

Panasonic[®]

ST50 series

*e***HELP**

All settings

Picture

Setting menu


Adjust the image or picture quality.

- Some menus are grayed out depending on the input signal or condition.
(e.g. **Zoom adjustments** will be grayed out if the aspect is not set to **ZOOM**.)

1. Display the menu



2. Select Picture from menu bar

Select desired menu using \triangle / ∇ from menu bar and press 

3. Select the item and adjust

Select desired item using \triangle / ∇ and adjust with $\triangleleft / \triangleright$

- * Shows the functions that can be adjusted.
- * Some functions will be disabled depending on the type of input signal.
Reset to defaults will be grayed out if no changes are made.

All settings

Picture

Basic settings (1)



MENU

→ Menu > Picture

Settings	Options	Description
Reset to defaults		<ul style="list-style-type: none">Resets all picture adjustments to factory default settings except for advanced settings.
Picture mode	Vivid/ Standard/ Cinema/ Game/ Custom	<ul style="list-style-type: none">Adjusts the picture quality according to ambient lighting conditions or situation.When changing picture mode from/to Game the screen will momentarily go black. This is normal. The blacking out of the screen is normal and is due to a change of parameters in order to improve the response to video games.
Contrast, Brightness, Color, Tint, Sharpness		<ul style="list-style-type: none">Adjusts the color, brightness, etc. for each picture mode to suit your taste.Display range Contrast/Brightness/Color/Sharpness : 0 - 100 Tint :-50 - +50

All settings

Picture

Basic settings (2)



MENU

→ Menu > Picture

Settings	Options	Description
Color temp.	Cool2/1/ Normal/ Warm1/2	<ul style="list-style-type: none">• Selects color temperature preference, from "cool" (bluish) to "warm" (reddish) or normal.
Color mgmt.	Off/On	<ul style="list-style-type: none">• On: Enhances green and blue color reproduction, especially outdoor scenes.
C.A.T.S.	Off/On	<ul style="list-style-type: none">• Contrast Automatic Tracking System (C.A.T.S.) adjusts the screen brightness and contrast according to the room's ambient light conditions. This ECO feature automatically dims the brightness of the screen when the room lighting is lowered. C.A.T.S. features a built-in delay when the lighting conditions change. The adjustment happens gradually. <p>If you prefer a consistent brightness, disable C.A.T.S. by:</p> <ul style="list-style-type: none">• Menu > Picture > scroll down to C.A.T.S. and turn it off. <p>Or</p> <ul style="list-style-type: none">• Menu > Picture > Picture mode then select viewing mode such as Custom. <p>Note: Standard picture mode automatically sets C.A.T.S. to On.</p>
Video NR	Off/Weak/ Medium/ Strong/Auto	<ul style="list-style-type: none">• Reduces noise, commonly called snow. Leave it off when receiving a strong signal.

All settings

Picture

Pro settings (1)



MENU

→ Menu > Picture > Pro settings

Settings	Options	Description
Reset to defaults		<ul style="list-style-type: none">Resets all Pro setting adjustments to factory default settings.
Color space	Wide/ <u>Normal</u>	<ul style="list-style-type: none">Each color space is a matrix composed of red, green & blue colors. Select your preference.
W/B high R, G, B	-50 - 0 - +50	<ul style="list-style-type: none">Adjusts the white balance for light red/green/blue areas.
W/B low R, G, B	-50 - 0 - +50	<ul style="list-style-type: none">Adjusts the white balance for dark red/green/blue areas.

All settings

Picture

Pro settings (2)



MENU

→ Menu > Picture > Pro settings

Settings	Options	Description
Black extension	0-15	<ul style="list-style-type: none">• Adjusts the dark shades of the image in gradation.
Gamma adjustment	S-curve/ 1.8/2.0/ <u>2.2</u> /2.4/2.6	<ul style="list-style-type: none">• Gamma correction. Adjusts the intermediate brightness of the image.
Panel brightness	Low/ <u>Mid</u> /High	<ul style="list-style-type: none">• Selects different levels of overall panel brightness.
Contour emphasis	Off/ <u>On</u>	<ul style="list-style-type: none">• Adjusts the contour emphasis of the image.
AGC	0-15	<ul style="list-style-type: none">• Increases the brightness of dark signal automatically.
Save as default		<ul style="list-style-type: none">• Saves all "Picture" (when "Picture mode" is "Custom") and "Pro settings" adjustment.

All settings

Picture

Aspect adjustments



MENU

→ Menu > Picture > Aspect adjustments

Settings	Options	Description
Screen format	FULL/H-FILL/ JUST/4:3/ ZOOM	<ul style="list-style-type: none">Changes the format (aspect ratio). Lets you choose the aspect depending on the format of received signal.
HD size	<u>Size 1</u> /Size 2	<ul style="list-style-type: none">Selects between 95 % (Size 1) or 100 % (Size 2) for the scanning area with High Definition signal.
H size	<u>Size 1</u> /Size 2	<ul style="list-style-type: none">Adjusts the horizontal display range to reduce noise of both side edges of an image. <p>Size 2: Adjusts the image size according to the aspect mode to reduce noise.</p> <p>Aspect mode: 4:3</p> <ul style="list-style-type: none">The width will be decreased on both sides to reduce noise. <p>Aspect Ratio: FULL/JUST(H-FILL/ZOOM)</p> <ul style="list-style-type: none">The width will be increased on both sides to reduce noise.
Zoom adjustments		<ul style="list-style-type: none">Adjusts vertical alignment and size when aspect setting is "ZOOM".

