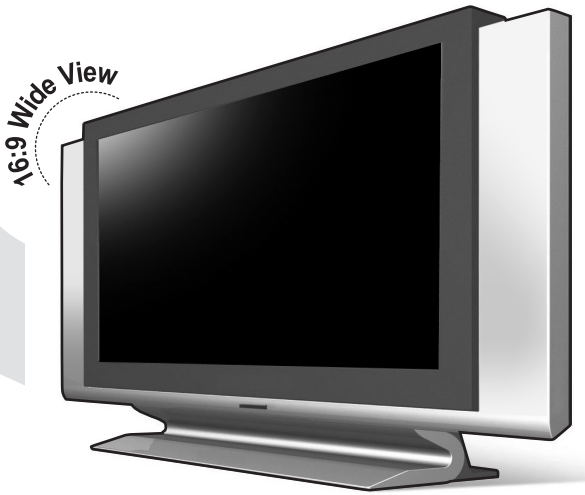
Please read this manual carefully before operating your set.

26" / 32" WIDE TFT-LCD TV

User's Manual



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

◎ Reorient or relocate the receiving antenna.
◎ Increase the separation between the equipment and receiver.
◎ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
◎ Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

Safety Instructions

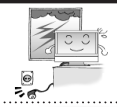
Notes & Descriptions

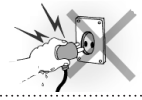
To reduce the risk of fire, electrical shock and other injuries, keep these safety precautions in mind when installing, using and maintaining your TV.

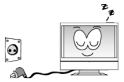
⚠ **Warning** : If you manipulate against the notice, it may cause serious injury or death to user.

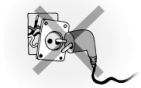
Caution : If you manipulate against the notice, it may cause slight injury to user or appliance.

⚠ Warning


Disconnect the power cable and signal cable connected to the product in case of thunder or lightning.


Do not attempt to touch its power cord with wet hands.
If any electric pin is wet or dusty, remove the moisture or dust first before use.


It is recommended to pull out the power cord unless you use it for a long time.


Damaged power cord, plug or unfitted outlet may be very dangerous.

Do not install the set close to any heating sources.

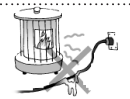
Do not place heavy articles on it or step on the product.

The product should be installed on a clean and dry place.

When you detect any smog, unusual noise or smell, just disconnect the electric power and refer servicing to qualified service personnel.

Do not place any bowl with water, beverage, can or other liquid products on it.

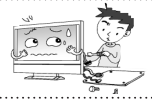
Do not use or place any combustible sprayer or inflammable substances close to the product.


Do not arrange the power cord close to any heating devices/sources.

Install the outdoor antenna for the set far away from high voltage cables.

⚠ Warning

When moving it, do not apply any forces on the set.


Do not attempt to disassemble, repair or change the product.
Whenever you need to repair, adjust or check it, refer servicing to qualified service personnel.

Do not directly spray water or rub it with inflammable substances (thinner or benzene) when cleaning it.

Do not wet or penetrate water over/into the set.

When cleaning the LCD surface, disconnect the power and use a piece of smooth cloth against any scratches on it. Never use wet cloth.

Caution

Make sure to pull out the power cord when cleaning or removing the product.

Ventilation should be always open and the set should be installed in a well-ventilated and wide enough place (a minimum distance away from a wall 10cm or more).

Do not install the set in a place directly exposed to sunlight.

Available Temperature & Humidity

Operating Temperature	0~40˚C
Storage Temperature	-10~50˚C
Operating Humidity	10~80% RH
Storage Humidity	10~90% RH

For dot defect [dead pixel] of LCD ;

TFT-LCD produced by using high-end semiconductor technology with precision of 99.9% above is used for this TV.

However the pixels of R.G.B. & White color seem to be right sometimes or some of black pixels could be seen on the LCD. This is not from bad quality or functional problem and you can use it without any problem.

Precautions when used as a PC monitor ;

Since the LCD TV is not designed for a PC monitor, it may not support very high resolutions that are supported in a PC. When you use it for the purpose, refer to the supportable resolution levels as follows.

When used as a PC monitor : Optimal resolution is XGA (1,024 X 768) @60Hz

This TV has RGB & DVI input connector and its optimal resolution (RGB / DVI) is 1,024×768 @ 60Hz. If you connect DVI connector, you can enjoy better image quality.

When used as a DTV : 720p Input

If you set 720p resolution for your Set-Top BOX output, you can enjoy better quality image & sound with the TV, because applied LCD panel is WXGA (1,366 ×768) resolution product.

Precautions for Image Ghost

Watching TV in a still image for an excessive time may seriously harm the LCD panel. Note that any troubles from the reckless use are not guaranteed and please be cautious of the use.

1. Digital broadcast is delivered in wide screen standard (16:9) DTV, so if the existing broadcasting program made in general screen size (4:3) is on the TV, both sides may not be completely displayed.

   Any different brightness, in case limits to left/right sides are fixed, may leave image ghost of the limits on the LCD penal, if you watch it for a long time.

2. When you watch panorama broadcasting in a general display, it may show the central image with up/down parts removed.

   Any different brightness, in case limits to top/bottom sides are fixed, may leave image ghost of the limits on the LCD penal, if you watch it for a long time.

3. Watching the screen in a still image for a long time may leave image ghost on the LCD panel.

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CHAPTER 1

Before use

1-1. Accessories

1-2. Panels

1-3. Remote Control

1-4. MENU Configuration

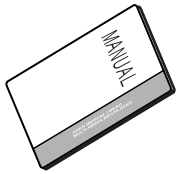
1-5. Inserting the Batteries in the Remote Control

1-1. Accessories

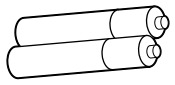
Please make sure the following items are included with your LCD TV.

If any items are missing, contact your dealer.

Remote Control



User's Manual

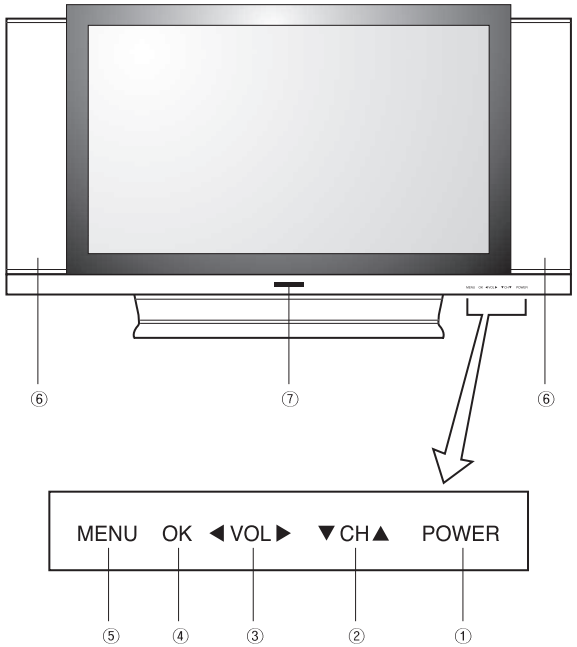


AAA-type battery(×2)

Power Cord

1-2. Panels

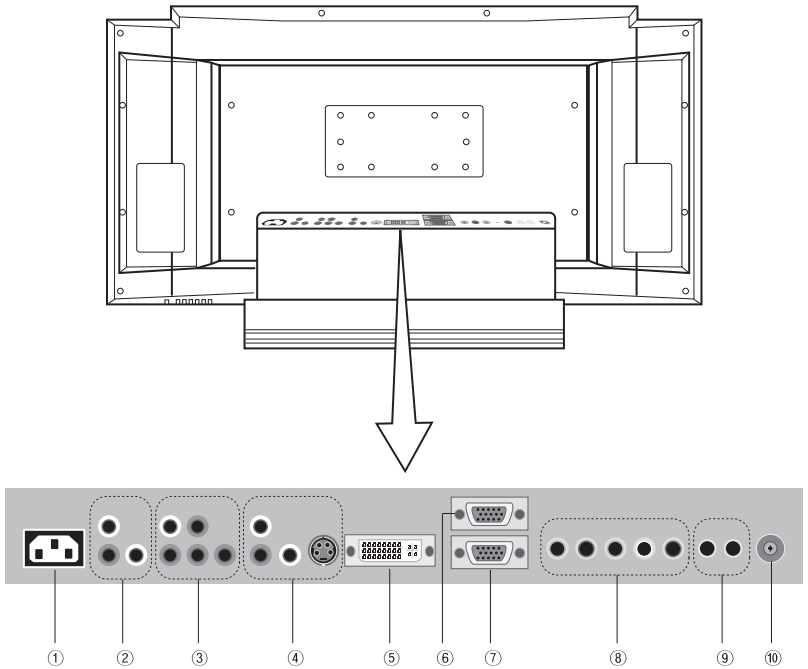
Front Panels



① Power
② Channel Button
③ Sound Cont.
④ MENU SET / Exit MENU
⑤ Load MENU
⑥ Speaker
⑦ Remote Control Sensor

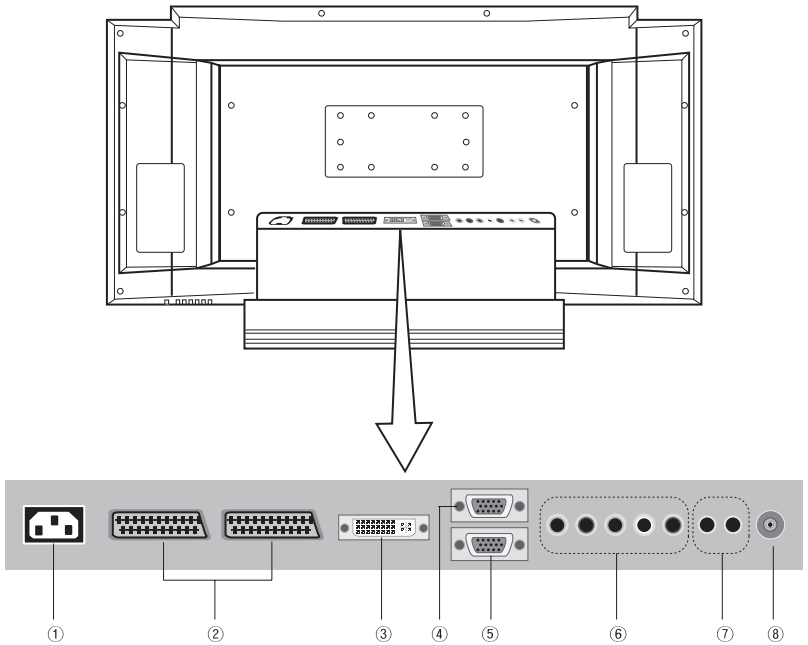
※ AUTO button searches automatically TV channels if set as TV, and it adjusts automatically for PC mode.

