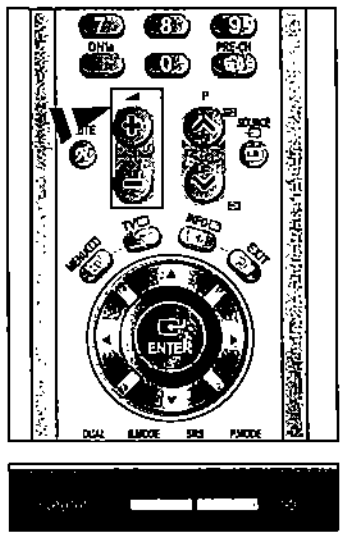
Adjusting the Volume

You can adjust the volume using your remote control.



Press the button to increase the volume.

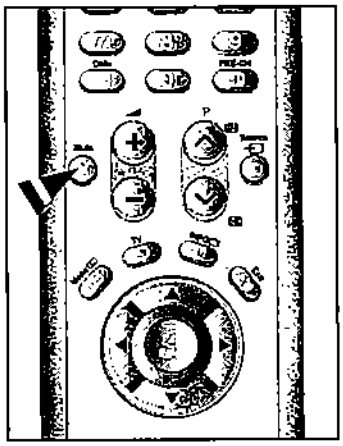
Result: A horizontal bar is displayed and the volume increases until you release the button. The cursor moves to the right to indicate the volume.

Press the button to decrease the volume.

Result: A horizontal bar is displayed and the volume decreases until you release the button. The cursor moves to the left to indicate the volume.

➢ Additional sound adjustments are available on your set.
For further details, refer to pages 34 to 39.

Switching the Sound Off Temporarily



You can switch the sound off temporarily.

Example: You wish to answer the telephone.

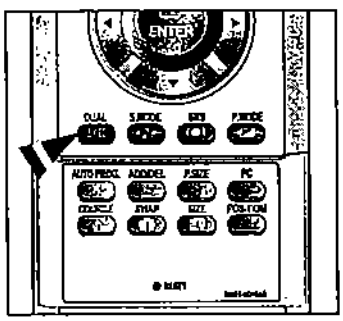
1 Press the **MUTE** button.

Result: The sound is switched off and "**MUTE**" is displayed.

2 When you wish to turn the sound back on, press the **MUTE** button again or either of the volume buttons.

Result: The sound comes back on at the same volume as before and the "**MUTE**" indication disappears.

Selecting the Sound Mode



You can set the sound mode by pressing the "DUAL" button.
When you press it, current sound mode is displayed on the screen.

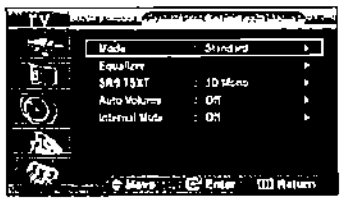
	Audio Type	DUAL 1/2	Default
FM Stereo	Mono	MONO	Automatic change
	Stereo	STEREO ↔ MONO	
	Dual	DUAL 1 ↔ DUAL 2	DUAL 1
NICAM Stereo	Mono	MONO	Automatic change
	Stereo	MONO ↔ STEREO	
	Dual	→ MONO ↔ DUAL 1 → DUAL 2 →	DUAL 1

➢ ◆If the receiving conditions deteriorate, listening will be easier if the mode is set to **Mono**.

◆If the stereo signal is weak and automatic switching occurs, switch to **Mono**.

Changing the Sound Standard

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

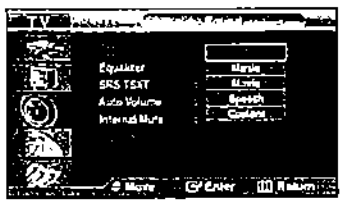


1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

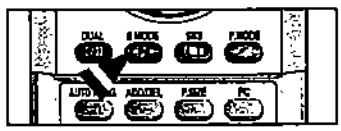
Result: The options available in the **Sound** group are displayed.