All settings

Picture

HDMI settings



MENU

→ Menu > Picture > HDMI settings

Settings	Options	Description
HDMI/DVI RGB range (HDMI)	Auto/ Standard (16-235)/ Nonstandard	<ul style="list-style-type: none">• Prevents the blown out highlights and blocked up shadows when a wide-range signal is received. Selects between standard RGB range (16-235 bits) or non-compliance (0-255 bits).• Auto: Switches the RGB range (Standard (16-235)/Nonstandard) depending on the HDMI signal information.
Content type (HDMI)	Off/Auto/ Photos/ Graphics	<ul style="list-style-type: none">• Sets content type to each HDMI input.• Auto: Switches content type automatically depending on the HDMI signal information.• Photo: Best setting for JPEG viewing.• Graphics: Best setting for On-Screen display of connected equipment.

All settings

Picture

Advanced picture (1)



MENU

→ Menu > Picture > Advanced picture

Settings	Options	Description
3D Y/C filter	Off/On	<ul style="list-style-type: none">• Minimizes rough edges (dot crawl) in the picture from a composite source.
Color matrix	SD/HD	<ul style="list-style-type: none">• Selects image resolution of component-connected devices.<ul style="list-style-type: none">• SD: Standard Definition HD: High Definition• Only used with 480p video signal.
Block NR	Off/On/Auto	<ul style="list-style-type: none">• Reduces noise of specific digital signals of DVD, Cable box, etc.
Mosquito NR	Off/On	<ul style="list-style-type: none">• Reduces HDTV flicker noise in the contoured sections of a compressed image.
Motion smoother	Off/Weak/ Medium/ Strong	<ul style="list-style-type: none">• Improves motion picture quality by reducing motion blur.

All settings

Picture

Advanced picture (2)



MENU

→ Menu > Picture > Advanced picture

Settings	Options	Description
Black level	Light/Dark	<ul style="list-style-type: none">• Select Dark when details are washed out in dark areas of picture from external source. Valid only for external input signals.
3:2 pulldown	Off/On/Auto	<ul style="list-style-type: none">• Reduces motion jitter in film-based content by transforming 24 fps to 30 fps (non-HDMI).
24p Direct in	60Hz/48Hz	<ul style="list-style-type: none">• 48Hz: Achieves more cinematic playback by reproducing the movie contents at twice the speed of 24 frames per second.

All settings

Audio


Setting menu

Adjust audio quality.

1. Display the menu

 **MENU** → Menu

2. Select Audio from menu bar

Select desired menu using \triangle / ∇ from menu bar and press 

3. Select the item and adjust

Select desired item using \triangle / ∇ and adjust with $\triangleleft / \triangleright$

- * Shows the functions that can be adjusted.
- * Some functions will be disabled depending on the type of input signal.
Reset to defaults will be grayed out if no changes are made.

All settings

Audio

Basic settings



MENU

→ Menu > Audio

Settings	Options	Description
Reset to defaults		<ul style="list-style-type: none">Resets Bass, Treble, and Balance adjustments to factory default settings.
Bass		<ul style="list-style-type: none">Increases or decreases the bass response.
Treble		<ul style="list-style-type: none">Increases or decreases the treble response.
Balance		<ul style="list-style-type: none">Emphasizes the left / right speaker volume.

All settings

Audio

Advanced audio



MENU

→ Menu > Audio > Advanced audio

Settings	Options	Description
A.I. sound	Off/On	<ul style="list-style-type: none">Equalizes overall volume levels across all channels and external inputs.
Surround	Off/On	<ul style="list-style-type: none">Enhances audio L/R response when listening to stereo. Ideal for music and action movies.
Volume leveler		<ul style="list-style-type: none">Minimizes volume disparity after switching to external inputs.
Distance to wall	Over 1ft(30cm)/ Up to 1ft(30cm)	<ul style="list-style-type: none">Over 1ft(30cm): TV is on a stand. Keeps current setup.Up to 1ft(30cm): TV is mounted. Reduces low frequency level to prevent resonance.
TV speakers	Off/On	<ul style="list-style-type: none">Enables the TV's built-in speakers.Switches to "Off" when using external speakers."A.I. sound", "Surround", "Volume leveler", and "Distance to wall" do not work if "Off" is selected.
HDMI in	Digital/ Comp./Video	<ul style="list-style-type: none">The default setting is "Digital" for the HDMI connection. (Digital input signal)Select audio input terminal when a DVI cable is connected along with an analog audio input signal.

All settings

Audio

DTV language and SAP settings



MENU

→ Menu > Audio > DTV language and SAP settings

Settings	Options	Description
Preferred language	English/ Spanish/ French	Selected preferred language is used for automatic selection of audio service.
Preferred audio type	Main Audio/ Hearing Impaired/ Visually Impaired	Selected preferred audio type is used for automatic selection of audio service.

All settings

Audio

DIGITAL AUDIO OUT terminal

You can enjoy your Home Theater by connecting a Dolby Digital (5.1 channel) decoder and "Multi Channel" amplifier to the DIGITAL AUDIO OUT terminals.

- Depending on your DVD player and DVD-Audio software the copyright protection function may operate and disable optical output.
- When an ATSC channel is selected, the output from the DIGITAL AUDIO OUT jack will be Dolby Digital. When an NTSC channel is selected, the output will be PCM.
- When playing a movie on SD Card Movie player, when the sound has been recorded in Dolby Digital, the output from the DIGITAL AUDIO OUT terminal will be Dolby Digital. When the sound is recorded in other formats, the output will be PCM.

All settings

Network

Network settings (1)

 **MENU** → Menu > Network

Settings	Options	Description
Connection test		<ul style="list-style-type: none">• Checks for proper network connection, settings and communication to the Internet & server.
Network connection	<u>Ethernet cable</u> /Wireless (WiFi)	<ul style="list-style-type: none">• Select Network type.

