

Television/Monitor TFT LCD

User's Manual

■ Model: SDD-2301N



Warning! Important Safety Instructions



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates high voltage is present inside.
It is dangerous to make any kind of contact with any
inside part of this product.



This symbol alerts you that important literature concerning
operation and maintenance has been included with this product.

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Attention: pour eviter les chocs electriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.
Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

Important Safety Information

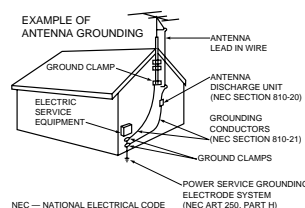


Always be careful when using your TV receiver. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Read all safety and operating instructions before operating your TV.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the TV receiver and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the TV receiver from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the TV receiver where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the TV on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling TV can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the TV. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the TV and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the TV receiver. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the TV receiver on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the TV receiver on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your TV receiver only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.
- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.



- Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the TV.
- Ground outdoor antennas. If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



- Do not attempt to service the TV yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - when the power-supply cord or plug is damaged
 - if liquid has been spilled on the unit or if objects have fallen into the unit
 - if the TV has been exposed to rain or water
 - if the TV does not operate normally by following the operating instructions
 - if the TV has been dropped or the cabinet has been damaged
 - when the TV exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and**
- (2) This device must accept any interference that may cause undesired operation.**

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

FCC Information

User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

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 receptions, 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.

User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult your dealer or an experienced radio/television technician for additional suggestions.

You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4 .

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product. Declaration of conformity for products marked with FCC Logo. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Notice de Conformité IC

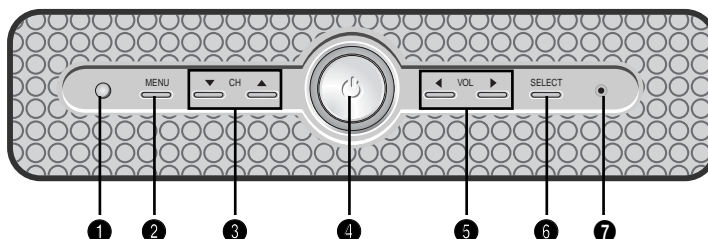
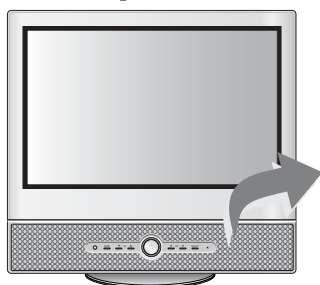
Cet appareil numérique de classe B respecte toutes les exigences du Règlement ICES-003 sur les équipements produisant des interférences au Canada.

Contents

Warning! Important Safety Instructions	2
Important Safety Information	3
FCC Information	5
Parts Description	7
Front panel	7
Rear panel jacks	7
Remote Control Unit	8
Inserting the batteries in the remote control	8
Connecting	9
Connecting the aerial or cable television network	9
Connecting to the VCR or other external devices	9
Connecting to the DVD or Digital TV Set-top Box	9
Connecting to the DVI input	10
Connecting a PC	10
Watching a TV	11
Turning the TV On and OFF	11
Viewing the Menus	11
Using the Volume Buttons	11
Using the MUTE Button	11
Memorizing the Channels	12
Selecting the Video Signal-source	12
Storing Channels in Memory (Automatic Method)	12
Adding and Removing Channels (Manual Method)	13
Picture Control	14
Changing the Picture Standard	14
Adjusting the Picture Settings	14
Adjusting the Picture Position (D-Sub or DVI Mode)	15
Adjusting the Color Temperature	15
Selecting the Picture Size	16
Viewing the Picture In Picture (PIP)	17
Sound Control	18
Changing the Sound Standard	18
Adjusting the Sound Settings	18
Adjusting the Volume Automatically	19
Time Setting	20
Setting and Displaying the Current Time	20
Switching the Television On and Off Automatically	21
Special Features	22
Fine Tuning Channels	22
LNA (Low Noise Amplifier)	22
Setting the OSD Timeout	23
Adjusting the Menu Background	23
Viewing Closed Captions	24
Using the content blocking	25
Setting up your Personal ID Number (PIN)	25
How to Set up Restrictions using the "TV Blocking"	26
How to Set up Restrictions using the Blocking Movie(MPAA): G, PG, PG-13, R, NC-17, X	28
PC Control	29
How to Set up Your PC Software (Windows only)	29
Display Modes	30
Pin Assignments	31
Troubleshooting	32
Specification	33

Parts Description

Front panel



1 REMOTE CONTROL SENSOR

2 MENU

Display the main on-screen menu.
Exit from sub-menu.

3 ▼ CHANNEL ▲

Press CH ▼ or CH ▲ to change channels.
Also used to highlight selections on the on-screen menus.

4 POWER

Switches the set off (standby mode) and on.

5 ◀ VOLUME ▶

Press to increase or decrease the volume.
Also used to increase or reduce the value of a menu option.

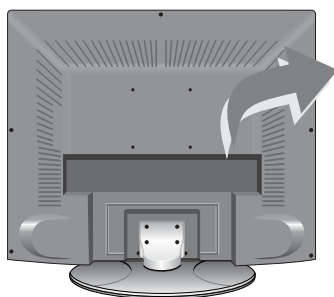
6 SELECT

Select input signal or select submenu of the on-screen menu.

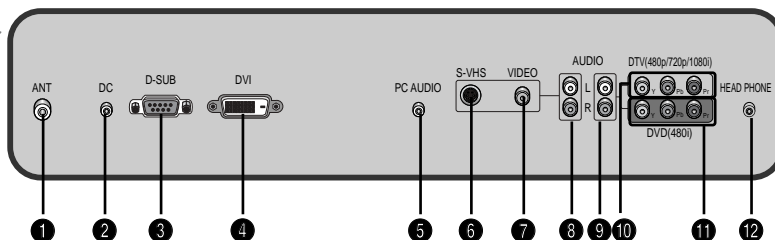
7 LAMP

Power ON/OFF Indicator.