Rear Panels (NTSC)



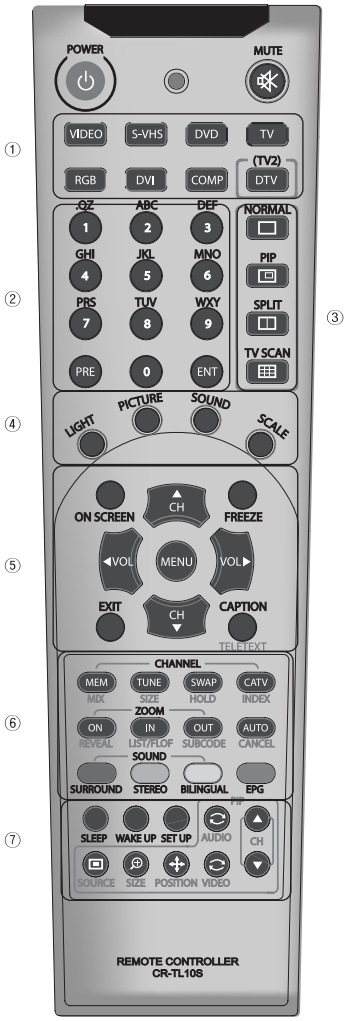
① Power Input
② Video/Audio Output
③ DVD Input (Pb Y Pr L R)
④ Video/Audio lutput, S-VHS Input
⑤ PC Input (DVI)
⑥ PC Input (Upgrade)
⑦ PC Input (RGB)
⑧ DTV Input (Pb Y Pr L R)
⑨ PC Sound Input/Head Phone Output
⑩ TV Antenna Input

Rear Panels (PAL/SECAM)



① Power Input
② SCART (FULL/HALF)
③ PC Input (DVI)
④ PC Input (Upgrade)
⑤ PC Input (RGB)
⑥ DTV Input (Pb Y Pr L R)
⑦ PC Sound Input/Head Phone Output
⑧ TV Antenna Input

1-3. Remote Control



① TV & Input Source Selection Button
② Channel Selection Button
③ Display Selection Button
④ Display Mode & Audio Control Button
⑤ MENU Control Button
Channel & Volume Control Button
⑥ TV Functions & Teletext Menu Button
⑦ PIP Function and Setting Button

Functions by remote control buttons

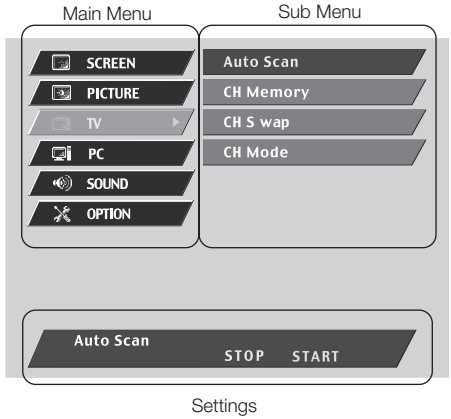
Button	Function	Button	Function
POWER	Power On/Off	MUTE	Sound off Temporarily
VIDEO	Composite Video Input	S-VHS	S-Video Input
DVD	DVD Input (Y PbPr)		
TV	TV Input	RGB	PC Input
DVI	DVI Input (Optional)	COMP	DTV Component Input
DTV (TV2)	PIP TV Input (Optional) / DTV Input (If DTV Tuner is built in)		
NORMAL	Select Normal Display	PIP	PIP display
SPLIT	Split (PBP)	TV SCAN	16 Channels Multi Scan
0~9	Numeric Buttons		
PRE	Previous Channel	ENT	Input selected channels
LIGHT	Control background Light	PICTURE	Control Picture Mode
SOUND	Control Sound	SCALE	Control Picture Scale
FREEZE	Pause	ON SCREEN	Display screen status
MENU	Enter Main/Sub MENU	EXIT	Exit Main/Sub MENU
CH UP / DOWN	Move TV channels / Move MENU up and down		
VOL + / -	Control Volume / MENU settings		
CAPTION	Turn On/Off Caption		
MEM	Add/Remove a TV CH	TUNE	Not Available
SWAP	Switch TV channels	CATV	TV Mode
Zoom ON	Zooming On/Off	IN	Zoom in
OUT	Zoom out		
AUTO	TV : Channel search / PC : Auto Adjustment		
SURROUND	Surround effect	STEREO	STEREO/MONO
BILINGUAL	Select Multilanguage broadcasting system		
EPG	Electronic Program Guide (Option for DTV)	SLEEP	Sleep TImer setting
WAKE UP	Wake-Up Timer setting	SET UP	Other setting
PIP SOURCE	PIP input signal change	PIP VIDEO	Switch Main/PIP screen
PIP AUDIO	Switch Main/PIP sound	PIP POSITION	Change PIP position
PIP SIZE	Control PIP size		
PIP CH UP / DOWN	Change PIP TV Channel		

※ The remote control provided is available up to 7m from the optical receive part within Left/Right 15 degrees.

1-4. MENU Configuration

Most functions of the TV set can be controlled by MENU and selection buttons on the remote control, so learning how to operate them would be convenient for you.

1. Menu Configuration



2. Press it again to move to sub menu of a selected main menu.

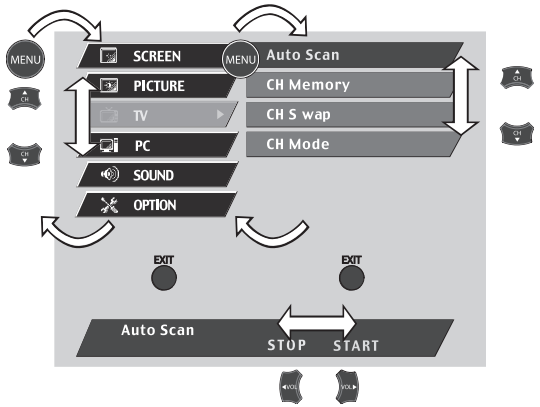
1) Press MENU button to display main menu.

2) Press it again to move to sub menu of a selected main menu.

3) Press EXIT to return from sub menu to main menu or from main menu to menu removal.

4) To move among menus, use CH button.

5) To change a selected menu setting, use VOL button.



1-5. Inserting the Batteries in the Remote Control

1) Remove the cover of the remote control.
2) Check the polarity of batteries and insert them in right directions.
3) Replace the cover.
4) Available batteries : 2 DC 1.5V AAA-type batteries

Since incorrect insertion of batteries may cause breakage, leakage or injuries, check the polarities before the insertion.
Separate and collect used batteries for the protection of environment.
Do not use alkaline and manganese batteries together.

CHAPTER 2

Connection (NTSC)

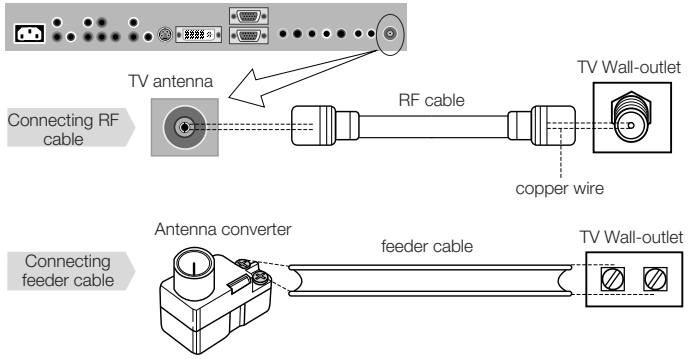
2-1. Connecting Power
2-2. Connecting TV Antenna
2-3. Connecting PC
2-4. Connecting PC DVI
2-5. Connecting DV (AV equipment)
2-6. Connecting DTV
2-7. Connecting DVD
2-8. Connecting VIDEO / S-VHS Input
2-9. Connecting Headphone (speaker) Output
2-10. Connecting VIDEO Output

2-1. Connecting Power

1. The product automatically adjusts voltage.
   In case 110V is used, connect 110V plug before use.
2. Power Cable should be firmly connected to an outlet or TV Power input in order not to be pulled out or shake.

2-2. Connecting TV Antenna

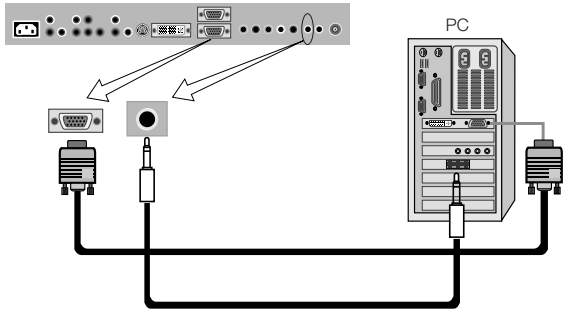
1. When round cable (75Ω coaxial cable) is used, copper part of the cable should not be bent.



Cautions

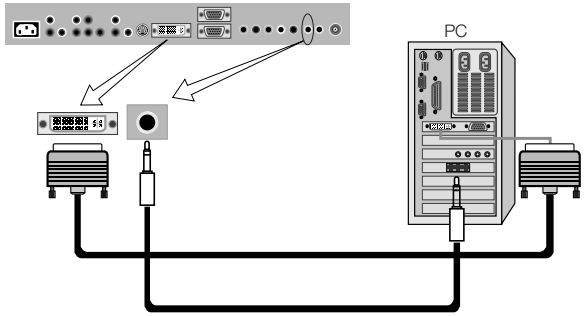
1. When an outdoor antenna is used, it is recommended for a skilled technician to install it.
2. It may be helpful to better display to purchase additional installing amplifier if there is any problem with weak radio wave.