All settings

Network

Network settings (2)



MENU

→ Menu > Network

Settings	Options	Description
Wireless network settings		<ul style="list-style-type: none">• This setting is performed only when "Wireless (WiFi)" is selected in Network connection.• Select the Access point from the list or select Connection method with color key.• Follow the directions on screen to complete the setting.

All settings

Network

Network settings (3)

 **MENU** → Menu > Network

Settings	Options	Description
IP address/ DNS settings	IP setting mode/ IP address/ Subnet mask/ Default gateway/ DNS setting mode/ DNS/ Proxy setting	<ul style="list-style-type: none">• Select IP setting mode/DNS setting mode and set to Automatic, then each IP address is acquired Automatically. <p>[Manual setting]</p> <ul style="list-style-type: none">• Select IP setting mode/DNS setting mode and set to Manual, then select item and press OK.• Check the specifications of the broadband router and enter each IP address. Or Enter each IP address as was specified by the provider. <p>■ Proxy setting</p> <ul style="list-style-type: none">• Set only if specified by the provider. It is not required for normal household use <p>Proxy address/Proxy port: Setting is only required if specified by the provider.</p>

All settings

Network

Network settings (4)



MENU

→ Menu > Network

Settings	Options	Description
Network link (Stream and control content from networked portable devices.)	VIERA network name	<ul style="list-style-type: none">• Sets your favorite name for this TV. This name will be displayed on the screen of the other Network compatible equipment.
	DLNA remote control	<ul style="list-style-type: none">• Enables Digital Media Renderer for playback of DLNA content.
	DLNA remote volume control	<ul style="list-style-type: none">• Sets volume setting in DMR operation• Available only when Enable is selected in DLNA remote control
	Network remote control	<ul style="list-style-type: none">• Switches remote control of network device such as a smartphone to Disable or Enable.

All settings

Network

Network settings (5)



MENU

→ Menu > Network

Settings	Options	Description
Software update		<ul style="list-style-type: none">• Press OK to start the Software update screen. And follow directions on the screen. * Set Clock first.
New software notice	Off/ <u>On</u>	<ul style="list-style-type: none">• On: When TV is turned On, update message is displayed if available. Follow the directions on the screen to download.
Network status		<ul style="list-style-type: none">• Displays Current settings and status screen. (Network type/Wireless settings/MAC address/IP Address etc.) * Displayed items differ depending on the type of network connection.

All settings

Timer

Setting menu


The TV can automatically turn On/Off at a designated date and time.

If the Timer settings are grayed out, first set the clock and make sure **Auto power on** is set to **No**.

1. Display the menu



2. Select **Timer** from menu bar

Select desired menu using \triangle / ∇ from menu bar and press 

3. Select the item and adjust

Select desired item using \triangle / ∇ and adjust with $\triangleleft / \triangleright$

All settings

Timer

Sleep (Off timer)



MENU

→ Menu > Timer

Settings	Options	Description
Sleep (minutes)	Off/15/30/60/90	<ul style="list-style-type: none">• Selects how long the TV stays on before it automatically turns off.

All settings

Timer

Timer (On/Off timer)

 **MENU** → Menu > Timer

Settings	Options	Description
Timer set	<u>Off</u> /On	<ul style="list-style-type: none">• Enables or disables the Timer.
Inputs		<ul style="list-style-type: none">• Sets the input to select when the TV turns on.
Channel		<ul style="list-style-type: none">• Sets the channel to select when the TV turns on.
Day		<ul style="list-style-type: none">• Sets the day when the TV turns on. [SUN/MON/TUE/WED/THU/FRI/SAT (displays the nearest future date) MON-FRI/SAT-SUN/ DAILY/Every SUN/Every MON/Every TUE/ Every WED/Every THU/Every FRI/ Every SAT]
On time		<ul style="list-style-type: none">• Sets the time when the TV turns on. The TV will turn off after 90 minutes or as specified.
Off time		<ul style="list-style-type: none">• Sets the time when the TV turns off within 24 hours.

All settings

Lock (parental control)

Setting menu


Locks specified channels or shows to prevent children from watching objectionable content.

You will be asked to enter your password each time you display the Lock menu. Set **Custom** in **Mode** to specify **Channel**, **Game**, **Program** and **VIERA Connect** settings.

1. Display the menu



2. Select Lock from menu bar

Select desired menu using \triangle / ∇ from menu bar and press 

3. Select the item and adjust

Select desired item using \triangle / ∇ and adjust with $\triangleleft / \triangleright$

- This television is designed to support the "Downloadable U.S. Region Rating System" when available. (Currently available only in U.S.A.)
- The Off rating is independent of other ratings.
- When placing a lock on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.
- The channels will be blocked regardless of the program rating.

All settings

Lock (parental control)

Lock (1)



MENU

→ Menu > Lock

Settings	Options	Description
Mode	Off/All/Custom	<ul style="list-style-type: none">Locks (All) or Unlocks (Off) all channels, programs or inputs. For Custom, Locks specified inputs of Channel, Game, Program and VIERA Connect.
Channel (These channels will be blocked regardless of the program ratings.)	Mode (<u>Off</u> /All/ Custom)	<ul style="list-style-type: none">Locks (All) or Unlocks (Off) all channels. For Custom, Locks specified channels. Set Channel 1 - Channel 7.
	Channel 1-7	<ul style="list-style-type: none">Designates channel number to be blocked at any time, regardless of its broadcast content.
Game	<u>Off</u> /On	<ul style="list-style-type: none">Restricts access to channel 3, channel 4 and all the TV's inputs.