Rear panel



Rear panel jacks



1 ANT RF-IN

2 POWER JACK

3 PC VIDEO INPUT

4 DVI INPUT

Connect to the digital video output jack for device with DVI output.

5 PC AUDIO INPUT

Connects to the sound-output port of a personal computer.

6 S-VIDEO IN

Video input for external devices with an S-Video output, such as a camcorder or VCR.

7 VIDEO INPUT

Video input for external devices, such as a camcorder or VCR.

8 AUDIO INPUTS (VIDEO,S-VHS)

Audio signals from VCR or similar device.

9 AUDIO INPUTS (DTV, DVD)

Audio signals from Digital TV Set-top Box or DVD player when using the component input jacks.

10 Component VIDEO INPUT(DTV)

Component video signal from a Digital TV Set-top Box.

11 Component VIDEO INPUT (DVD)

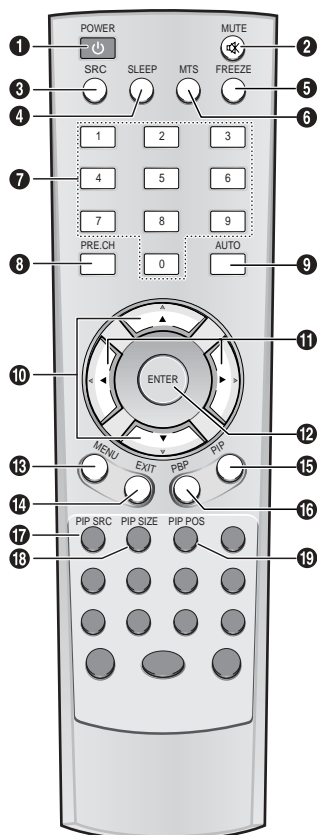
Component video signal from a DVD.

12 HEAD PHONE JACK

Connect a set of external headphones to this jack for private listening.

Parts Description

Remote Control Unit

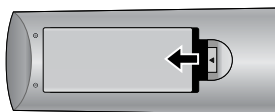


- ❶ **POWER:** Turns the TV On and Off.
- ❷ **MUTE:** Press to temporarily cut off the sound.
- ❸ **SRC:** Press to display all of the available video sources (i.e., TV, S-Video, Video, DVD, D-sub, DVI, HDTV)
- ❹ **SLEEP:** Selects a preset time interval for automatic shut off.
- ❺ **FREEZE:** Press to pause the current screen. Press again to cancel.
- ❻ **MTS:** Press to choose stereo, dual or mono.
- ❼ **NUMBER (0 ~ 9) :** Selects the channel directly.
- ❽ **PRE.CH:** Moves to the previous channel.
- ❾ **AUTO:** Resets automatically the screen quality and position in PC (D-sub) mode.
- ❿ **▼▲:** Change channels. Also used to highlight selection on the on-screen menus.
- ⓫ **◀▶:** Press to increase or decrease the volume. Also used to make selection on the on-screen menus.
- ⓬ **ENTER:** Confirms a selection.
- ⓭ **MENU:** Displays on-screen menu.
- ⓮ **EXIT:** Press to exit the menu.
- ⓯ **PIP:** Activates picture in picture.
- ⓰ **PBP:** Selects double picture windows in PIP mode.
- ⓱ **PIP SRC:** Selects an external source in PIP mode.
- ⓲ **PIP SIZE:** Changes the sub-picture size in PIP mode.
- ⓳ **PIP POS :** Changes the sub picture location in PIP mode.

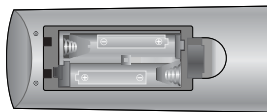
Inserting the batteries in the remote control

You must insert or replace the batteries in the remote control when you:

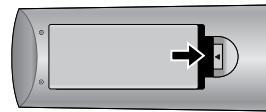
- Purchase the set.
- Find that the remote control is no longer operating correctly.



- ❶ Remove the cover of the remote control by pressing the symbol and pulling the cover space in the direction of the arrow.



- ❷ Insert 2 batteries (AAA size), taking care to respect the polarities.

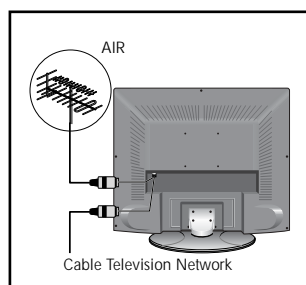


- ❸ Replace the cover by pushing it in the direction of the arrow.

You can use your remote control within a distance of 7~10m and an angle of 30 degrees from the left and right sides of the remote control receptor of your monitor.

Connecting

Connecting the aerial or cable television network



To view television channels correctly, a signal must be received by the set from one of following sources :

- An outdoor aerial
- An indoor aerial (Not recommendable)
- A cable television network

- 1** In the first three cases, connect the aerial or network input cable to the 75 ohm coaxial socket on the bottom of the television.
- 2** Press the **SRC** button on the remote control.

Connecting to the VCR or other external devices

- 1** Connect video and audio cable according to the shape and color of the video / audio cable.
 - When an external devices is in MONO, the audio connection cable can be connected to either the left and S.MODE should be set FM MONO.
- 2** For optimal visual image, use S-VHS connector instead of video (yellow) connector.