2-3. Connecting PC



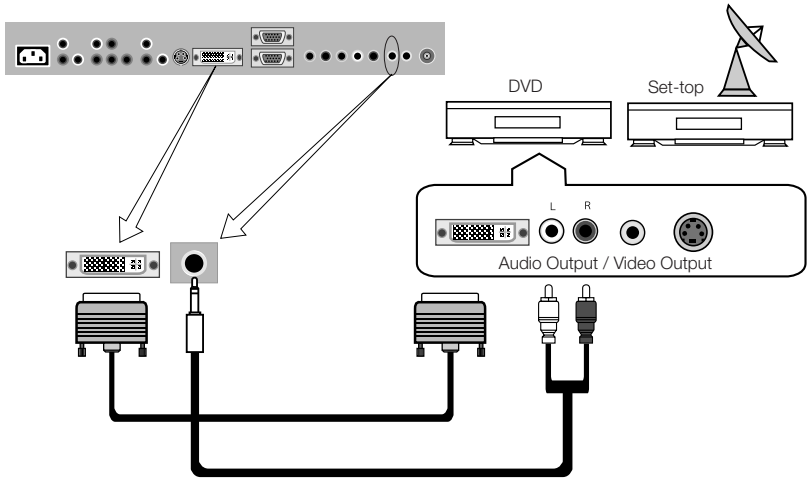
1. Connect D-Sub Cable to D-Sub port on the TV and PC.
2. Connect Audio Cable (not included) to Audio output of a PC (stereo jack) and PC Audio Input Port of the TV (stereo jack).

2-4. Connecting PC DVI



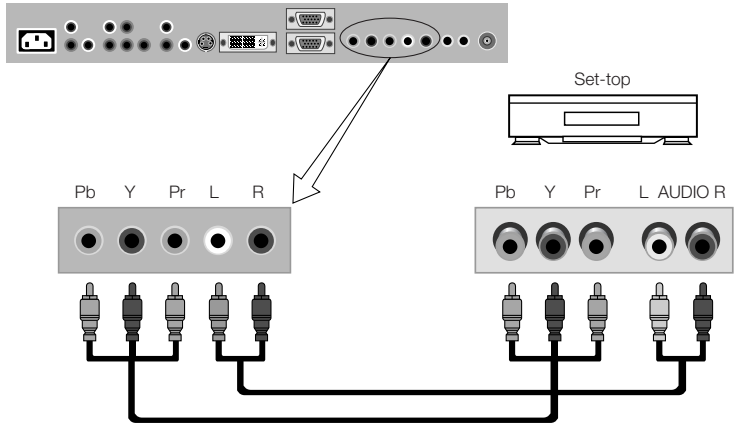
1. Connect DVI Cable (not included) to DVI port of the TV and PC.
2. Connect Audio Cable (not included) to Audio port of PC (stereo jack) and TV (stereo jack).
3. It is recommended to use D-type DVI cable.

2-5. Connecting DVI (AV equipment)



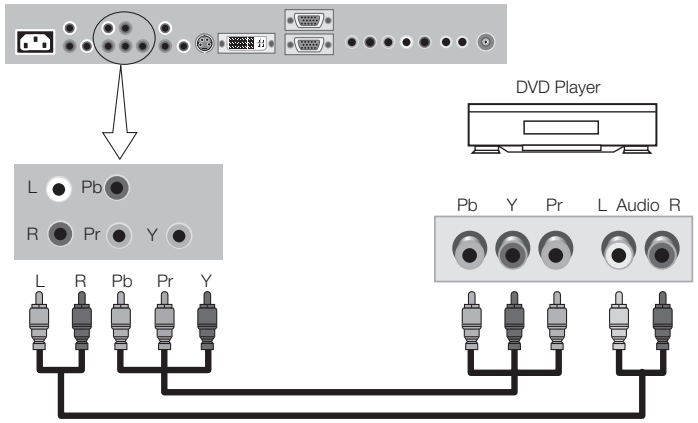
1. Connect a DVI cable (Option) to DVI connector of TV, DVD, or Set-top Box.
2. Connect an audio cable (Option) between an audio connector of DVD player, Set-top Box and PC audio connector of TV.
3. When using DVI connector of AV equipment, you have to connect audio cable to PC audio input connector of TV. Otherwise, it doesn't work!
4. You have to use only DVI cable of D-type.

2-6. Connecting DTV



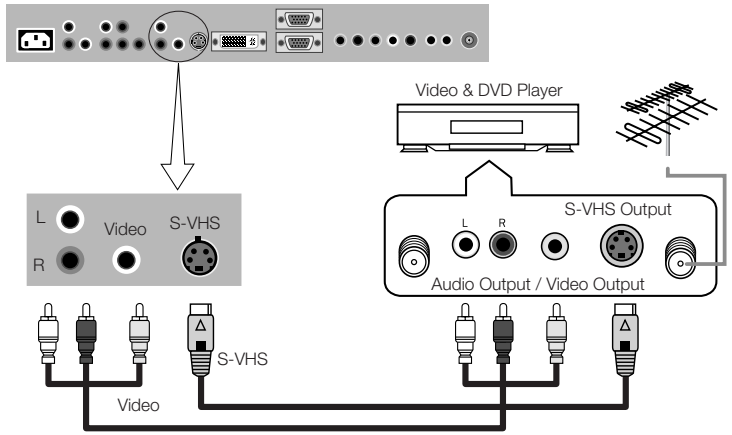
1. Connect Component Cable (not included) to DTV Connection ports of TV (Pb Y Pr) and DTV Receiver.
2. Connect Audio Cable (not included) to Audio ports (L/R) of TV and DTV Receiver.
3. Cables should be connected to ports of same colors.

2-7. Connecting DVD



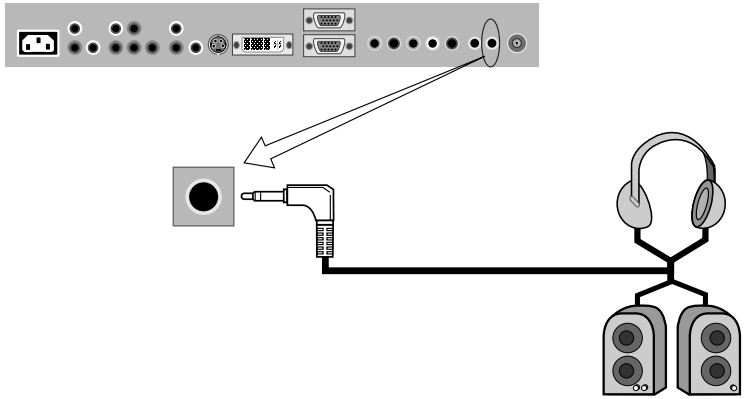
1. Connect Component Cable (not included) to Component ports of TV and DVD player.
2. Connect Audio Cable (not included) to Audio ports (L/R) of TV and DVD player.
3. Cables should be connected to ports of same colors.

2-8. Connecting VIDEO / S-VHS Input



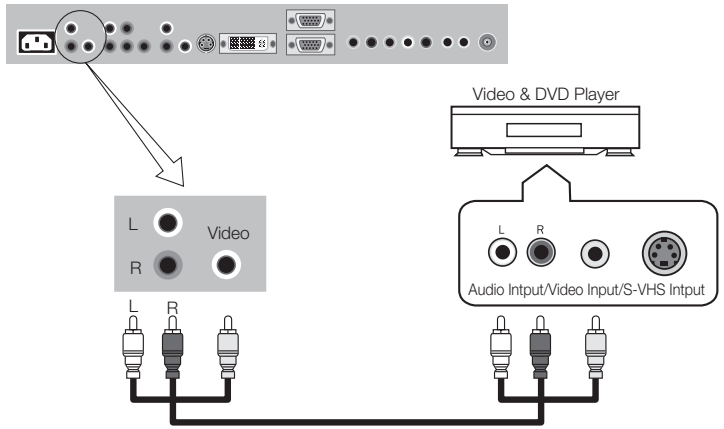
1. Connect Video/Audio Cable (not included) and S-VHS Cable to Video port of TV and camcorder, game machines, VCR, DVD player or Set-Top box.
2. Cables should be connected to ports of same colors.
3. Audio signals of S-VHS should be used with external audio signal cables.
4. S-VHS signal secures better quality than composite video signal.

2-9. Connecting Headphone (speaker) Output



1. Connect Headphone (not included) to the Headphone output port of the TV.
2. Even in case of using headphone, internal speakers built in the TV still works and if you press MUTE button, the speakers stop working.
3. If possible, use the headphones of which impedance is 8Ω. Other headphones may output too weakly or strongly.
4. In case of connecting to speakers, connect speakers with amps. If connected with speakers without amps, it may sound weakly.
5. To adjust the headphone volume level select SOUND in the configuration menu and move to “Headphone Volume”.

2-10. Connecting VIDEO Output



1. When recording TV program or using the video/audio of the TV for other AV device (VCR and etc), connect it to AUX Output terminal of the TV and Input Port of the device.
2. Cables should be connected to terminals of same colors.
3. External Output Signal outputs TV broadcasting signals of the main display.

CHAPTER 3

Connection (PAL/SECAM)

3-1. Connecting Power

3-2. Connecting TV Antenna

3-3. Connecting PC

3-4. Connecting PC DVI

3-5. Connecting DV (AV equipment)

3-6. Connecting DTV / DVD

3-7. Connecting SCART (Full)

3-8. Connecting SCART (Half)

3-9. Connecting Headphone (speaker) Output

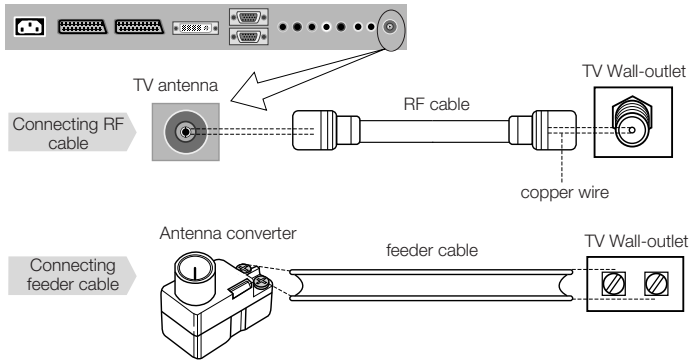
3-10. Connecting VIDEO Output

3-1. Connecting Power

1. The product automatically adjusts voltage.
   In case 110V is used, connect 110V plug before use.
2. Power Cable should be firmly connected to an outlet or TV Power input in order not to be pulled out or shake.

