Setting the Sleep Timer

You can adjust the time for automatic system down.



Press [SLEEP] button. Sleep Timer is changed as you press [Sleep] button.

OFF→30Min→60Min→90Min→120Min→150Min→180Min

To set the sleep timer in [Setup] menu.



- 1. Press MENU [button on the remote control.
- 2. Select Setup [] menu by pressing Channel [] button.
- 4. Select [Sleep Timer] by pressing Channel [⚠/⊡] button.
- 5. Set the timer with Volume [() button
- 6. When configuration is done, press MENU [button to save the changes and exit.

Tip

Time is automatically set, once you set the Time Zone and then watch a DTV channel. After Time is set, you can use On Timer and Off Timer functions.

PIXEL SHIFT

Due to its fundamental and built-up technology of the panel, when it is turned on long time of period especially with a still image, it can have afterimage that does not disappear even though it is turned off. During watching TV, this can affect serious image quality problem. However, with this feature, each pixel of panel is shifted to right or left minutely and regularly, surely impossible to be noticed by human eyes, to protect afterimage effect.



- 1. Press MENU [on the remote control.
- Select Setup [→] menu by pressing Channel [→ / →] button.
- 3. Press Volume[☐] button, select 'Pixel Shift' by pressing Channel [☑ / ☑] button.
- 4. Set 'Pixel shift' function 'On' by pressing Volume [(/ /)] button.
- 5. When configuration is done, press MENU [button to save the changes and exit.

Digital Noise Reduction

When the incoming signal is weak or picture noise appears at moving image, DNR function helps to reduce the noise and eye strain by its filtering procedure.



- 1. Press MENU $[\stackrel{\text{\tiny MENU}}{\bigcirc}]$ on the remote control.
- 2. Select Setup [] menu by pressing Channel [.../.] button.
- 3. Press Volume[] button, select 'DNR' by pressing Channel [] button.
- 5. When configuration is done, press MENU [button to save the changes and exit.

WIPER

Wiper function is for removing afterimage and noise, Moving wiper(white vertical bar) will remove noise on display after several minutes.



- 1. Press MENU $[\stackrel{\text{\tiny MENU}}{\bigodot}]$ on the remote control.
- 2. Select 'WIPER' in Setup [] menu.
- 3. Set 'WIPER' function 'On' by pressing Volume [/ /] button.

PIP (Picture In Picture)

PIP is the function to display two different input source simultaneously.



Press [PIP] on the remote control.
 [PIP] is changed as following every time you press [PIP] button.

On -> Off

To set PIP in On Screen Display Menu,



- 1. Press MENU $[\stackrel{\mbox{\tiny MENU}}{\mbox{\tiny \mbox{\tiny }}}]$ button on the remote control.
- 2. Select PIP [menu by pressing Channel [] button.
- 3. Press Volume [] button and select [PIP] by pressing Channel [[] button.
- 4. Set PIP to "On" with Volume [/] button.
- 5. When configuration is done, press MENU [button to save the changes and exit.

* Please check the following PIP combination table of Main and Sub picture.

('Graphic-in-Graphic or Video-in-Video' is not supported.)

SUB MAIN	TV	AV 1	S-VIDEO	AV 2	D-TV	Component 1	Component 2	PC	HDMI
TV	Х	Х	Х	Х	Х	0	0	0	0
AV 1	Х	Х	Х	Х	0	0	0	0	0
S-VIDEO	Х	Х	Х	Х	0	0	0	0	0
AV 2	Х	Х	Х	Х	Х	Х	Х	Х	Х
D-TV	Х	0	0	0	Х	Х	Х	Х	Х
Component 1	0	0	0	0	Х	X	Х	Х	Х
Component 2	0	0	0	0	Х	×	×	×	Х
PC	0	0	0	0	Х	Х	Х	Х	Х
HDMI	0	0	0	0	Х	Х	Х	Х	Х

*Video: TV, SCART *Graphic: Component,

Analog RGB, HDMI

Adjusting the Size of Sub picture



Press [P.SIZE] button on the remote control. The size is changed in the following order each press.

 $\texttt{`Small} \rightarrow \texttt{DOUBLE} \rightarrow \texttt{DOUBLE2'}.$

To adjust the size in On Screen Display Menu.



- 1. Press MENU [im] button on the remote control.
- 2. Select PIP [41] menu by pressing Channel [1.7] button.
- 3. Press Volume [] button and select [Size] by pressing Channel [] button.
- 4. Press Volume [/ /) button to adjust the size.
- 5. When configuration is done, press MENU [im] button to save the changes and exit.

Changing Input mode of Sub picture

You can change the input source of sub picture.



Press [P.INPUT] button on the remote control. The input source is changed as you press the button.

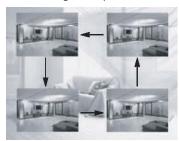
To change the input source in On Screen Display Menu.