Connecting to the DVD or Digital TV Set-top Box

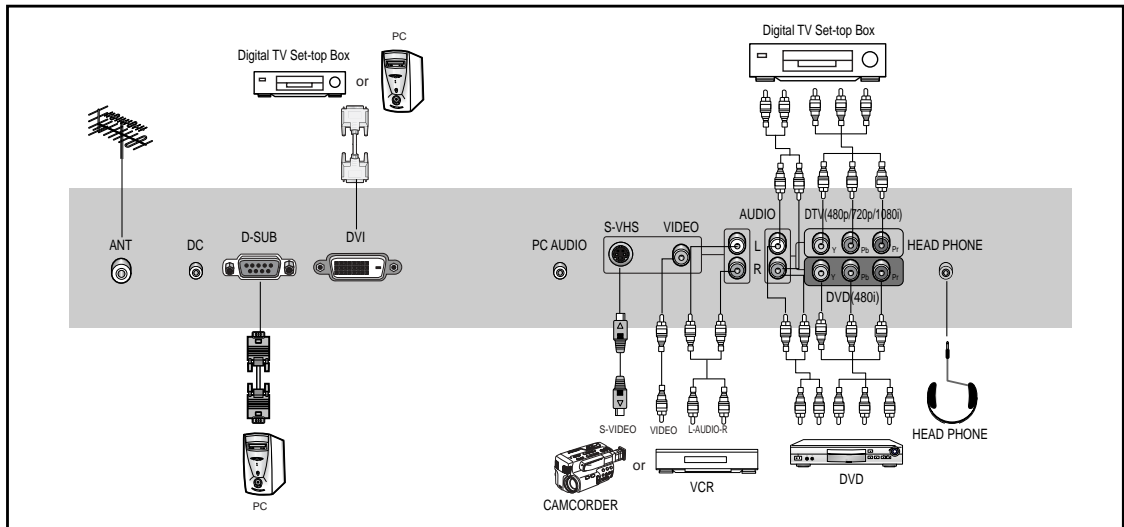
- 1** Connect component video and audio cable according to the shape and color of the component video / audio cable.
 - When an external devices is in MONO, the audio connection cable can be connected to either the left and S.MODE should be set FM MONO.

(**Note:** For the explanation of component video, see your DVD player or Digital TV Set-top Box owner's manual.)

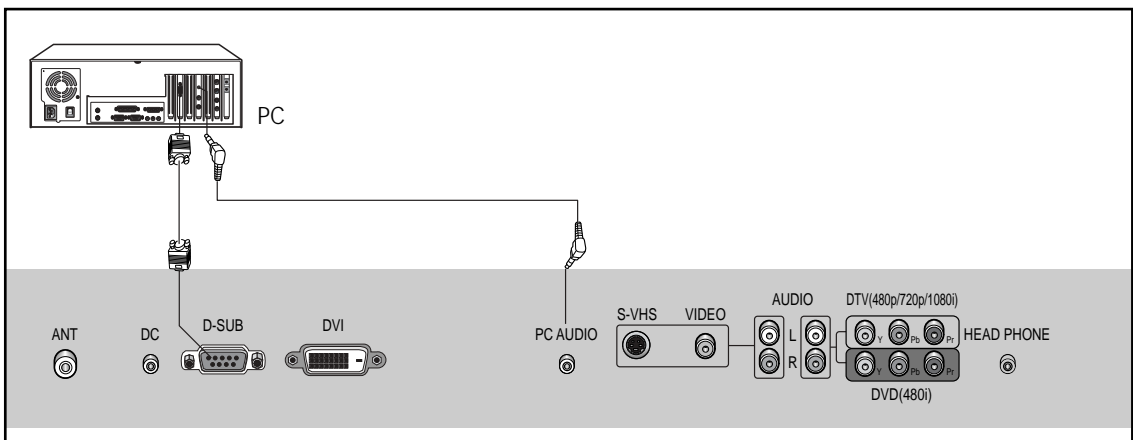
Connecting

Connecting to the DVI input

Connect to the digital video output jack for device with DVI output.



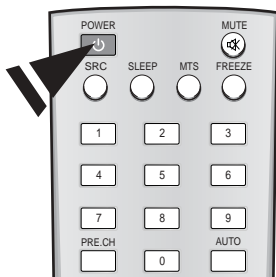
Connecting a PC



- 1 Turn off your computer and monitor.
- 2 Connect a PC D-sub cable between your PC and PC-VIDEO-IN of the monitor.
- 3 Connect a PC audio cable between the sound output jack of the sound card on a PC and the PC-AUDIO-IN of the monitor.
- 4 Connect a DC power unit cable to the power jack on the rear of your monitor. And connect a power cable to the DC power unit before connecting to a power outlet.
- 5 Power on the computer before turning on the monitor.

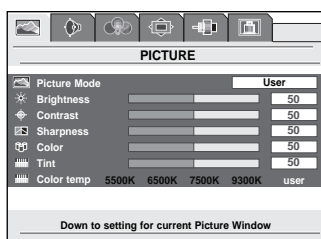
Watching a TV

Turning the TV On and OFF



- 1 Power on your television by pressing the **POWER** button on the main or the remote control. You can also switch on by pressing the **CH ▼/▲**.
 - Power On : **GREEN**
 - Power Off : **RED**

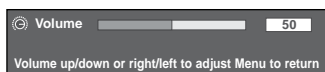
Viewing the Menus



- 1 With the power on, press the **MENU** button. The main menu appears on the screen. You can also use the **MENU**, **CH ▲** or **▼**, and **VOL ◀** or **▶** buttons on the front panel of the TV to make selections.
- 2 Press the **◀** or **▶** button to move items in the menu. Press the **▲** or **▼** and **ENTER** buttons to display, change, or use the selected items. Press the **◀** or **▶** button to enter items in the menu.
Result: On screen menus disappear from the screen automatically after a few seconds.

Using the Volume Buttons

Press the **◀** or **▶** button to increase or decrease the volume.



Using the MUTE Button

At any time, you can temporarily cut off the sound using the **MUTE** button.