3-2. Connecting TV Antenna

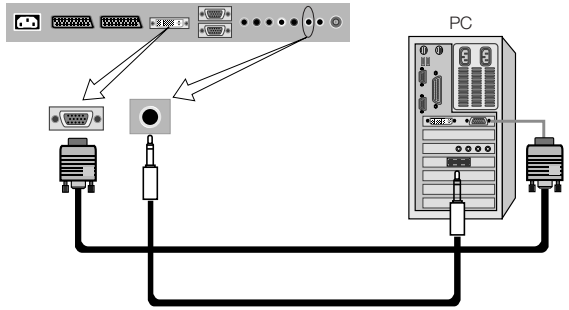
1. When round cable (75Ω coaxial cable) is used, copper part of the cable should not be bent.



Cautions

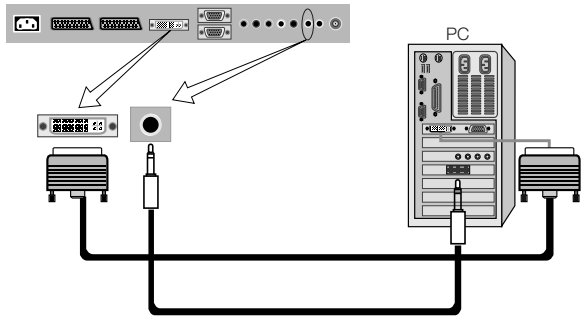
1. When an outdoor antenna is used, it is recommended for a skilled technician to install it.
2. It may be helpful to better display to purchase additional installing amplifier if there is any problem with weak radio wave.

3-3. Connecting PC



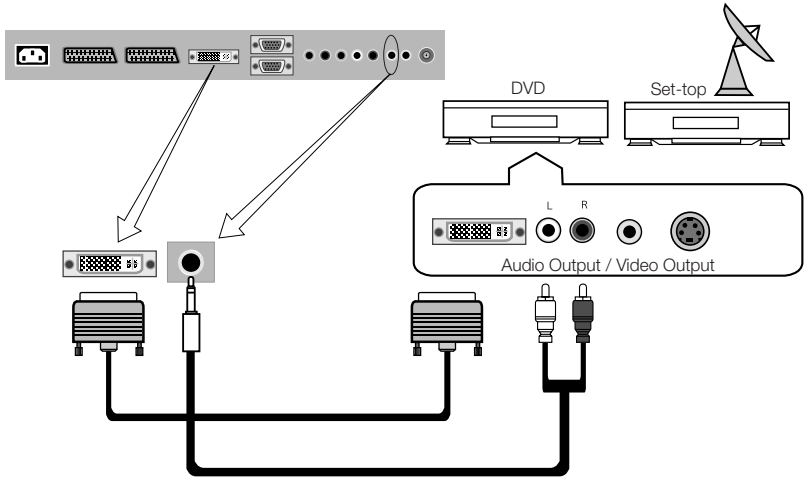
1. Connect D-Sub Cable to D-Sub port on the TV and PC.
2. Connect Audio Cable (not included) to Audio output of a PC (stereo jack) and PC Audio Input Port of the TV (stereo jack).

3-4. Connecting PC DVI



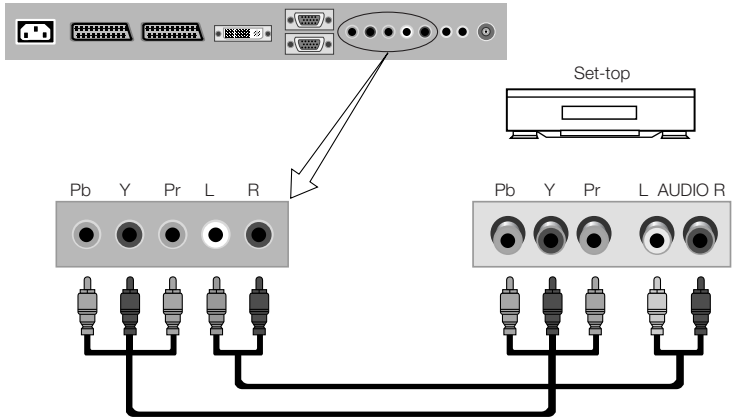
1. Connect DVI Cable (not included) to DVI port of the TV and PC.
2. Connect Audio Cable (not included) to Audio port of PC (stereo jack) and TV (stereo jack).
3. It is recommended to use D-type DVI cable.

3-5. Connecting DVI (AV equipment)



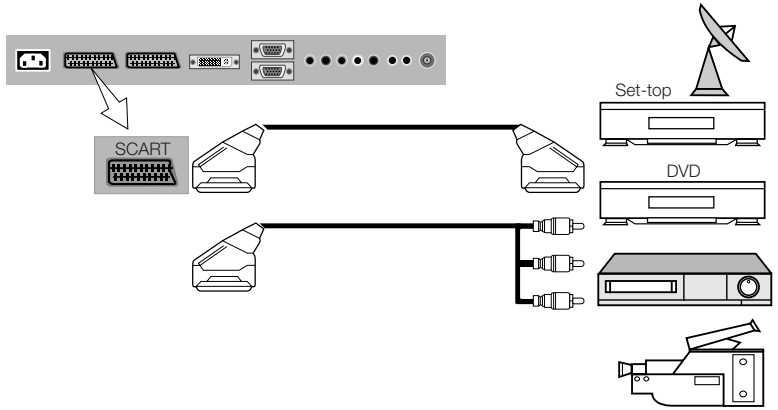
1. Connect a DVI cable (Option) to DVI connector of TV, DVD, or Set-top Box.
2. Connect an audio cable (Option) between an audio connector of DVD player, Set-top Box and PC audio connector of TV.
3. When using DVI connector of AV equipment, you have to connect audio cable to PC audio input connector of TV. Otherwise, it doesn't work!
4. You have to use only DVI cable of D-type.

3-6. Connecting DTV / DVD



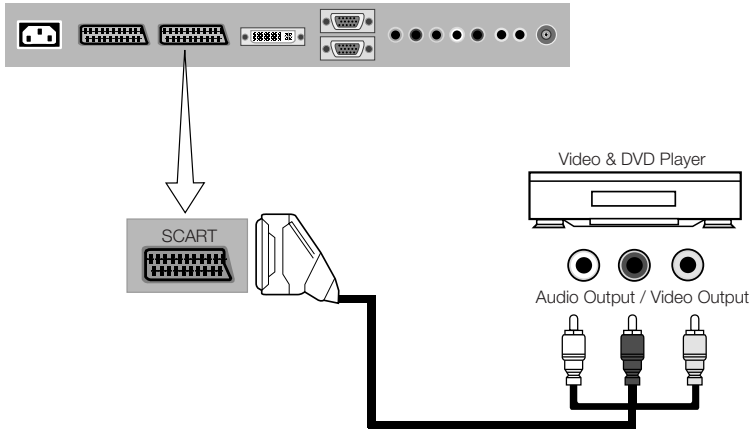
1. Connect Component Cable (not included) to DTV / DVD Connection ports of TV (Pb Y Pr) and DTV / DVD Receiver.
2. Connect Audio Cable (not included) to Audio ports (L/R) of TV and DTV / DVD Receiver.
3. Cables should be connected to ports of same colors.

3-7. Connecting SCART(Full)



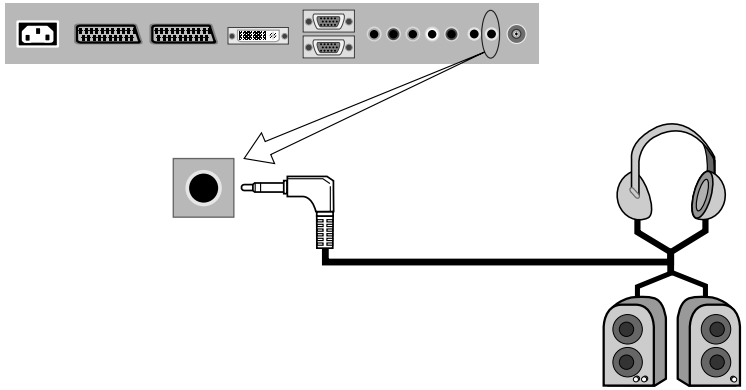
1. Connect SCART Cable (not included) to SCART port of TV and DVD player, VCR, Set-Top box or camcorder.

3-8. Connecting SCART(Half)



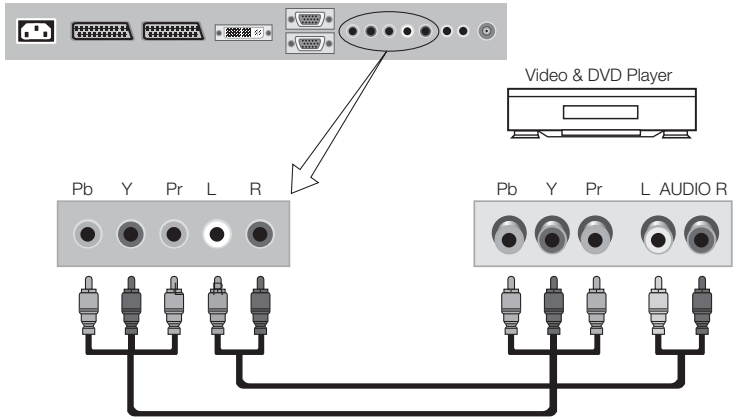
1. Connect SCART Cable (not included) to SCART port of TV and DVD player, VCR, Set-Top box or camcorder.

3-9. Connecting Headphone (speaker) Output



1. Connect Headphone (not included) to the Headphone output port of the TV.
2. Even in case of using headphone, internal speakers built in the TV still works and if you press MUTE button, the speakers stop working.
3. If possible, use the headphones of which impedance is 8Ω. Other headphones may output too weakly or strongly.
4. In case of connecting to speakers, connect speakers with amps. If connected with speakers without amps, it may sound weakly.
5. To adjust the headphone volume level select SOUND in the configuration menu and move to “Headphone Volume”.

3-10. Connecting VIDEO Output



1. When recording TV program or using the video/audio of the TV for other AV device (VCR and etc), connect it to AUX Output terminal of the TV and Input Port of the device.
2. Cables should be connected to terminals of same colors.
3. External Output Signal outputs TV broadcasting signals of the main display.

CHAPTER 4

Using TV Menus

4-1. Watching TV

4-2. Auto On/Off Timer

4-3. Change TV Channel Mode

4-4. Channel Search

4-5. Add/Remove Channel

4-6. Channel Swap

4-7. V-chip Funetion

4-8. Caption

4-9. Password

4-10. DTV Field

4-11. AVC Control

4-12. PC / DTV Mode

4-13. Stereo

4-14. Bilingual (Multi-Language Broadcasting)

4-1. Watching TV

1. Precautions in the initial installation

1) Check whether TV antenna cable is properly connected.
2) After checking whether the voltage is 100V or 220V, supply the electric power and connect the adaptor to the TV.
   At the moment, TV is in standby.