All settings

Lock (parental control)

Lock (2)

 **MENU** → Menu > Lock

Settings	Options	Description
Program (Prohibits viewing of TV content based on the rating provided by the broadcasters.)	Mode	<ul style="list-style-type: none">• Sets program lock status. (Off/On) "V-chip" technology enables restricted shows to lock according to TV ratings. On: Set each rating level (MPAA, U.S.TV, C.E.L.R., C.F.L.R.)
	MPAA	<ul style="list-style-type: none">• Selects U.S. movie ratings to lock.
	U.S.TV	<ul style="list-style-type: none">• U.S. TV program ratings.
	C.E.L.R.	<ul style="list-style-type: none">• Canadian English ratings.
	C.F.L.R.	<ul style="list-style-type: none">• Canadian French ratings.
VIERA Connect	<u>Off/On</u>	<ul style="list-style-type: none">• Locks VIERA Connect. When you access VIERA Connect, the "VIERA Connect Lock" screen is displayed. Type the correct password to enter the Home screen.
Change password		<ul style="list-style-type: none">• Create a new password. Input the new 4-digit password twice.

All settings

Lock (parental control)

Password setting

You need to enter the password when you access locked channels or inputs.



- * If it is your first time entering the password, enter the password twice in order to register it.
- * Make a note of your password. Do not forget it. (If you have forgotten your password, consult your local dealer.)
- * When you select a locked channel, a message will be displayed that allows you to view the channel after you input your password.

All settings

Lock (parental control)

Parental control ratings (1)

"V-chip" technology enables you to lock channels or shows according to standard ratings set by the entertainment industry.

■ U.S. MOVIE RATINGS (MPAA)

NR	Not Rated.
G	All children and General Audience.
PG	Parental Guidance suggested.
PG-13	Parental Guidance for children under 13.
R	Restricted Viewing, parental guidance is suggested for children under 17.
NC-17/X	No one 17 or under allowed.

■ U.S. TV PROGRAMS RATINGS (U. S. TV) - Age-Based Ratings

TV-NR	Not Rated.
TV-Y	All children.
TV-Y7	Directed to children age 7 and older.
TV-G	General Audience.
TV-PG	Parental Guidance suggested.
TV-14	Parents strongly cautioned, parental guidance is suggested for children under 14.
TV-MA	Mature Audience only.

All settings

Lock (parental control)

Parental control ratings (2)

■ CANADIAN ENGLISH RATINGS (C. E. L. R.)

E	Exempt programming.
C	All children.
C8+	Children 8 years and older.
G	General programming.
PG	Parental Guidance.
14+	Viewers 14 and older.
18+	Adult programming.

■ CANADIAN FRENCH RATINGS (C. F. L. R.)

E	Exempt programming.
G	General programming.
8 ans+	Not recommended for young children.
13 ans+	Not recommended for ages under 13.
16 ans+	Not recommended for ages under 16.
18 ans+	Programming restricted to adults.

Contents-Based Ratings

FV	Fantasy Violence.	S	Sexual situations.
D	Suggestive Dialogue.	V	Violence.
L	Strong Language.		

All settings

Lock (parental control)

Parental control ratings (3)

Caution

The V-Chip system used in this set is capable of blocking "NR" programs (non rated, not applicable and none) as per FCC Rules Section 15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"

- Emergency Bulletins (Such as EAS messages, weather warnings and others)
- Locally originated programming • News • Political • Public Service Announcements • Religious • Sports • Weather

All settings

Setup


Setting menu

Other functions settings

1. Display the menu

 **MENU** → Menu

2. Select Setup from menu bar

Select desired menu using \triangle / ∇ from menu bar and press 

3. Select the item and adjust

Select desired item using \triangle / ∇ and adjust with $\triangleleft / \triangleright$

- * Shows the functions that can be adjusted.
- * Some functions will be disabled depending on the type of input signal.
Reset to defaults will be grayed out if no changes are made.

All settings

Setup

3D settings (1)



MENU

→ Menu > Setup > 3D settings

Settings	Options	Description
Auto detect 3D	Off/ <u>Auto 1</u> / Auto 2	<ul style="list-style-type: none">• Auto 1: Switches to 3D display when 3D indication is available (HDMI (3D), AVCHD file, etc.)• Auto 2: Same as Auto 1. Also detects 3D signal by identifying similar image in side-by-side or top-and-bottom 3D formats. Note: Choose 3D mode manually when auto detection is not available.
3D signal notification	Off/ <u>On</u>	<ul style="list-style-type: none">• On: Displays a message according to the signal received by the Auto detect 3D.
2D → 3D depth	Minimum/ <u>Medium</u> / Maximum	<ul style="list-style-type: none">• Adjusts 3D depth. Available only when 2D → 3D is selected in 3D format select.• Available only when 3D content is displayed.

All settings

Setup

3D settings (2)



MENU

→ Menu > Setup > 3D settings

Settings	Options	Description
3D adjustment	<u>Off</u> /On	<ul style="list-style-type: none">Changes 3D depth by adjusting left-right parallax. Set to On to adjust Effect (-3 to +3).
Left/Right swap	<u>Normal</u> / Swapped	<ul style="list-style-type: none">Change this to Swapped when the phases are reversed (When there is an unusual sense of depth).
Diagonal line filter	<u>Off</u> /On	<ul style="list-style-type: none">On: Resolves discomfort caused by receiving a quincunx matrix signal.
Safety precautions		<ul style="list-style-type: none">Displays message for viewing 3D images.