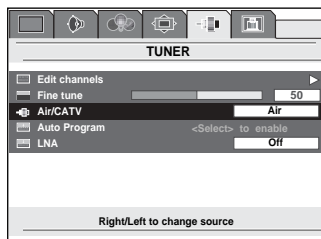
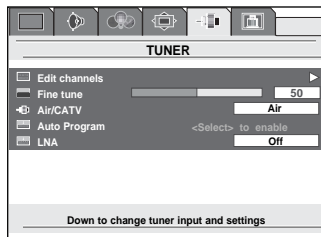
- 1 Press the **MUTE** button and the sound cuts off.
- 2 To turn mute off, press the **MUTE** button again, or simply press the **◀** or **▶** button. You must first do the "Storing Channels in Memory" procedure (See page 14) before you can use the **▲** or **▼** button.

Memorizing the Channels

Your TV can memorize and store all of the available channels for both "Air (antenna)" and Cable channels.

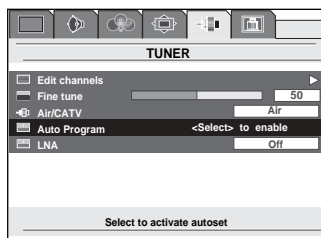
Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or a cable system).



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TUNER**.
The options available in the TUNER group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **TUNER** group.
- 4 Press the ▲ or ▼ button to select **Air/CATV**.
- 5 Press the ◀ or ▶ button to select your Signal Source (Air and Cable).
- 6 Press the **MENU** button to exit.

Storing Channels in Memory (Automatic Method)

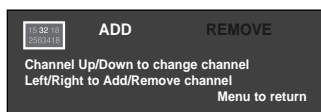
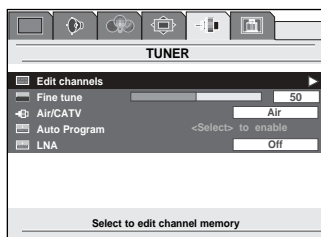


- 1 First, select the correct antenna (Air and Cable).
Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TUNER**, then press the ▼ or ENTER button.
- 3 Press the ▲ or ▼ button to select **Auto Program**, then press the ◀ / ▶ / ENTER button to start the channel search.
- 4 The TV will begin memorizing all of the available channels.
After all the available channels are stored, the Auto program menu reappears.

Note:

- To stop the search before it has finished, press the **MENU** button.
- The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.

Adding and Removing Channels (Manual Method)

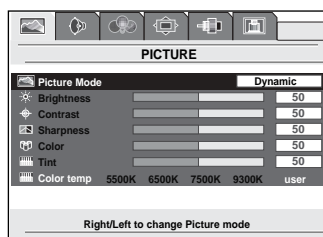


- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TUNER**.
The options available in the TUNER group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **TUNER** group.
- 4 Press the ▲ or ▼ button to select **Edit channels**.
- 5 Press the ◀ or ▶ button.
The **ADD/REMOVE** channel menu will be displayed at the bottom of the screen.
- 6 Press the ▲ or ▼ button to select the channel you want to add or remove. To Add or remove the channel, press the ◀ or ▶ button, then press the **ENTER** button.
- 7 Press the **MENU** button to exit.

Picture Control

Changing the Picture Standard

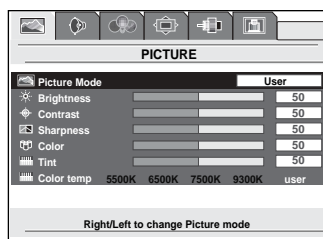
You can select the type of picture which best corresponds to your viewing requirements.



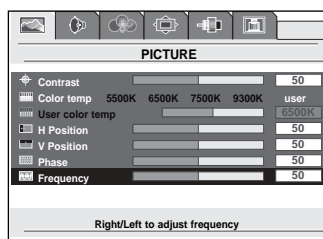
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **PICTURE**.
The options available in the PICTURE group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **PICTURE** group.
- 4 Select the option by pressing the ◀ or ▶ button.
The following modes are available depending on the input source.
 - **Dynamic - Standard - Movie - User**
- 5 Press the ◀ or ▶ button to reach the required setting.
- 6 Press the **MENU** button to exit.

Adjusting the Picture Settings

Your television has several settings which allow you to control picture quality.



D-sub Mode



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **PICTURE**.
The options available in the PICTURE group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **PICTURE** group.
- 4 Select the **User** by pressing the ◀ or ▶ button.
The User options are activated.
 - **Brightness, Contrast, Sharpness, Color, Tint.**
 - **Brightness, Contrast, Phase, Frequency. (D-sub or DVI mode)**
- 5 Press the ◀ or ▶ button to reach the required setting.
- 6 Press the **MENU** button to exit.

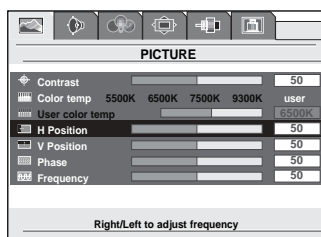
Note: • When the User Picture Mode is set, the settings values may vary depending on the input source.

Picture Control

Adjusting the Picture Position (D-sub or DVI Mode)

Preset to the D-sub or DVI mode by using the SRC button.

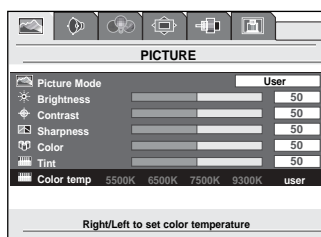
D-sub Modde



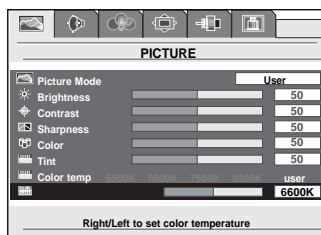
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **PICTURE**.
The options available in the PICTURE group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **PICTURE** group.
- 4 Press the ▲ or ▼ button to select the option (**H Position**, **V Position**) to be adjusted.
- 5 Press the ◀ or ▶ button to reach the required setting.
- 6 Press the **MENU** button to exit.