2. Turning on TV

1) Turn on the Power button directly on the set or by remote control.
2) Each pressing the button turns on or off the set.

Power Button on Remote Control

Power Button on the TV Set

3. Channel Selection

1) Press CH button on the remote control to change channels.
2) Press numeric buttons to go to a channel directly.
3) Press CH buttons (▼\▲) on the TV set to increase or decrease TV channels.

Channel button on the remote control

Channel button on the TV set

4. Volume Control

1) Increase/decrease volume by pressing VOL button on the remote control.
2) Press VOL button (◀/▶) on the TV set to control the volume.

Volume Button on the remote control

Volume Button on the TV Set

5. Mute

MUTE button on the remote control

1) Press MUTE button on the remote control to sound off temporarily and "MUTE" is displayed.
2) Press it again to turn the sound back on or press volume buttons.

6. Move to Previous Channel

Previous Channel Button

1) Every time pressing the PRE button on the remote control, it moves to a previous channel.

7. Checking the present broadcasting information

Broadcasting Info Button

1) Press ON SCREEN button on the remote control to display the information on the screen.
2) Press ON SCREEN button again removes the information or leaving it clears the information in 5 seconds.

※ In case of TV Signal, it displays channel info while it shows mode info in case of PC signal.

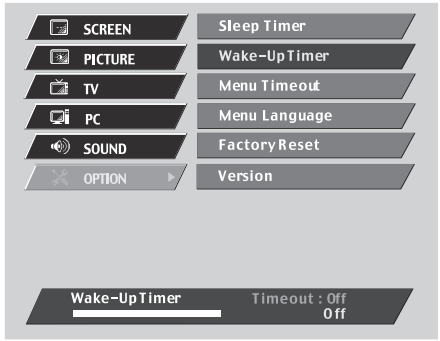
4-2. Auto On/Off Timer

You may set the TV to turn on or off in a certain time period.

1. Setting Wake-Up Timer

- Press WAKE UP button on the remote control.

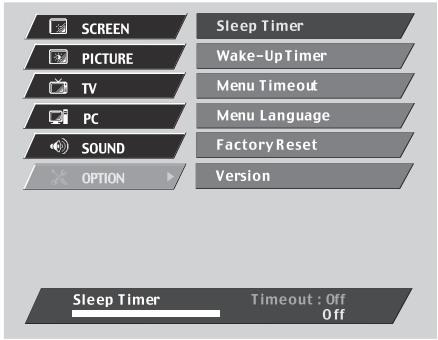
- Set the time to turn on the TV automatically by using volume button on the remote control.
- Wake-up timer can be set from Off to 12 hours.
- Once the setting is complete, press WAKE UP button again or EXIT button.
- Also, it can be set in OSD menu if OSD button is used.



2. Setting Sleep Timer

- Press SLEEP button on the remote control.

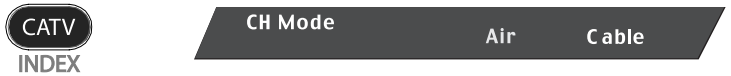
- Set the sleep timer by using volume button on the remote control.
- Sleep Timer can be set from Off to 180 minutes.
- Once the setting is complete, press SLEEP button again or EXIT button.
- Also, it can be set in OSD menu if OSD button is used.



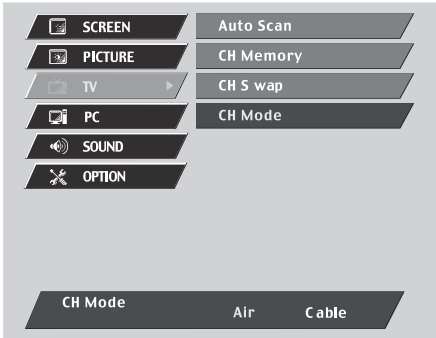
4-3. Change TV Channel Mode

Please set your broadcast type between Air and Cable.

If its mode is set as Air, some Cable broadcasts are not able to watch.



- Press CATV button on the remote control.

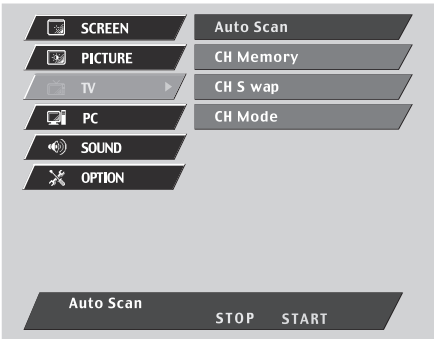


- Set the CH Mode between Air & Cable by using VOL button on the remote control.
- Once the setting is complete, press CATV button or EXIT button.
- Also, it can be set in OSD menu if OSD button is used.

4-4. Channel Search

When using the TV first after purchase, reconnecting it due to power failure or other reasons, channels should be searched and registered again.
Since Channel Search function searches channels currently broadcasted, you should execute it when most channels are broadcasted.
- Press AUTO button on the remote control.

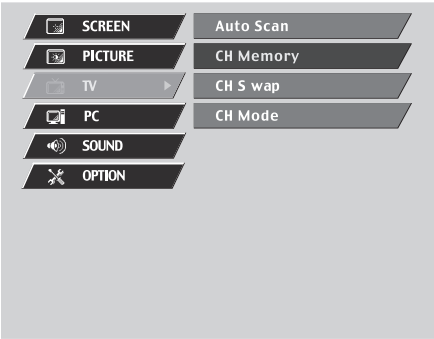
- Once you move to START by using Volume button on the remote control, it starts channel search.
- To stop channel search, repress AUTO button on the remoter control.
- If you stop it during channel search, it stores the currently searched channels only.
- Also, it can be set in OSD menu if OSD button is used.



4-5. Add/Remove Channel

You may add or remove a channel as your need.
- Move to a channel to add or remove by pressing numeric buttons or CH button.
- Press MEM button on the remote control.

- In case of adding a channel by using Volume button on the remote control, move to Add or Remove.
- Once the setting is complete, press MEM button again or EXIT button.
- Also, it can be set in OSD menu if OSD button is used.

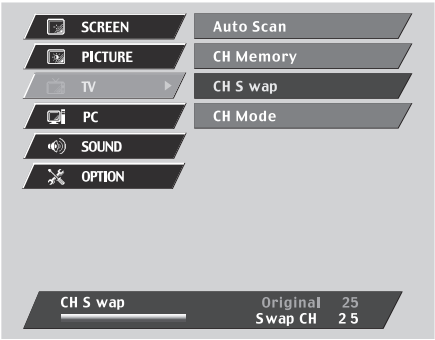


4-6. Channel Swap

In case of channels frequently watch, you can switch it to other channel numbers and store them.

- Move to a channel to change.
- Press SWAP button on the remote control.

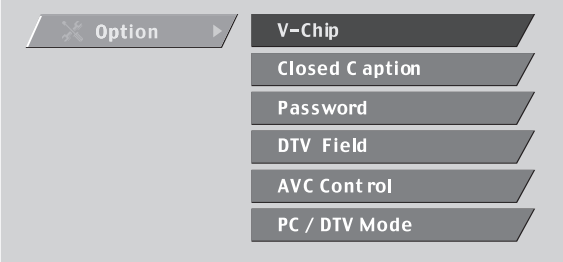
- Change a channel number to switch by using Volume button on the remote control.
- Once the setting is complete, press SWAP button again or EXIT button.
- Also, it can be set in OSD menu if OSD button is used.



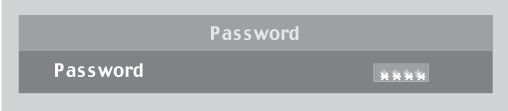
4-7. V-Chip Funetion

It makes MPAA rating of TV broadcast and other media.
It works only with V-Chip function broadcast and media.
It can be controlled by using the remote control only.

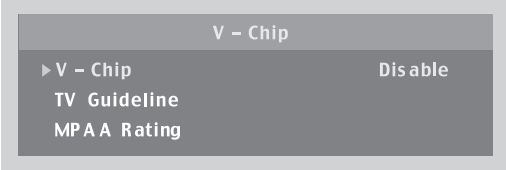
- Press SETUP button on the remote control.
- Move to V-Chip menu by using CH button on the remote control.



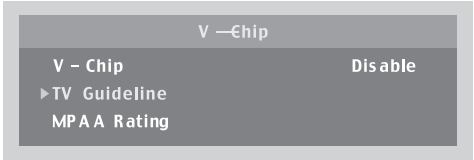
- Press MENU button and enter Password.
- Press ENT or MENU button on the remote control.



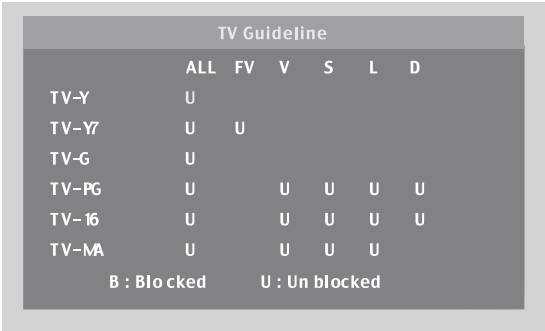
- Set V-Chip function by using VOL button on the remote control.



- Move to TV Guideline or MPAA Rating by using CH button on the remote control.



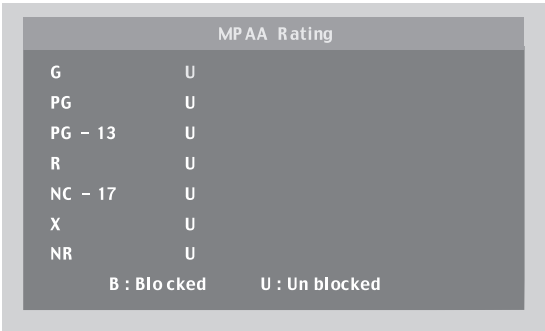
- Move to the position which you want to make channel blocking and press MENU button for setting.
- Press it again for cancellation.



TV Guideline

	ALL	FV	V	S	L	D
TV-Y	U					
TV-Y7	U	U				
TV-G	U					
TV-PG	U		U	U	U	U
TV-16	U		U	U	U	U
TV-MA	U		U	U	U	

B : Blocked U : Unblocked



MPAA Rating

G	U
PG	U
PG – 13	U
R	U
NC – 17	U
X	U
NR	U

B : Blocked U : Unblocked

- Press EXIT button for coming out from setting.