- 1. Press MENU [button on the remote control.
- 2. Select PIP [] menu by pressing Channel [] button.
- 3. Press Volume [] button and select [Input Source] by pressing Channel [/] button and Volume [] button again.
- Press Volume [/ /] button to change input source.
 (To adjust the input source of Sub picture, PIP should be active.)
- 5. When configuration is done, press MENU [button to save the changes and exit.

Adjusting the position of Sub picture

You can change the position to 'Up', 'Down', 'Left', 'Right'.



The position of Sub picture is changed as you press [P.POSITION] button on the remote control.

To adjust the position in On Screen Display Menu.



- 1. Press MENU [button on the remote control.
- Select PIP [4] by pressing Channel [1/1] button.
- 3. Press Volume button. [📔]
- 4. Select [Position] by pressing Channel [.../...] button and Volume [...] button again.
- 5. Adjust the position by pressing Volume [/] button (To adjust the position of Sub picture, PIP should be active.)
- 6. When configuration is done, press MENU [button to save the changes and exit.

Swapping the main with sub picture in PIP mode



Press [P.SWAP] button on the remote control.

To do this in On Screen Display Menu.



- 1. Press MENU [button on the remote control.
- Select PIP [] by pressing Channel [/] button.
- 3. Press Volume button. [📔].
- Select [SWAP] by pressing Channel [/)
 button.
- 5. Pressing Volume [] button to swap the picture
- 6. When configuration is done, press MENU [] button to save the changes and exit.

Viewing Closed Caption

Closed Caption feature is to display On Screen Text Messages during watching TV. This feature is available in both analog and digital broadcast.



- 1. Press MENU [on the remote control, select Setup [] menu by manipulating Channel [] button and press volume [] button.
- 2. Press Channel [/] to select [Caption] and then Volume [] button.
- 3. 'Caption' sub menu will appear.

Caption: Turn the feature on or off. This can be set by Volume $[\ \ \]$ button.

Caption Box: Set the Text Box. You can turn it on or off with Volume [] /] button.

Caption Box Color: change the color of Caption Box. Press Volume [[/ []] button to change it.

^{*}v Sub Menus of Caption.

Parental Rating Control (V-Chip)

V-chip feature automatically locks TV Programs (TV Parent Guide Lines) or Movie (MPAA) that is considered as inappropriate for children. To activate, deactivate or set the rating, you should enter a PIN (Personal ID Number).



- 1. Press [MENU] button to display the menu.
- 2. Press Channel [] button to select 'Setup', and then press volume [[/ []]
- 3. Press Channel [13/10] button to select 'V-Chip', and then press Volume [🗐 / 🗐] button.
- 4. The message "Enter PIN" will be appear. Enter your four digits PIN Number and press ok[@] button The V-Chip screen will appear.

(*The default Pin Number of a new TV set is '0000'.)

*To change PIN Number, select Change Pin Number menu and then the menu will appear. Choose and enter 4 digits.

How to set up restrictions using the "V-Chip"

- Press Volume [] button to set V-Chip mode.
 Press Channel [√] button to select 'TV Parent Guide Lines' and then push Volume [/ E] button. The menu will appear. You can set up the restrictions in this menu.
 - *Restriction Categories based on six aged base.

Young Children TV-Y7 Children 7 and over TV-G General Audience TV-PG Parental Guidance TV-14 Viewers 14 and Over TV-MA Mature Audience

For instances, if you block TV-Y, TV-Y7 will automatically be blocked and similarly, if you block the TV-G, all the categories in "young adult" (TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-MA) will be

- *Each Restriction Category has additional options, sub-ratings.
- FV: Fantasy Violence V: Violence
- L: Adult Language
- S: Sexual Situation
- D: Sexually Suggestive Dialog

V-Chip will automatically block certain sub-categories that are more restrictive. For example, if you block "L" sub-rating in TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

How to set up restrictions using the "MPAA".

- 1. Press Volume [👸] button to set V-Chip mode.
- 2. Press Channel [] button to select 'MPAA Rating" and then push Volume [] button. The menu will appear. You can set up the MPAA restrictions in this menu.

*Restriction Categories based on six aged base.

General Audience (No Restrictions) PG Parental Guidance Suggested PG-13 PG-13 (Parents Strongly Cautioned)

R (Restricted. Children under 17 should be accompanied by an adult) R

No Children under age 17. NC-17

X (Adults Only) NR Not Rated

Using as a PC Monitor

This TV is designed to be used as a PC Monitor. Concerning the Maximum Resolution, please refer to specification table in Appendix. Since it has driver software implemented, you don't have to install any additional software. Just PLUG N' PLAY!!!

Tip

To use it as a PC Monitor, your PC and TV should be connected via D-Sub Cable (15 Pin Analog) or DVI-to-HDMI cable. For details, please check the Installation section.

Check the current Resolution and Frequency rate

This displays information on current resolution and frequency rate on the bottom of the screen.