Adjusting the Color Temperature

Your television has several settings which allow you to control picture quality.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **PICTURE**.
The options available in the PICTURE group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **PICTURE** group.
- 4 Select the **Color temp** by pressing ▲ or ▼ button.
- 5 Select the option by pressing the ◀ or ▶ button.
The following modes are available :
5500K(Warm) – 6500K – 7500K – 9300K(Cool) - user
- 6 Press the **MENU** button to exit.



Customizing the Color Temperature

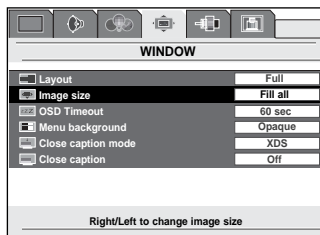
- When you set the color temperature option to user in step 5 above, the User color temp is activated.
- Adjust the color temperature you want by pressing ◀ / ▶ or ENTER button.

Note: • The color temperature is available from 5000K to 9300K and the interval is 100K.

Picture Control

Selecting the Picture Size

You can select the picture size which best corresponds to your viewing requirements.

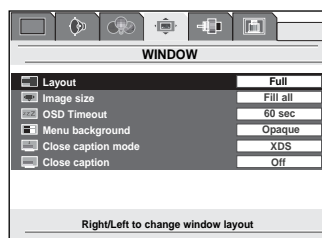


- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **WINDOW**.
The options available in the **WINDOW** group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **WINDOW** group.
- 4 Press the ▲ or ▼ button to select **Image size**.
- 5 Press the ◀ or ▶ button to change the setting.
The picture size are displayed in the following order.
Fill all – **Normal** – **Panorama** – **Zoom**
Fill all: Sets the picture to 16:9 wide mode.
Normal: Displays the current picture on the 4:3 aspect ratio format screen.
Panorama : Use this mode for the wide aspect ratio of a panoramic picture.
Zoom: Magnify the size of the picture vertically on screen.
- 6 Press the **MENU** button to exit.

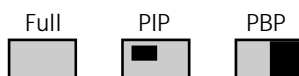
Picture Control

Viewing the Picture In Picture (PIP)

You can display a sub picture within the main picture of TV program or external A/V devices. In this way you can watch TV program or monitor the video input from any connected devices while watching TV or other video input.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **WINDOW**.
The options available in the WINDOW group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **WINDOW** group.
- 4 Press the ▲ or ▼ button to select **Layout**.
- 5 Press the ◀ or ▶ button to change the Image size option.
The options are displayed in the following order :



Note: If the sub picture has no signal and the main picture is output from a external signal, the sub picture will be viewed in black color.

- 6 Press the **MENU** button to exit.

Easy functions of remote control

Buttons	Feature
PIP	PIP On/Off
PBP	Double picture selection
PIP SRC	Sub picture source selection
PIP SIZE	Sub picture size selection
PIP POS	Sub picture location selection

The Table of PIP Settings

○ : PIP operates

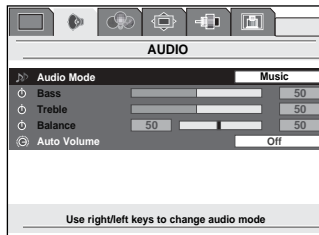
X : PIP doesn't operate

Sub	Main	TV	S-Video	Video	DVD	D-sub	DVI	HDTV
		TV	S-Video	Video	DVD	D-sub	DVI	HDTV
TV		X	X	X	X	○	○	○
S-Video		X	X	X	X	○	○	○
Video		X	X	X	X	○	○	○
DVD		X	X	X	X	○	○	○
D-sub		○	○	○	○	X	X	X
DVI		○	○	○	○	X	X	X
HDTV		○	○	○	○	X	X	X

Sound Control

Changing the Sound Standard

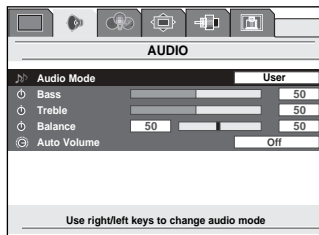
You can select the type of special sound effect to be used when watching a given broadcast.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **AUDIO**.
The options available in the AUDIO group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **AUDIO** group.
- 4 Press the ◀ or ▶ button to select the options.
The sound effects are displayed in the following order.
Music - Normal - News - User
- 5 Press the **MENU** button to exit.

Adjusting the Sound Settings

The sound settings can be adjusted to suit your personal preferences.

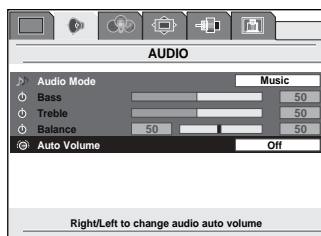


- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **AUDIO**.
The options available in the AUDIO group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **AUDIO** group.
- 4 Press the ▲ or ▼ button to select **User**.
The User menu is activated.
- 5 Press the ▲ or ▼ button to select the option (**Bass, Treble, Balance**).
- 6 Press the ◀ or ▶ button to reach the required setting.
- 7 Press the **MENU** button to exit.

Sound Control

Adjusting the Volume Automatically

Each broadcasting station has its own signal conditions, and so it is not easy for you to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

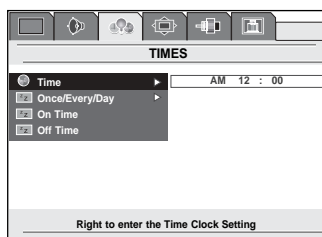


- 1** Press the **MENU** button.
The main menu is displayed.
- 2** Press the ◀ or ▶ button to select **AUDIO**.
The options available in the AUDIO group are displayed.
- 3** Press the ▼ or ENTER button to select the options in the **AUDIO** group.
- 4** Press the ▲ or ▼ button to select **Auto Volume**.
- 5** Press the ◀ or ▶ button to select **Off** or **On**.
- 6** Press the **MENU** button to exit.

Time Setting

Setting and Displaying the Current Time

You can set the television's clock.