4-8. Caption

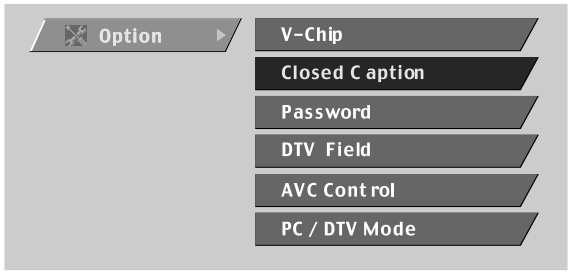
This function works only Caption broadcast or other CC marked video tape and DVD title.
Set the function in the SETUP menu.
Caption can be set only by using the remote control.

1. Caption On / Off

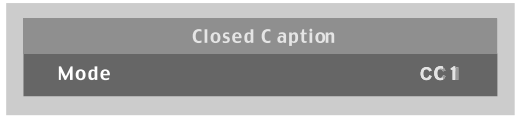
- Press CAPTION button on the remote control when it is broadcasted.
- Press CAPTION button for coming out from setting.

2. Set Caption

- Press SETUP button.
- Move to Closed Caption menu by using CH button.



- Set Caption broadcast type by using VOL button on the remote control.

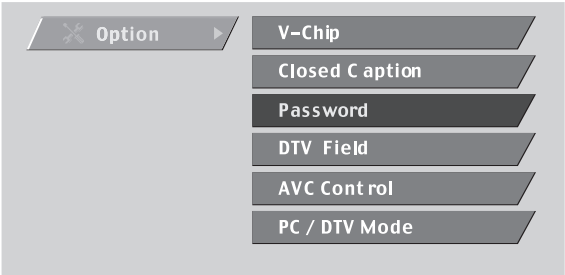


- Press EXIT button for coming out from setting.

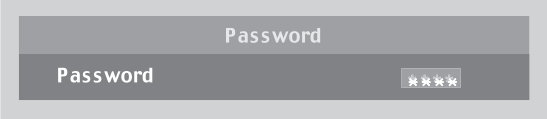
4-9. Password

When using Contents Blocking function, you can set password and please keep the password private.
Default password is <0000>.
Please change default password to new one after installing TV.

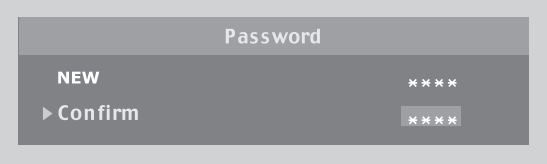
- Press [SET UP] button on the remote control.
- Move to password menu by using [CH] button on the remote control



- Press [MENU] button on the remote control for entering Password setting menu.
- When setting password first after purchase, press <0000> on the remote control and press [ENT] or [MENU] on the remote control after entering new password for changing.



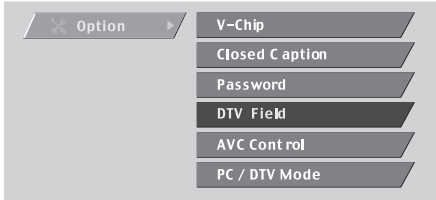
- Press new password and [ENT] or [MENU] again for confirmation it.



4-10. DTV Field

Depending on a DTV receiver, a signal is not identical with standard signal. It may cause unclear display and if you change DTV Field value, it will be recovered to the normal picture (it can be set only by the remote control).

- Press [SET UP] button.



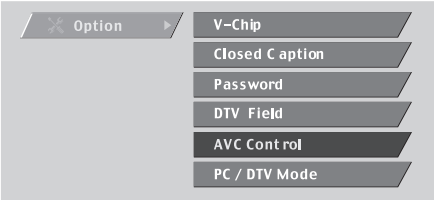
- Press [MENU] button to go into DTV Field Setting Menus.
- Set **Not Invert/Invert** with Volume button.
- Initially, '**Not Invert**' is defaulted and you may change it to '**Invert**' if the display is not normal.

- Once the setting is complete, press the [EXIT] button.

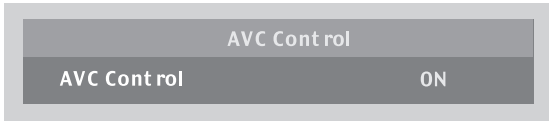
4-11. AVC Control

AVC (Automatic Volume Correction) Control : This option is properly control its sound volume level if there is different volume level from same sound source.

- Press SET UP button on the remote control.
- Move to AVC Control menu by using CH button.



- Select AVC control menu by pressing MENU button.
- Change its ON/OFF setting by using VOL button.

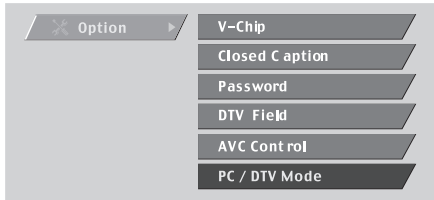


- Once the setting is complete, press the EXIT button.

4-12. PC / DTV Mode

Use this function when you use DVI connector for DTV / PC input signal.
When you use PC / DTV signal, please set its proper mode as PC / DTV, because PC & DTV input signal is different.

- Press SET UP button on the remote control.
- Move to PC / DTV Mode menu by using CH button.



- Select PC / DTV Mode by pressing MENU button.
- Set its PC / DTV mode by using VOL button.

- Once the setting is complete, press the EXIT button.

NOTICE

If the screen size is not properly set on the display, please check whether you changed its mode before input signal changed please check its input mode whether it is properly set as PC or DTV.

4-13. Stereo

If you use the TV in an area with weak or bad reception, there may cause sound noise or other problem when selecting a channel. In this case, cancel the STEREO setting.
It can be canceled only by the remote control.

- Press STEREO button on the remote control to cancel stereo and returning to Mono.
- Press STEREO button in Mono returns to Stereo.
- If Stereo is off, it is always set as Mono even though a channel is changed.

4-14. Bilingual (Multi-Language Broadcasting)

In case of multi-language broadcasting, it can be converted if you wish to listen to other language except main language.
Multilanguage broadcasting can be set only by the remote control.

- Every time pressing BILINGUAL button on the remote control, the language display is changed in good order of main language → sub language → main + sub languages (dual language).
(Main - Sub - Dual)

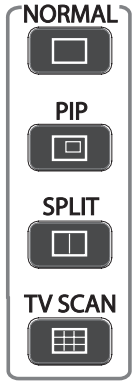
CHAPTER 5

Using Menus of Picture, Sound and Others

5-1. Setting Display Mode
5-2. Setting Scale Mode
5-3. Setting Picture Mode
5-4. Using Simultaneous Picture Mode
5-5. Setting Screen MENU by Simultaneous Picture
5-6. Setting Sound
5-7. Setting Others

5-1. Setting Display Mode

You may view other video screen while watching TV.



- Press NORMAL, PIP, SPLIT or TV SCAN button.

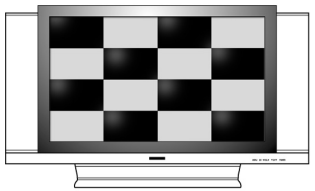
1) NORMAL : Show a selected main screen in full size.

2) PIP : Show main screen and sub screen in full size and small size together.

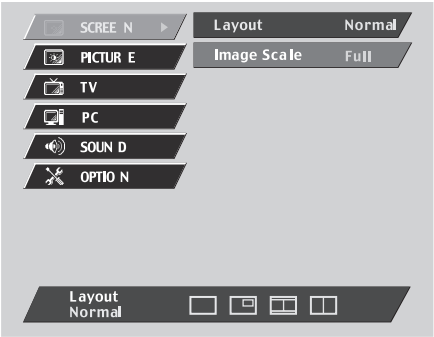
3) SPLIT : Show main screen and sub screen by horizontally shared. You can control Main screen's (left side screen) size and Sub screen's size is controlled inverse ratio of main screen.

4) SPLIT FULL : Repressing SPLIT button in Split display, shows main screen and sub screen in split full screen.

5) TV SCAN : Show 16 channels searched and stored in the TV set in 16 pictures in order on the screen. At the moment, TV SCAN can be operated only by the remote control.



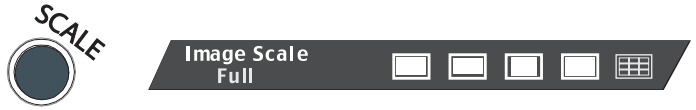
- Also, it can be set in OSD menu if OSD button is used.
- OSD Menu is different depending on Display Type [Screen Layout].



5-2. Setting Scale Mode

You can set the screen's suitable image scale of TV or Video input signals and view them accordingly.

- Press SCALE button on the remote control.



- Control the scale (s) in desirable size (s) by using Volume button on the remote control.

1) FULL : Show a screen in the full LCD Penal.

2) 16:9 : Show a screen in 16:9 wide screen size.

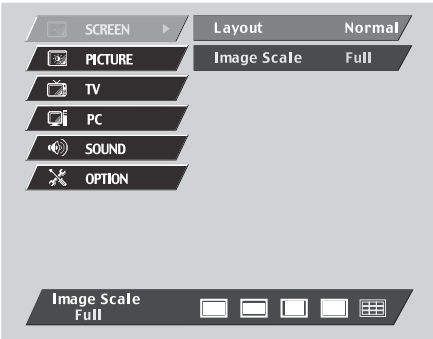
3) 4:3 : Show a screen in 4:3 screen size for general broadcasting.

4) CAPTION : Show a screen suitable for Caption Broadcasting.

5) SMART VIEW : Show a screen in a proportion suitable for grand image.

In PIP or SPLIT screen, it can be set in types of AUTO, 16:9, 4:3. For more information, see to 4-4 Setting Simultaneous Picture Mode.

- Once the setting is complete, press PICTURE button or EXIT button on the remote control.
- Also, it can be set in OSD menu if OSD button is used.
- OSD Menu is different depending on Display Type [Screen Layout].



5-3. Setting Picture Mode

By setting a picture mode suitable for broadcasting/video signals, you may enjoy better quality picture.

- Press PICTURE button on the remote control.

- Set a picture mode by using Volume button on the remote control.