All settings

Setup

ANT/Cable setup (1)



MENU

→ Menu > Setup > ANT/Cable setup

Settings	Options	Description
ANT in	Cable/ Antenna/ Not used	<ul style="list-style-type: none">• Select desired signal type to scan or edit. Not used: Following channel settings are not available
Auto program	All channels/ Analog only/ Digital only	<ul style="list-style-type: none">• Select scan type and press OK to start scanning automatically. After the scanning is completed. Select Apply . <ul style="list-style-type: none">• All previously saved channels are erased.
Manual program		<ul style="list-style-type: none">• Change the channel setting or channel display. Edit: Edit these items. <ul style="list-style-type: none">• Caption: Changes the station identifier. (maximum 7 characters available)• Favorite: Registers channels to the Favorite List from Set favorite.• Add: Adds (Yes) or skips (No) channels Apply: After the editing is completed, press OK to save the settings. Cancel: Cancel the changes.

All settings

Setup

ANT/Cable setup (2)



MENU

→ Menu > Setup > ANT/Cable setup

Settings	Options	Description
Signal meter		<ul style="list-style-type: none">• Check the signal strength if interference is found or freezing occurs on a digital image.• If the signal is weak, check the antenna. If you cannot figure out the problem, consult your local dealer. <ul style="list-style-type: none">• Not available if "Cable" is selected in "ANT in"• Available only for digital antenna channels.

All settings

Setup

Anti Image retention

 **MENU** → Menu > Setup > Anti image retention

Settings	Options	Description
Pixel orbiter	Disable/ <u>Enable</u>	<ul style="list-style-type: none"> • Enable: Shifts the display image automatically.
4:3 side bars (4:3 mode only)	Off/Dark/Mid/ <u>Bright</u>	<ul style="list-style-type: none"> • Changes the brightness of the side bar <p>The recommended setting is "Bright" to prevent the panel "Image retention".</p> <ul style="list-style-type: none"> • Do not display a picture in 4:3 mode for an extended period, as this can cause "Image retention" to remain on either or both sides of the display field. To reduce the risk of such "Image retention", change the brightness of the side bars. • The side bar may flash (alternate black/white) depending on the picture.
Scrolling bar		<ul style="list-style-type: none"> • Press "OK" to start the horizontal "Scrolling" on the screen. Press any key except the POWER key to return to previous screen. You will return to the previous screen if no key operation has been performed for 15 minutes.

All settings

Setup

Closed caption (1)



MENU

→ Menu > Setup > Closed caption

Settings	Options	Description
Reset to defaults		<ul style="list-style-type: none">Resets all Closed caption settings to factory default settings.
Mode	Off/On/ CC on mute	<ul style="list-style-type: none">On: To display Closed captions.CC on mute: To display Closed captions when the audio is muted. (When not using, select Off).
Analog	<u>CC</u> 1-4/T1-4	<ul style="list-style-type: none">Choose the Closed caption service of Analog broadcasting.<ul style="list-style-type: none">CC1-4: Information related to pictures (Appears at the bottom of the screen)T1-4: Textual information (Appears over the entire screen)

All settings

Setup

Closed caption (2)



MENU

→ Menu > Setup > Closed caption

Settings	Options	Description
Digital	Primary/ Second/ Service 3/4/5/6	<ul style="list-style-type: none">• The Digital Closed caption menu lets you configure the way you choose to view the digital captioning.
Digital setting (Set display settings in digital programs.)	Size	<ul style="list-style-type: none">• Select the text size
	Font	<ul style="list-style-type: none">• Select the text font
	Style	<ul style="list-style-type: none">• Select the text style (Raised, Depressed, etc.)
	Foreground	<ul style="list-style-type: none">• Select the color of text
	Fore. opacity	<ul style="list-style-type: none">• Select the opacity of text
	Background	<ul style="list-style-type: none">• Select the color of text box
	Back. opacity	<ul style="list-style-type: none">• Select the opacity of text box
	Outline	<ul style="list-style-type: none">• Select the outline color of text (Identify the setting options on the screen).

All settings

Setup

Closed caption notice

- For viewing the CC of digital broadcasting, set the aspect to FULL (If viewing with H-FILL, JUST, ZOOM or 4:3, characters might be cut off).
- The CC can be displayed on the TV only when the receiver (such as a Cable box or satellite receiver) has the CC set to ON within the device itself. Check with your Cable or Satellite provider for instructions. The TV's CC button does not operate the Satellite or Cable box's CC function.
- If the CC is set to ON on both the receiver and TV when the signal is 480i (except for the HDMI connection), the CC may overlap on the TV.
- If a digital program is being output in analog format, the CC data will also be output in analog format.
- If the recorder or output monitor is connected to the TV, the CC needs to be set up on the recorder or output monitor.

All settings

Setup

VIERA Link settings (1)



MENU

→ Menu > Setup > VIERA Link settings

Settings	Options	Description
VIERA Link	Off/ <u>On</u>	<ul style="list-style-type: none">• To use all VIERA Link functions, set to On after everything is connected.
Power on link	<u>No</u> /Yes	<ul style="list-style-type: none">• Yes: The TV is turned on automatically and switches to the appropriate HDMI input whenever VIERA Link compatible equipment is initially turned on and the Play mode is selected.
Power off link	No/ <u>Yes</u>	<ul style="list-style-type: none">• When "Yes" is selected and the TV is turned off, all connected VIERA Link compatible equipment is also automatically turned off.<ul style="list-style-type: none">• The TV remains on even if the VIERA Link compatible equipment is turned off.