- 1. Press MENU [is button on the remote control.
- 2. Press Channel [/ i] button to select '[Picture]' [i] button.
- 3. In [Picture] menu, select [PC] with Channel [Mail of the channel push Volume p
- The resolution and Frequency rate are displayed on the bottom of the screen.

Automatic Adjustment of the PC picture

This is the function that the TV System finds the optimal value for adjustment and automatically applies it. Use this function when the position of WINDOWS image is not centered or the characters on the screen are not clear.



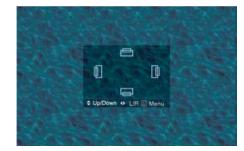


- 1. Press MENU [im] button on the remote control.
- 2. Press Channel $[\[\] /\[\]]$ button to select '[Picture]' $[\[\]]$ menu and push Volume $[\[\]]$ button.
- 3. In [Picture] menu, select [PC] with Channel [oxdots] button and push Volume [oxdots] button.
- 4. Select 'Auto Adjustment' by pressing Channel [M/11] button
- 5. Press Volume $[\, \widehat{\,\,\,\,}]$ button and then Automatic adjustment starts. (It takes a little time.)

Setting the Position of PC Picture

You can adjust the position of a PC picture manually. Use this function when the picture is not centered or shifted to sides.



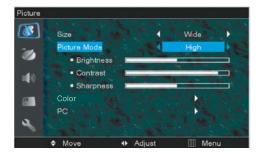


- 2. Press Channel $\lceil \frac{2}{3} \rceil$ button to select '[Picture]' $\lceil \frac{2}{3} \rceil$ menu and push Volume $\lceil \frac{2}{3} \rceil$ button.
- 3. In [Picture] menu, select [PC] with Channel [which is button and push Volume [] button.
- 4. Press Channel [| button and then select 'Position' by pressing Volume [] button.
- 5. The position adjustment screen will be displayed.
- 6. Adjust the position by pressing Channel $[\square/\square]$ button and Volume $[\square/\square]$ button.

Adjusting the PC Picture Settings

TYou can adjust the PC picture, by selecting the preset values or user value. In this Menu, you can adjust Brightness, Contrast and Sharpness.

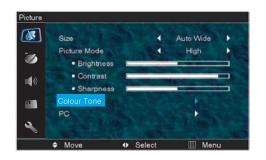
To use the preset values, (High \rightarrow Middle \rightarrow Low \rightarrow Custom)



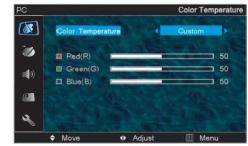
- 1. Press MENU [is button on the remote control.
- 2. Press Volume [🕒] button in Picture [🚳] Menu.
- Select [Picture Mode] by pressing Channel [/ 1]
 button and adjust the value with Volume [/ 2]
 button.

Adjusting the Color Tone

You can adjust the color tone of the PC Picture.(Normal \rightarrow Warm1 \rightarrow Warm2 \rightarrow Custom \rightarrow Cool2 \rightarrow Cool1)







- 1. Press MENU [button on the remote control.
- 2. Press Channel [/ button to select '[Picture]' [menu and push Volume [] button.
- 3. Select [Color Tone] by pressing Channel [[] button and press Volume [] button.
- 4. [Color Temperature] Menu will display.
- 5. Adjust RGB by pressing Channel [\bigcirc / \bigcirc] button and Volume [\bigcirc / \bigcirc] button.

Customiging the Color Tone

- 1. Press MENU [button on the remote control.
- 2. Press Channel [.../ii] button to select '[Picture]' [...] menu and push Volume [...] button.
- 3. Select [Color Tone] by pressing Channel $[\mathbb{L}]/\mathbb{L}$] button and press Volume $[\mathbb{L}]$ button.
- 4. [Color Temperature] Menu will display.
- 5. Select [Custom] by pressing Volume [4/1-] button.
- 6. Select [R], [G], [B] Menu by pressing Channel [.../1] button.
- 7. Adjust [R], [G], [B] Menu by pressing Volume $[\overline{ \cdot \cdot \cdot }]$ button.
- 8. Press MENU [im] button to exit.

Adjusting the Frequency / Phase

Use this function to adjust the Frequency range or Phase.

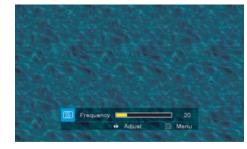
To adjust the Frequency by using On Screen Display Menu.



- 1. Press MENU [is button on the remote control.
- 2. Select Picture munu by pressing Channel $[\ \ \]$ button.
- 3. Press Volume [] button in Picture [] Menu and then, select 'PC' menu by manipulating Channel [/) button.
- 4. Press Volume [🕒] button.
- 5. Press Channel [] button to select [Frequency] or [Phase].
- 6. Press Volume [/ /] button to adjust the Frequency range or Phase



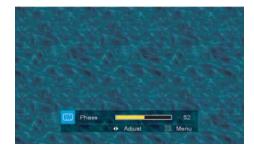




(Frequency)







(Phase)