- 1** Press the **MENU** button.
The main menu is displayed.
- 2** Press the ◀ or ▶ button to select **TIMES**.
The options available in the TIMES group are displayed.
- 3** Press the ▼ or **ENTER** button to select the options in the **TIMES** group.
- 4** Press the **ENTER** button to set the current time.
- 5** Press the ▲ / ▼ or **ENTER** button to select **AM/PM**.
- 6** Press the ◀ or ▶ button to move to the Hour or Minute in.
Set the Hour or Minute by pressing the ▲ / ▼ or **ENTER** button.
- 7** Press the **MENU** button to exit.

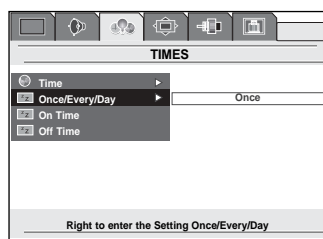
Time Setting

Switching the Television On and Off Automatically

You can set the television's clock and set the On or Off timers so that the television will:

- Switch on automatically and tune to the channel of your choice at the time you select
- Switch off automatically at the time you select

Note: The first step is to set the television's clock (refer to "Setting and Displaying the Current Time").

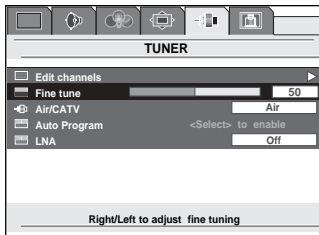


- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TIMES**.
The options available in the TUNER group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **TIMES** group.
- 4 Press the ▲ or ▼ button to select **Once/Every Day**, then press the ENTER button.
- 5 Press the ▲ / ▼ or ENTER button to select option (Once, Every, Off).
- 6 Press the **MENU** button, then press the ▲ or ▼ button to select **On Time**.
When you select the option Every or Once, On Time and Off Time menu is activated.
- 7 Press the ENTER button to set the On Time, then press the ▲ / ▼ or ENTER button to select **AM/PM**.
- 8 Press the ◀ or ▶ button to move to the Hour or Minute in.
Set the Hour or Minute by pressing the ▲ / ▼ or ENTER button.
- 9 Press the **MENU** button.
If you want to set **Off Time**, press the ▲ or ▼ button to select **Off Time**. Set the Off Time just as you set **On Time**.
- 10 Press the **MENU** button to exit.

Special Features

Fine Tuning Channels

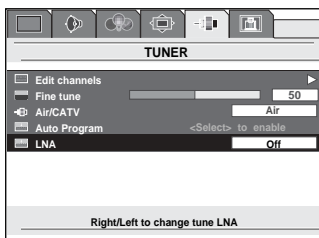
If reception is weak, you can fine tune a channel manually.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TUNER**.
The options available in the TUNER group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **TUNER** group.
- 4 Press the ▲ or ▼ button to select **Fine tune**.
- 5 Press the ◀ or ▶ button until the picture and sound are both clear and sharp.
- 6 Press the **MENU** button to exit.

LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).

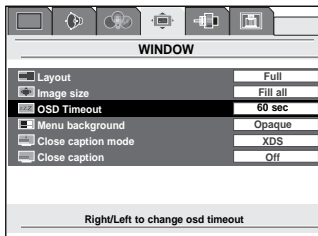


- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **TUNER**.
The options available in the TUNER group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **TUNER** group.
- 4 Press the ▲ or ▼ button to select **LNA**.
- 5 Press the ◀ or ▶ button to select **On**.
Note: Pressing the ◀ or ▶ button will alternate between **On** and **Off**.
- 6 Press the **MENU** button to exit.

Special Features

Setting the OSD Timeout

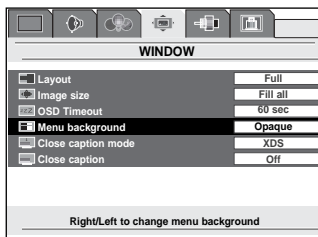
You can select for how long the OSD will be shown.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **WINDOW**.
The options available in the **WINDOW** group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **WINDOW** group.
- 4 Press the ◀ or ▶ button to select **OSD Timeout**.
- 5 Select the option (5 sec, 15 sec, or 60 sec) by pressing ◀ or ▶ button.
- 6 Press the **MENU** button to exit.

Adjusting the Menu Background

You can give the transparency OSD background in this menu.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **WINDOW**.
The options available in the **WINDOW** group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **WINDOW** group.
- 4 Press the ▲ or ▼ button to select **Menu background**.
- 5 Select **Menu Background** to **Translucent** or **Opaque** by pressing the ◀ or ▶ button.
- 6 Press the **MENU** button to exit.

Special Features

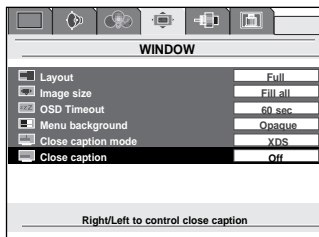
Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows.

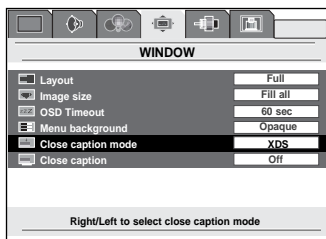
These captions are usually subtitles for the hearing impaired or foreign-language translations.

All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: **CC**

Note: The Caption feature does not work with DVD or DTV signals.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **WINDOW**.
The options available in the **WINDOW** group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **WINDOW** group.
- 4 Press the ▲ or ▼ button to select **Close caption**.
- 5 Press the ◀ or ▶ button to turn close caption (**On**, **On Mute**, **Off**).
- 6 Press the **MENU** button, then select **Close caption mode** by pressing the ▲ or ▼ button.
- 7 Press the ◀ or ▶ button to select option (**XDS**, **CC1**, **CC2**, **TI**, **T2**).
- 8 Press the **MENU** button to exit.