All settings

Setup

VIERA Link settings (2)



MENU

→ Menu > Setup > VIERA Link settings

Settings	Options	Description
Energy saving mode	<u>Quick start</u> / Save	<ul style="list-style-type: none">• Quick Start: When TV is turned off, all connected VIERA Link compatible equipment is moved to ECO Standby mode* automatically under these conditions.<ul style="list-style-type: none">• Power off link:(Yes). The connected equipment has "HDAVI Control 4 or later (with Quick Start mode)" <p>* Minimum power consumption of Standby condition for the equipment.</p>
Unselected device energy save	<u>No (stay on)</u> / Yes (with prompt)/ Yes (no prompt)	<ul style="list-style-type: none">• Yes: The connected VIERA Link compatible equipment will be turned off automatically when not in use under these conditions.<ul style="list-style-type: none">• The connected equipment has "HDAVI Control 2 or later" (for available equipment only)
Default speakers	<u>TV</u> /Theater	<ul style="list-style-type: none">• TV is the default setting. To set the Home theater system as Default speakers, change the Default speakers setting from TV to Theater. Sound will be output from the Home Theater whenever the TV is powered on.

All settings

Setup

ECO/energy saving (1)



MENU

→ Menu > Setup > ECO/energy saving

Settings	Options	Description
Power save	<u>Standard/</u> Saving	<ul style="list-style-type: none">• Reduces screen brightness to lower power consumption. Eye-friendly for viewing in a dark room.
No signal for 10 minutes	<u>Stay on/</u> <u>Power TV off</u>	<ul style="list-style-type: none">• To conserve energy, the TV automatically turns off when NO SIGNAL and NO OPERATION continue for more than 10 minutes.<ul style="list-style-type: none">• Not in use when "Auto power on" is set to "Yes", or "On/Off Timer" is set.• "No signal for 10 minutes was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No signal for 10 minutes" feature.• The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.

All settings

Setup

ECO/energy saving (2)



MENU

→ Menu > Setup > ECO/energy saving

Settings	Options	Description
No activity for 3 hours	Stay on/ Power TV off	<ul style="list-style-type: none">• To conserve energy, the TV automatically turns off when no operation of remote and side panel key continues for more than 3 hours.<ul style="list-style-type: none">• Not in use when "Auto power on" is set to "Yes", or "On/Off Timer" is set.• "No activity for 3 hours was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No activity for 3 hours" feature.• The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.

All settings

Setup

Advanced setup

 **MENU** → Menu > Setup > Advanced setup

Settings	Options	Description
Auto power on	<u>No</u> /Yes	<ul style="list-style-type: none"> • Turns TV On automatically when the cable box or connected device is turned On. • TV AC cord must be plugged into this device. TV turns on every time the power is restored.
Image viewer auto play	Slideshow/ Photos/ Videos/Music/ <u>Set later</u> /Off	<ul style="list-style-type: none"> • Sets the media contents or playback type to playback SD cards automatically. • Set later: Image viewer settings menu will be displayed repeatedly.
VIERA Connect Banner	Off/ <u>On</u>	<ul style="list-style-type: none"> • Sets the banner display status.

All settings

Setup

Other settings (1)

 **MENU** → Menu > Setup

Settings	Options	Description
Channel surf mode	All/Favorite/ Digital only/ Analog only	<ul style="list-style-type: none">• Sets the mode to select the channel with the Channel up/down button. Favorite: Only channels registered as FAVORITE.
Language	English/ Español/ Français	<ul style="list-style-type: none">• Selects the screen menu language.
Clock		<ul style="list-style-type: none">• Adjusts the TV's date and time. (Needed for timer function).
Input labels		<ul style="list-style-type: none">• Selects the terminal and label of the external equipment. Devices connected to external input terminals can be labeled for easier identification during the input selection. Label: [BLANK] Blu-ray/CABLE/SATELLITE/ DVD /DVD REC/DVR/GAME/HOME THTR/ RECEIVER/COMPUTER/MEDIA CTR/ MEDIA EXT/VCR/CAMERA/MONITOR/ AUX/OTHER/Not used

All settings

Setup

Other settings (2)



MENU

→ Menu > Setup

Settings	Options	Description
Keyboard type		<ul style="list-style-type: none">Selects the country/region of the keyboard connected to this TV. (U.S./Canadian French/Canadian Multilingual Standard/Spanish (Latin America)/Spanish (Spain))
First time setup		<ul style="list-style-type: none">Launches First time setup wizard. Repeats the initial step-by-step TV setup.
About		<ul style="list-style-type: none">Displays TV's firmware version and software license.
Reset to defaults		<ul style="list-style-type: none">Clears all TV settings and memory to factory defaults.

Support / FAQ

FAQ

Picture - Viewing

If there is a problem with your TV, please refer to the table below to determine the symptoms, then carry out the suggested check. If this does not solve the problem, visit the Panasonic website for further assistance.

Questions	Answers
How do I view the picture from devices such as : Cable/Satellite box, game console, Blu-ray or DVD player?	<ul style="list-style-type: none">• Press the INPUT button on the remote to select the correct input source.• Check that the device is turned on and functioning correctly.
Why doesn't the picture look like it is in High Definition?	<ul style="list-style-type: none">• Press the INFO button on the remote to confirm the type of signal being received. HD signal should be 720p, 1080i or 1080p.• Select a High Definition channel from your HD source (Cable, Satellite or fiber optic service). HD channels sometimes broadcast non-HD content.• Ensure that your HD source (HD box, Blu-ray player, etc.) is connected to the TV with an HDMI or Component cable and set to output an HD video signal.