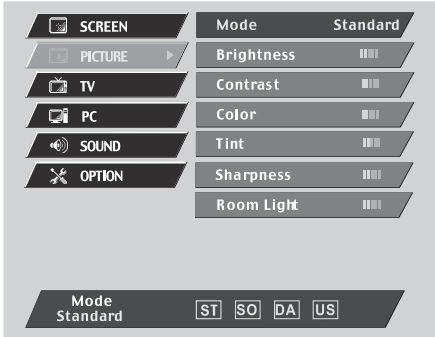
1) Standard : Standard picture mode.

2) Soft : It displays a picture softly as a whole and is better for watching a film or TV series.

3) Dynamic : The mode is suitable for watching sports, which changes pictures fast.

4) User : It is a picture mode customized by a user.

- Also, it can be set in OSD menu if OSD button is used.

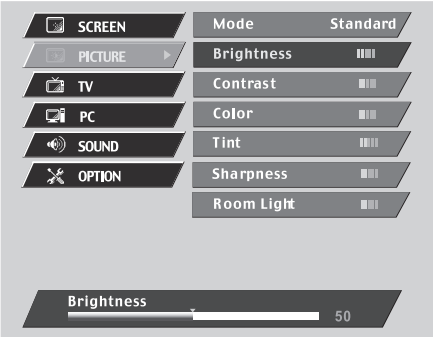


1. Setting USER Mode

You can set each picture mode according to your taste. If you set USER mode as your taste, it is stored as USER Mode standard.

- Press MENU button on the remote control and move to PICTURE of main menu by using CH button on the remote control.
- Press MENU button on the remote control and move to the sub menu for changing values by using CH/VOL buttons.

1) Brightness : Adjust screen brightness.
2) Contrast : Adjust screen contrast.
3) Color : Adjust screen color.
4) Tint : Adjust screen tint.
5) Sharpness : Adjust screen sharpness.
6) Room Light : Adjust the brightness of TV screen according to background brightness.

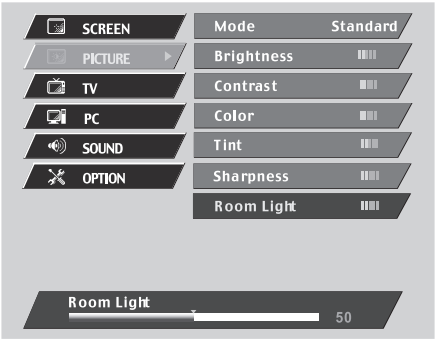


2. Setting Room Light

You can adjust the entire TV brightness according to lightning status.

- Press LIGHT button on the remote control.

- Adjust values by using Volume button on the remote control.
- Once the setting is complete, press LIGHT or EXIT button on the remote control.



5-4. Setting Simultaneous Picture Mode

While watching TV on main screen, you can enjoy other video picture on the sub screen.
Simultaneous Picture means PIP and/or SPLIT Picture display.

1. Changing a channel of Simultaneous Picture

- Press CH button on the remote control.
- It changes a TV channel if the sub screen shows TV.

2. Changing input signal of Sub-Screen

- Press SOURCE button on the remote control.
- Every time pressing SOURCE button, it changes input signal of sub screen.
- Available input signals of sub screen are as follows;

SUB / MAINRGB	PC RGB	PC DVI	TV	VIDEO	S-VHS	COMP (DTV)	DVD
PC RGB	X	X	0	0	0	X	0
PC DVI	X	X	0	0	0	X	0
TV	0	0	X	X	X	0	X
VIDEO	0	0	X	X	X	0	X
S-VHS	0	0	X	X	X	0	X
COMP (DTV)	X	X	0	0	0	X	0
DVD	0	0	X	X	X	O	X

3. Changing Sub Screen Size

It adjusts sub screen size.

- Press SIZE button on the remote control.
- Adjust sub screen size by Volume button on the remote control.
- Different menus are displayed depending on PIP Picture or SPLIT Picture.

- On PIP Picture, sub screen size can be adjusted from 1/16 to 1/4 of the full size.

- On SPLIT Picture, main screen size is adjusted while sub screen size is adjusted accordingly.
- On SPLIT Picture, the left screen always shows main screen.

4. Changing Sub Screen Position

Adjust a sub screen's position on PIP Picture.

POSITION

- Press POSITION button on the remote control.
- Move PIP picture to a desirable position by using CH/VOL button on the remote control.

- The position is set as USER setting of OSD menu.
- Once the setting is complete, press POSITION or EXIT button on the remote control.

5. Switching Main/Sub Screen

VIDEO

It switches main/sub screens.
In case of switching main/sub screens, audio is changed accordingly.
The left screen always shows main screen.

6. Switching Audio of Main/Sub Screen

AUDIO

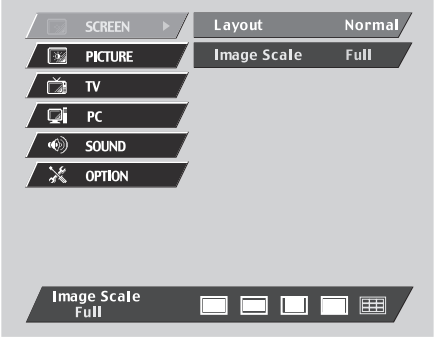
It switches audio of main/sub screen.
In case of switching audio of main/sub screen, it switches audio only, not screens.

5-5. Setting Screen MENU by Simultaneous Picture

Depending on Layout in OSD Menu, sub menus of SCREEN are changed.

1. SCREEN MENU in NORMAL Picture

- It works only in NORMAL Picture.
- Select SCREEN menu by pressing MENU button on the remote control (MENU → MENU).

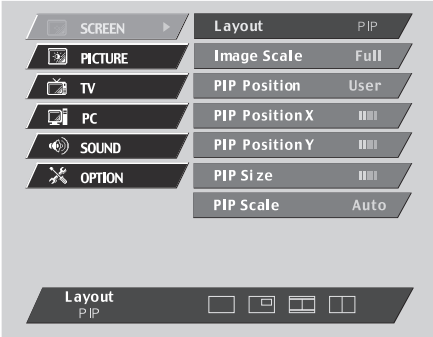


1) Layout : Set Picture mode [Display Mode].
2) Image Scale : Select an image scale
(FULL, 16:9, 4:3, Caption, Smart View)

- Once the setting is complete, press EXIT button to exit it.

2. Screen Menu on PIP Picture

- It works only on PIP Picture.
- Select SCREEN menu by pressing MENU button on the remote control.



1) Layout : Set a display layout.

2) Image Scale : Select an image scale of main screen.
(FULL, 16:9, 4:3, Caption, Smart View)

3) PIP Position : Adjust the position of PIP
(L-Top, L-Bottom, R-Top, R-Bottom, USER)

4) PIP Position X / Y : In case of PIP Position menu is set as USER, it sets X/Y position of PIP.

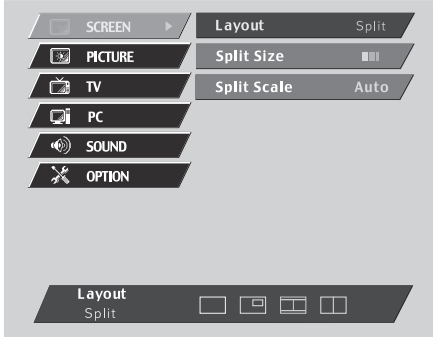
5) PIP Size : Adjust PIP size. It can be adjusted from 1/16 to 1/4 of full screen.

6) PIP Scale : Adjust image scales of PIP.

- Auto : Adjust PIP scale by automatically determining input signals.
- 16:9 : It fixes PIP scale to 16:9.
- 4:3 : It fixes PIP scale to 4:3.

3. SCREEN Menu in SPLIT Picture

- It works only on SPLIT Picture.
- Select SCREEN menu by pressing MENU button on the remote control.



1) Layout : Set a display layout

2) Split Size : Adjust a size of Split main screen. Sub screen size is adjusted by main screen size.

3) SPLIT Scale : Adjust an image scale of SPLIT Picture.

- Auto : Adjust PIP scale by automatically determining input signals.
- 16:9 : It fixes PIP sub screen scale to 16:9.
- 4:3 : It fixes PIP sub screen scale to 4:3.

5-6. Setting Sound

You can set sound suitable for TV broadcasting or Video.

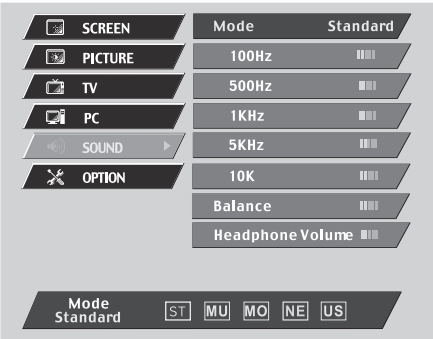
1. Mode Setting

- Press SOUND button on the remote control to display SOUND mode setting.

- Set the menu settings by using Volume button on the remote control.

1) Standard : Standard sound mode.
2) Music : Music broadcasting mode.
3) Movie : Cinema broadcasting mode.
4) News : News broadcasting mode.
5) User : User's customization mode.

Also, it can be set in OSD menu if OSD button is used.



Balance : Control Left/Right speaker balance.

Headphone Volume : Control headphone volume.

2. USER Mode Setting

USER mode can be set only in OSD menu.

- Press MENU button to go into main menu.
- Move to SOUND menu by using CH button.
- Press MENU button to move to the Sub Menu.
- Adjust sound in a desirable frequency bandwidth by using VOL / CH button on the remote control.

3. SURROUND Setting

Surround mode can be set only by the remote control.

- Press SURROUND button on the remote control.
- Set ON/OFF by using Volume button on the remote control.

- Once the setting is complete, press SURROUND or EXIT button on the remote control.

5-7. Setting Others

Press MENU button on the remote control to move to Main Menu.

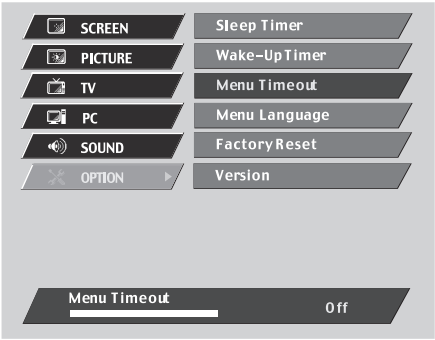
Move to OPTION menu by using CH button on the remote control

Press MENU button to move to the Main menu.

Change the settings by using VOL / CH button on the remote control.

1. Menu Timeout Setting

It can be adjusted to display OSD Menu between 5 ~ 60 seconds.