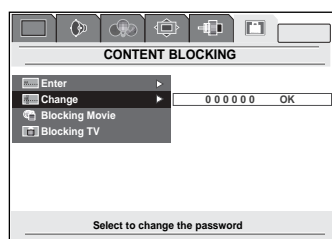
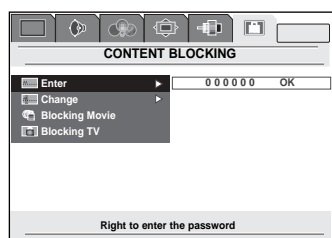


Special Features

Using the content blocking

The content blocking feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the content blocking are set up or changed.

Setting up your Personal ID Number (PIN)



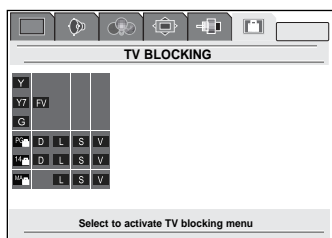
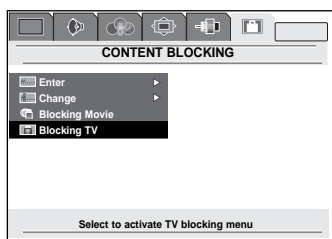
- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **CONTENT BLOCKING**.
The options available in the CONENT BLOCKING group are displayed.
- 3 Press the ▼ or ENTER button to select the options in the **CONTENT BLOCKING** group.
- 4 Press **ENTER** button to select **Enter**.
- 5 Press the ▲ or ▼ button to choose 6-digit number.
After selecting the digit, press ◀ / ▶ or ENTER button.
Press the ◀ or ▶ button to move to the each digit.
- 6 Press the ◀ or ▶ button to move OK, then press the **ENTER** button.
The **CONTENT BLOCKING** options are activated.
- 7 Press the **MENU** button, then press ▼ button to select **Change**.
- 8 Press the **ENTER** button.
Enter a new password by pressing ▲ or ▼ button, then move to OK and press the **ENTER** button. The changed password will be applied.
- 9 Press the **MENU** button to exit.

Special Features


How to Set up Restrictions using the “TV Blocking”


First, set up a personal identification number (PIN) (See previous page)

Parental restrictions can be set up using either of two methods: The TV TV Blocking or the Movie Blocking.



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **CONTENT BLOCKING**.
The options available in the CONTENT BLOCKING group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **CONTENT BLOCKING** group.
- 4 Press **ENTER** button to select **Enter**.
- 5 Press the ▲ or ▼ button to choose 6-digit number.
After selecting the digit, press ◀ / ▶ or **ENTER** button.
Press the ◀ or ▶ button to move to the each digit.
- 6 Press the ◀ or ▶ button to move OK, then press the **ENTER** button.
The **CONTENT BLOCKING** options are activated.
- 7 Press the ▲ or ▼ button to select **Blocking TV**, then press the **ENTER** button. The TV Blocking screen will appear.
- 8 Press the **ENTER** button, then press the ▲ or ▼ button to select one of the six ages based categories :

Y	Young children
Y7	Children 7 and over
G	General audience
PG	Parental guidance
14	Viewers 14 and over
MA	Mature audience
- 9 At this point, one of the TV-Ratings is selected.
Press the **ENTER** button. Depending on your existing setup, a symbol “” will be selected.



While “” is selected, press the ▲ or ▼ button to block the category. To select a different TV-Rating, press the ▲ or ▼ button and then repeat the process.

Special Features

Note 1: The Y7, PG, 14 and MA have additional options. See the next step to change any of the following sub-ratings:

FV: Fantasy violence
D: Sexually Suggestive Dialog
L: Adult Language
S: Sexual situation
V: Violence

Note 2: The Blocking TV will automatically block certain categories that are "more restrictive". For example, if you block "Y" category, then Y7 will automatically be blocked. Similarly, if you block the G category, then all the categories in the "young adult" group will be blocked (G, PG, 14 and MA). The sub-ratings (D, L, S, V) work together similarly. (See next section.)

- 10** How to set the FV, D, L, S and V sub-ratings. First, select one of these TV-Ratings: Y7, PG, 14 or MA (See Step 4, on previous page). Next, while the TV-Rating is selected, repeatedly press the **ENTER** button. This will cycle through the available sub-ratings (FV, L, S, D or V). A symbol "  " will be displayed for each sub-rating. While "  " is selected, press the **▲** / **▼** / **◀** or **▶** button to change the sub-rating.

To select a different TV-Rating, press the **▲** or **▼** button and then repeat the process.

Note: The V-chip will automatically block certain categories that are "More restrictive". For example, if you block "L" sub-rating in PG, then the "L" sub-ratings in 14 and MA will automatically be blocked.

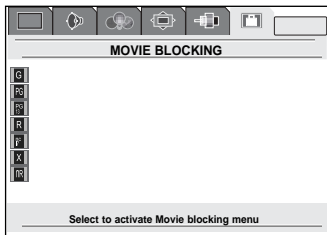
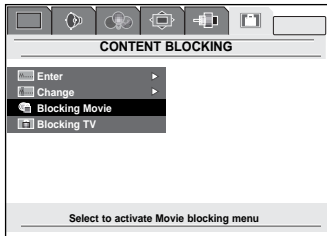
- 11** Press the **ENTER** button to clear the screen. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

Note: • These categories consist of two separate groups: Y and Y7 (young children through age 7), and G through MA (everybody else). The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group. (See next step.)



Special Features

How to Set up Restrictions using the Blocking Movie(MPAA): G, PG, PG-13, R, NC-17, X

The Blocking Movie (MPAA) rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either Blocking Movie or Blocking TV).