Support / FAQ

FAQ

Picture - Snowy / none

Questions	Answers
Why is there no picture or just a blue, black or snowy screen being displayed?	<ul style="list-style-type: none">• Check if the power cord is plugged in and the TV is turned on (front red LED light should be on; not blinking)• Press the INPUT button on the remote to select the correct input source.• Ensure all connections are correct and secure. Especially check for Component and VIDEO connection since these terminals are shared.• When using an external video source, such as a Cable/Satellite box or DVD player, check that the device is on and functioning correctly.• Press MENU on the TV's remote control. If the menu is displayed, then the TV is working; recheck above steps.
Why is the picture snowy when ANT/Cable in is selected?	<ul style="list-style-type: none">• When using a cable service (without a box), check that all connections are secure.• When using a cable or satellite box, change the connection (wiring) to Composite, Component or HDMI.• If you're using an antenna, then check that connections are secure. Change the position or direction of the antenna and check the Signal meter.

Support / FAQ

FAQ

Picture - Distortion

Questions	Answers
<p>The picture is distorted after selecting the "Video/Comp." input. What should I do?</p>	<ul style="list-style-type: none"> • Ensure that the device is connected correctly with the supplied Component/AV adapter to the TV's Video/Component green mini-connector. <p>NOTE: One red connector is for video and the other is for audio.</p> <ul style="list-style-type: none"> • Press INPUT and select Video <-> Comp. • Press ◀ / ▶ to choose Video or Component.
<p>Why do black bars appear on the top and bottom and/or sides of the screen?</p>	<ul style="list-style-type: none"> • Change the format (aspect ratio) of the picture by pressing the FORMAT button on the remote control. • Check the aspect settings on your external video source, such as Cable/Satellite box, DVD/Blu-ray Disc player, etc. <p>Note: Some content, such as film-based movies, are available in extra-wide format. Top and bottom bars are unavoidable.</p>
<p>Why is the picture chaotic and/or torn and/or with a buzz in the speakers?</p>	<ul style="list-style-type: none"> • Check if electrical products such as kitchen appliances, fluorescent lights or light dimmers are nearby. They may interfere with the TV's picture. • Try viewing a picture from another device, such as a DVD player or a game console, to narrow down the source of the problem.

Support / FAQ

FAQ

Picture - Continue

Questions	Answers
Why is there a black box on the screen?	<ul style="list-style-type: none">• Change settings of Closed caption (CC).
Why do some small spots on the screen remain bright or dark?	<ul style="list-style-type: none">• The panel is made up of a few million pixels and is produced with advanced technology through an intricate process. Sometimes a few pixels may be bright or dark. These pixels do not indicate a defective panel and will have no impact on the performance of the TV.
Why is the picture brightness changing?	<ul style="list-style-type: none">• Turn the C.A.T.S. feature off. Press MENU → Setup > Picture > C.A.T.S.

Support / FAQ

FAQ

Sound - none

Questions	Answers
Why is there no sound coming from the TV?	<ul style="list-style-type: none">• Make sure the volume is up and MUTE is off.• Confirm the TV speakers are set to On by pressing MENU and selection Audio > Advanced audio.• Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control.• If the TV is connected to a Panasonic Home Theater via HDMI cable, then check VIERA Link controls.• If the TV is connected to a Home Theater via optical cable, then: Check the connection, the audio system is on, the correct input is selected.• Check HDMI in analog/digital audio settings.

Support / FAQ

FAQ

Sound - Unusual

Questions	Answers
Why is the sound unusual, distorted, low volume or in another language?	<ul style="list-style-type: none">• Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control.• Check that all connections of external equipment connected to the TV are secure.• When using Cable or Satellite box, check the device's audio settings. (Example: try changing the box's Audio Range to "narrow")
Why is there a clicking, ticking or buzzing sound coming from the TV unit?	<ul style="list-style-type: none">• When TV power is turned on or shut off there are electrical components that make a click sound. This is normal operation.• Changes in the temperature and humidity of the room may cause thermal expansion and contraction that can produce sounds. This is not a sign of faulty operation or a malfunction.

Support / FAQ

FAQ

Networking

Questions	Answers
How do I get VIERA Connect to work on my TV?	<ol style="list-style-type: none">1. You need a broadband (high speed) Internet service with a speed of no less than 1.5 Mbps.2. Connect the TV to the Internet through your router by an Ethernet cable or a Panasonic Wireless LAN (built-in).3. Run the Connection test, under the Network menu. If Connection test fails, then check with your Internet service provider or router/modem manufacturer if there are firewall, content filter or proxy settings that may block the TV from accessing the Internet.
Can I download new apps (content/services) onto my VIERA Connect TV?	<ul style="list-style-type: none">• Yes. Select the VIERA Connect Market item in the middle bottom of the VIERA Connect home screen. VIERA Connect Market allows you to find and install the applications to VIERA Connect home screen.

Support / FAQ

FAQ

Software update

Questions	Answers
How do I check for the latest software (firmware) version for my TV?	<ul style="list-style-type: none">• In the main menu, select Network. Select Software update. The current version and latest version software will be shown. If software update is grayed out, the TV is not connected to the Internet. If a newer version is available, update your TV. Follow the on screen instructions, do not power off the TV until the update is complete. Be patient; firmware update may take a while.
How do I get the software update information and download periodically?	<ul style="list-style-type: none">• In the main menu, select Network. Highlight New software notice. Make sure that setting is On. When the TV is turned On, update message is displayed if available. Follow the directions on the screen to download.