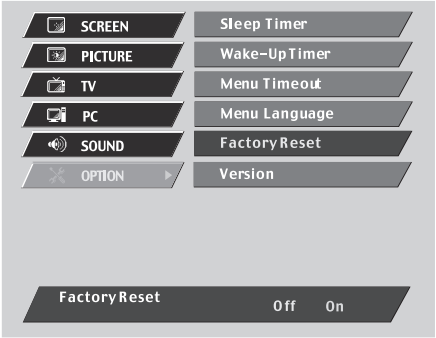


2. Setting OSD Menu Language

Change a language to display OSD.

3. Factory Reset

Reset all the OSD control settings back to the factory setting status.



4. Version

It shows the product version.

CHAPTER 6

Using PC MENU

6-1. Auto Adjustment

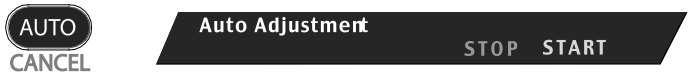
6-2. Setting PC Scale Mode

6-3. Setting Phase / Frequency

6-4. Setting Position / Size

6-1. Auto Adjustment

In case of using it as a PC monitor, it is automatically set.
When the set is connected to a PC, the MODE should be set as PC RGB Mode.
- Press AUTO button on the remote control to automatically set the product's screen status.

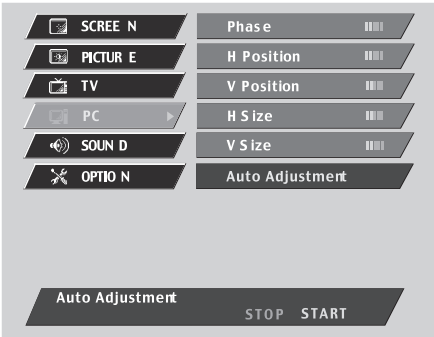


- Move to START by using Volume button on the remote control to start Auto Adjustment.

When it is used as a PC monitor;
Optimal Resolution: 1024 x 768 @ 60Hz
Max. Resolution: 1024 x 768 @ 85Hz.

- It may not normally display picture in any resolution out of the optimal resolution range.
- When you use it as a PC monitor, it requires to be set the Standard Signal Mode for PC Monitor before use.
- Even though it is automatically adjusted, it may not normally display picture depending on signals from a PC and in this case, it is recommended to execute Auto Adjustment for several times.

Also, it can be set in OSD menu if OSD button is used.



The Standard Signal Modes for PC Monitor

Resolution (H*V)	RGB	DVI
640 ×480	○	○
800 ×600	○	○
1024 ×768	○	○
1280 ×720	○	○
1280 ×768	△	×

The Standard Signal Modes for PC Monitor

Resolution (H ×V)	Vertical Frequency (kHz)	Horizontal Frequency (Hz)	Clock Frequency (MHz)	Polarity (Vert./Hor.)
640 ×480	31.469	59.94	25.175	– / –
640 ×480	37.861	72.809	31.5	– / –
640 ×480	37.5	75	31.5	– / –
720 ×400	31.469	70.087	28.322	– / +
800 ×600	37.879	60.317	40	+ / +
800 ×600	48.077	72.188	50	+ / +
800 ×600	46.875	75	49.5	+ / +
1024 ×768	48.363	60.069	65	– / –
1024 ×768	56.476	70.069	75	– / –
1024 ×768 (Optimal)	60.023	75.029	78.75	+ / +
1280 ×720	44.955	59.94	74.086	– / +

※ When you use it as a PC monitor, depending on signals of a PC, it may not display picture normally even though it is set for standard mode resolution.

6-2. Setting PC Scale Mode

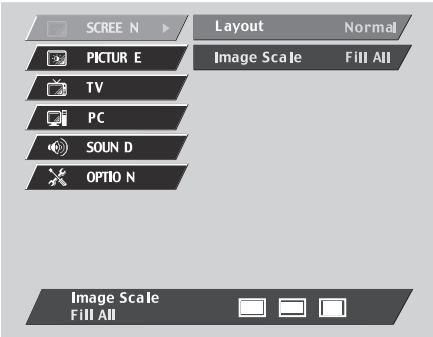
When being used as a PC Monitor, the scale can be adjusted.

PC Monitor Scale works only when PC signal is connected and input signals are selected in RGB mode.

- Press SCALE button on the remote control.

- Select a desirable scale by using Volume button.
- Once the setting is complete, press EXIT button.

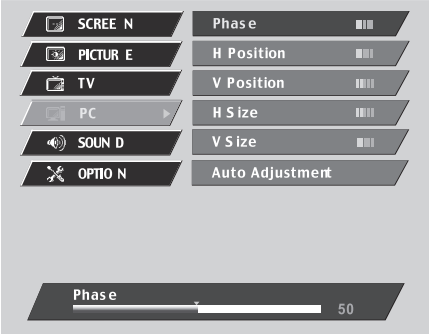
1. 1:1 : Display the resolution as 1:1.
2. Fill All : Display picture in the full screen regardless of the resolution.
3. Aspect Ratio : Display the resolution in 4:3 aspect ratio. Also, it can be set in OSD menu if OSD button is used.



6-3. Setting Phase / Frequency

In case it is not optimally set even though automatically adjusting it, use PHASE function.

- Press MENU button on the remote control.
- Move to PC menu by using CH button.
- Move to PHASE menu by pressing MENU button.
- Adjust settings by controlling Volume button.
- Once the setting is complete, press EXIT button.

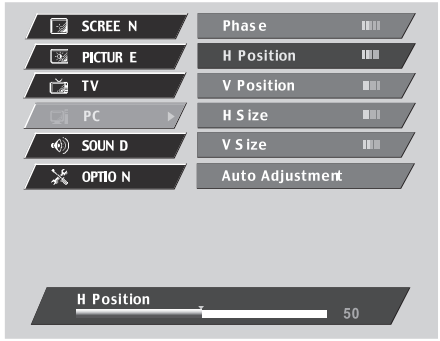


6-4. Setting Position / Size

Adjust the position and size of the PC Monitor.

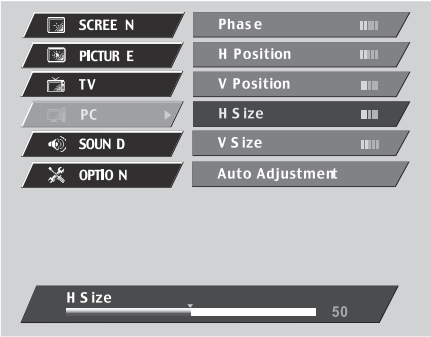
1. Setting Vertical/Horizontal Position

- Press MENU button on the remote control.
- Move to PC Menu by using CH button.
- Move to H / V Position Menu by using MENU button.
- Adjust settings by controlling VOL button.
- Once the setting is complete, press EXIT button.



(1) Setting Vertical/Horizontal Size

- Press MENU button on the remote control.
- Move to PC Menu by using CH button.
- Move to H / V Size Menu by using MENU button.
- Adjust settings by controlling VOL button.
- Once the setting is complete, press EXIT button.



CHAPTER 7

Service & Others

7-1. Troubleshooting

7-2. Concerning Services

7-1. Troubleshooting

Before contacting service to service personnel, please check the followings first.
If you still have the same symptoms even after taking the following actions, contact your local dealer or qualified service personnel.

1. TV-related Troubles

Unclear display or noisy sound

- Check whether TV antenna is correctly connected.
- Broadcasting may not be good in an area with bad reception or far away from a station/network.

No image

- Check whether you connect the power cord properly. And press the POWER button.

Black background only

- Check whether the mode is set as PC monitor or Video/S-VHS Input, not TV mode.

Strips and shaking display

- It may be interrupted by neighboring radio waves (please check any wireless phone, hair drier, electric drilling machine and etc)
- Execute fine tuning for manual adjustment.

Can't catch a specific channel

- Check whether Channel Setting is normally set.
- Try to rotate an antenna's direction.

Picture plays without sound

- Try to press MUTE button.
- Volume up by using Volume button.

2. PC Monitor-related Troubles

No image on the monitor

- Check whether the D-Sub cable is firmly connected to the TV and a PC.
- Check whether a graphic card is correctly inserted into the slot.
- Check whether the Power of a PC and the TV is on.
- Check whether a graphic card or mode is set appropriately on a PC.
  Referring to the Standard Signal Mode for PC Monitor in the previous chapter, change graphic mode.
- Check whether D-Sub cable pins are not inserted or bent.

No Power

- Check whether the power cord is normally inserted and reconnect it.
- Pull out the power cord from wall outlet and reconnect it in 10~20 minutes.

LED Lamp turns off in red and it shows no image

- Check whether the graphic cable is connected to theTV and a PC.
- Check whether a computer is in power-saving mode and attempt to operate keyboard and mouse.

Unstable or unfocused image or trembling

- Check whether the D-Sub cable is connected to the TV and a PC.
- If a PC's display mode is changed, the screen needs readjusting, so you need to use Auto Adjustment or Picture Adjustment.
- Check whether the TV and your graphic card are compatible each other and whether it is set as an appropriate refresh rate. If letters look distorted, change the refresh rate to 60Hz.

Abnormal image scale

- By using vertical/horizontal position in Picture Adjustment Menus, adjust the position.
- Try to execute Auto Adjustment function.

7-2. Concerning Services

We guarantee free of charge After-sales service for a full year if any troubles are found when you are using our product. However, any natural disasters or careless use cause the trouble, it may cost even within a valid warranty period.

Responsibility of Chargeable After Sales Service (Customer's Charge)

In one of the following cases, it may cost even in the valid warranty period.

1. In case of any troubles resulting from inserting of foreign substances (water, beverage, coffee and etc)
2. Dropping or applying force cause a trouble to damage on the product or induce malfunction.
3. Appearance damage or transformation by use of organic solutions such as thinner, benzene and etc.
4. When it gets troubled due to your disassemble.
5. When other parts/consumption accessories (including adaptor) that are not supplied by the company may directly cause any troubles.
6. Supplying wrong voltage may cause a trouble
7. Any personnel not from qualified service personnel repairs or modifies the product, resulting in troubles.
8. Natural disasters (lightning, fire, flood, gas, damage from sea wind, earthquake and etc) directly cause troubles
9. Violation against the directions in the manual cause any troubles
10. Customer's mishandling cause a trouble
11. In case the date of purchase may be vague, the valid warranty period is counted after 2 months since the product is manufactured.