- 1 Press the **MENU** button.
The main menu is displayed.
- 2 Press the ◀ or ▶ button to select **CONTENT BLOCKING**.
The options available in the **CONTENT BLOCKING** group are displayed.
- 3 Press the ▼ or **ENTER** button to select the options in the **CONTENT BLOCKING** group.
- 4 Press **ENTER** button to select **Enter**.
- 5 Press the ▲ or ▼ button to choose 6-digit number.
After selecting the digit, press ◀ / ▶ or **ENTER** button.
Press the ◀ or ▶ button to move to the each digit.
- 6 Press the ◀ or ▶ button to move OK, then press the **ENTER** button.
The **CONTENT BLOCKING** options are activated.
- 7 Press the ▲ or ▼ button to select **Blocking Movie**, then press the **ENTER** button. The **MOVIE BLOCKING** screen will appear.
- 8 Press the **ENTER** button, then press the ▲ or ▼ button to select a particular Movie Blocking category.
Pressing the ▲ or ▼ button will cycle through the **MOVIE BLOCKING** categories :
G General audience (no restrictions).
PG Parental guidance suggested.
PG-13 PG-13 (Parents strongly cautioned).
R R (Restricted. Children under 17 should be accompanied by an adult).
NC-17 No children under age 17.
X X (Adults only).
NR Not rated.

While a particular category is selected, press the 6 or 5 button to activate it. A selected symbol "  " will be displayed. Press the ▲ or ▼ button to select "  ".

Note: The V-Chip will automatically block any category that is "more restrictive". For example, if you block the "PG-13" category, then "R", "NC-17" and "X" will automatically be blocked also.

PC Control

How to Set up Your PC Software (Windows only)

The Windows display-settings for a typical computer are shown below. However, the actual screens on your PC will probably look different, depending upon your particular version of Windows and your particular video card. Even if your actual screens look different, the same, basic set-up information will apply in most cases. (If not, contact your computer manufacturer or Dealer.)



First, click on "Settings" on the Windows start menu.

While "Settings" is highlighted, move the cursor so that "Control Panel" is highlighted.

When the control panel screen appears, click on "Display" and a display dialog-box will appear.

Navigate to the "settings" tab on the display dialog-box.



The two key variables that apply the TV-PC interface are "resolution" and "colors."

The correct settings for these two variables are:

- Size (sometimes called "resolution"):
640 x 480 pixels

If a vertical-frequency option exists on your display settings dialog box, the correct value is "60" or "60 Hz." Otherwise, just click "OK" and exit the dialog box.

PC Control

Display Modes

If the signal from the system equals the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal the standard signal mode, adjust the mode by referring to your Videocard user guide; otherwise there may be no video. For the display modes listed below, the screen image has been optimized during manufacture.

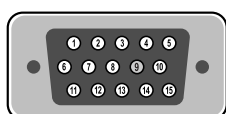
Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
MAC	640X480	31.469	59.940	25.175	- / -
	640X480	35.000	66.667	30.240	- / -
	800X600	49.726	74.551	57.284	- / -
IBM	720X400	31.469	70.087	28.322	- / +
VESA	640X480	37.861	72.809	31.500	- / -
	640X480	37.500	75.000	31.500	- / -
	800X600	37.879	60.317	40.000	+ / +
	800X600	48.077	72.188	50.000	+ / +
	800X600	46.875	75.000	49.500	+ / +
	1024X768	48.363	60.004	65.000	- / -
	1024X768	56.476	70.069	75.000	- / -
	1024X768	60.023	75.029	78.750	+ / +
GTF	1280X768	47.700	60.000	80.136	- / -

PC Control

Pin Assignments

Pin D-Sub Connection

Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Separate H/V	Red	Green	Blue	GND	GND (DDC Return)	GND -Red	GND -Green	GND- Blue	No Connection	GND-Sync/ Self Test	GND	DDC _SDA	H_Sync	V_Sync	DDC _SCL



Cleaning and Maintaining Your TV

With proper care, your TV unit will give you many years of service. Please follow these guidelines to get the maximum performance from your TV.

Placement

- Do not place the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

Liquids

- Do not handle liquids near or on the TV.
Liquids that spill into it can cause serious damage.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

Temperature

- If your TV is suddenly moved from a cold to a warm place, unplug the power cord, and allow at least two hours for moisture that may have formed inside the unit to dry completely.

Using Your TV in Another Country

If you plan to take your TV with you to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies.

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions.
If none of these troubleshooting tips apply, call your nearest service center.

Problem	Possible Solution
Poor picture	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality.	Try another channel. Adjust the antenna.
No picture or sound.	Try another channel. Press the SRC button. Make sure the TV is plugged in. Check the antenna connections.
No color, wrong colors or tints.	Make sure the program is broadcast in color. Adjust the picture settings. If the set is moved or turned in a different direction, the power should be OFF for at least 30 minutes. Adjust the antenna.
Picture rolls vertically.	Check all wire connections.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
The TV won't turn on.	Make sure the wall outlet is working.
Blurred or snowy picture, distorted sound	Check the direction, location and connections of your aerial. This interference is often due to the use of an indoor aerial.
Remote control malfunctions	Replace the remote control batteries. Clean the upper edge of the remote control (transmission window). Check the battery terminals.
"Check Signal Cable" message.	Ensure that the signal cable is firmly connected to the PC or video sources. Ensure that the PC or video sources are turned on.

Specification

Model Name	SDD-2301N
Active Area	23.01 inches(584.40mm) diagonal
Outline Dimension[mm]	528.0(H) x 326.0(V) x 34.5(D)
Resolution	1,280 x 768(WXGA)
Aspect Ratio	15:9
Pixel Pitch[mm]	0.1305 x 0.3915 x RGB
Number of Colors	16.7M(8bit)
Luminance	450
Contrast Ratio	400 : 1 Typical
Interface	LVDS
Viewing Angel(CR>10)	View angle free(176/176)
Response Time[ms]	25
Dimension Set Size	580 x 490 x 210 (W x H x D)
Box Size	660 x 584 x 280 (W x H x D)
Net Weight	11.0kg

Memo