Support / FAQ

FAQ

3D - Viewing

Questions	Answers
Why doesn't my 3D video source look 3D?	<ol style="list-style-type: none">1. Begin playing the 3D video source.2. Ensure that the Panasonic 3D Eyewear (glasses) are on.3. Press 3D button directly or press VIERA TOOLS button and select 3D.4. In the 3D format select menu, select 3D. <p>Notes:</p> <ol style="list-style-type: none">1. 3D Blu-ray discs must be played with a 3D capable Blu-ray player.2. Check with your Cable or Satellite provider to make sure their supplied box is 3D capable.3. 3D signal must be connected to the TV via an HDMI cable.4. Use Panasonic 3D Eyewear supporting Bluetooth wireless technology.
Can I use 3D glasses similar to the kind given at a 3D movie theater to watch 3D content on my 3D TV?	<ul style="list-style-type: none">• No. Movie theater's 3D glasses are passive. They use a simple filter 'lens'. Panasonic active shutter 3D Eyewear are actively synchronizing the left/right eye viewing with the display, providing a superior 3D viewing experience.

Support / FAQ

FAQ

3D - Format

Questions	Answers
When selecting some 3D Video content, why are there two pictures next to each other?	<ul style="list-style-type: none">• There are a few different 3D formats and the current setting may not match the incoming 3D signal. The format should change automatically, but depending on the source/connection it may not signal the TV properly. To manually select other 3D formats:<ol style="list-style-type: none">1. Press 3D button directly or press VIERA TOOLS button on the TV's remote control and select 3D2. In the 3D format select menu, choose another 3D format such as Side by side or Top and bottom.3. Remember to switch the 3D format setting back to 2D when you go back to viewing a standard 2D signal.
Why does the left and right Sides of the image seem reversed?	<ul style="list-style-type: none">• The 3D format has two different "phases". Try the other phase:<ol style="list-style-type: none">1. In the main menu, select Setup. Highlight 3D settings and press OK.2. In the 3D settings menu, select Left/Right swap.

Support / FAQ

FAQ

Other

Questions	Answers
What is the easiest and best way to connect a High-Definition Cable or Satellite box to the TV?	<ul style="list-style-type: none">• Use an HDMI cable. It carries both digital video and audio signal in HD. HDMI cable is the only cable needed to connect an HD device to the TV.
Why does the CC button not display Closed caption?	<ul style="list-style-type: none">• When viewing TV via an HDMI connected device, such as a Cable or Satellite box, CC must be enabled on the device.• Closed caption is available only at supported TV programming.
Why does the screen and back cover of the TV get warm?	<ul style="list-style-type: none">• The main unit radiates heat and some of the parts may become hot. This is normal operation and does not affect the performance of the set.• Ensure good ventilation.• Do not block the ventilation holes of the TV and do not place the TV on top of other equipment.

Support / FAQ

FAQ


Menu - Gray-out

Questions	Answers
<p>Why is the ANT/Cable option at the top of the Input select menu grayed-out and unable to be selected?</p>	<ul style="list-style-type: none">• During First time setup, you indicated in ANT/Cable setup that you are using Cable or Satellite box and the box is connected to one of the TV's AV inputs. In this case, the Antenna/Cable input is deactivated to prevent unintentional switching into unused tuner. To re-activate, press MENU, select Setup and repeat First time setup.
<p>Some menu items are grayed-out and unable to be selected. Why?</p>	<ul style="list-style-type: none">• Depending on certain modes or the selected input, some options are not available. For example, Zoom adjustments are only available when the Screen format is changed to ZOOM mode.

Support / FAQ

FAQ

Reset to default

Questions	Answers
How do I reset my TV to all factory defaults and settings?	<ul style="list-style-type: none">• In the main menu, select Setup. Highlight Reset to defaults and press . Enter your password (if created earlier) or create a temporary new password. Select Yes to reset the TV.

Support / FAQ

Care and Cleaning

Display panel

First, unplug the Power cord plug from the wall outlet.

■ Display panel

The front of the display panel has been specially treated. Wipe the panel surface gently using only a cleaning cloth or a soft, lint-free cloth.

- If the surface is particularly dirty, after cleaning up the dust, soak a soft, lint-free cloth in diluted mild liquid dish soap (1 part mild liquid dish soap diluted by 100 times the amount of water) and then wring the cloth to remove excess liquid. Use this cloth to wipe the surface of the display panel, then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects. Furthermore, avoid contact with volatile substances such as insect sprays, solvents, and thinner, otherwise, the quality of the surface may be adversely affected.

Support / FAQ

Care and Cleaning

Cabinet

First, unplug the Power cord plug from the wall outlet.

■ Cabinet

If the cabinet becomes dirty, wipe it with a soft, dry cloth.

- If the cabinet is particularly dirty, soak the cloth in a weak mild liquid dish soap and then wring the cloth dry. Use this cloth to wipe the cabinet and then wipe it dry with a dry cloth.
- Do not allow any mild liquid dish soap to come into direct contact with the surface of the TV. If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents, and thinner, otherwise, the quality of the cabinet surface may be adversely affected or the coating may peel off.
- Do not let articles made from rubber or PVC be in contact with the TV for long periods of time.

Support / FAQ

Care and Cleaning

Pedestal / Power cord

First, unplug the Power cord plug from the wall outlet.

■ **Pedestal**

- **Cleaning**

Wipe the surfaces with a soft, dry cloth. If the unit is particularly dirty, clean it using a cloth soaked with water to which a small amount of mild liquid dish soap has been added and then wipe with a dry cloth. Do not use products such as solvents, thinner, or household wax for cleaning, as they can damage the surface coating. (If using a chemically-treated cloth, follow the instructions supplied with the cloth.)

- Do not attach sticky tape or labels, as they can make the surface of the pedestal dirty. Do not allow long-term contact with rubber, vinyl products, or the like. (Doing so will cause deterioration.)

■ **Power cord**

- Wipe the plug with a dry cloth at regular intervals. (Moisture and dust can lead to fire or electrical shock.)