3 Press the **ENTER** button.

4 Press the **ENTER** button again.

Result: The **Mode** is selected.

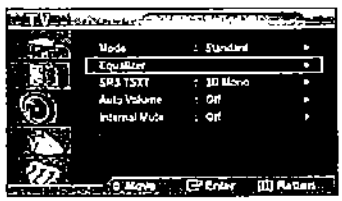


5 Select the required sound effect by pressing the ▲ or ▼ button repeatedly and then press the **ENTER** button.
The following sound effects are available:
Standard - Music - Movie - Speech - Custom

➢ You can also select these options by simply pressing the **S.MODE** (Sound Mode) button on the remote control.

Adjusting the Sound Settings

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

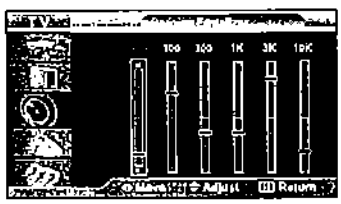


1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.



3 Press the **ENTER** button.

4 Select **Equalizer** by pressing the ▲ or ▼ button and then press the **ENTER** button.

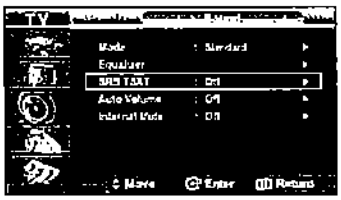
5 Select the required option by pressing the ◄ or ► button.

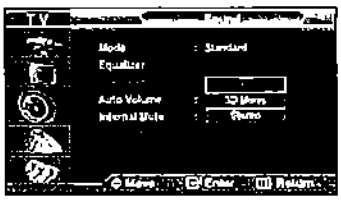
6 Press the ▲ or ▼ button to reach the required setting.

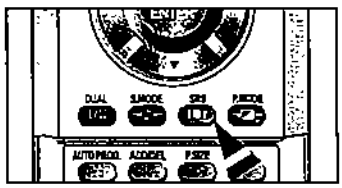
7 When you are satisfied with the setting, press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

➢ If you make any changes to these settings, the Sound Mode is automatically switched to **Custom**.

Setting the TruSurround XT (SRS TSXT)







TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. Trusurround delivers a compelling,virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.

3 Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **SRS TSXT** and then press the **ENTER** button.

5 Select the required option by pressing the ▲ or ▼ button. Press the **ENTER** button.

Result: The sources are displayed in the following order: **Off - 3D Mono - Stereo**

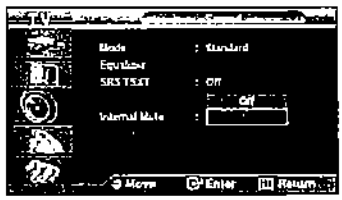
6 Press the **EXIT** button to return to normal viewing.

➢ You can also set these options simply by pressing the **SRS** button on remote control.

SRS TruSurround XT is a trademark of SRS Labs,Inc. **TruSurround XT** technology is incorporated under license from SRS labs, Inc.

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.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.
Press the **ENTER** button.

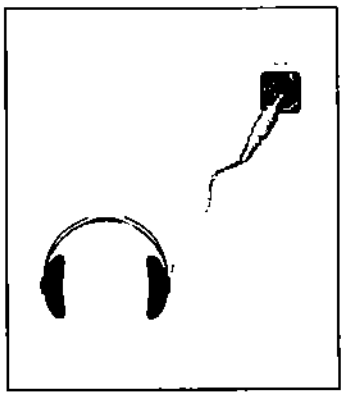
Result: The options available in the **Sound** group are displayed.

3 Press the ▲ or ▼ button to select **Auto Volume**.
Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **On**.
Press the **ENTER** button.

5 Press the **EXIT** button to return to normal viewing.

Connecting Headphones



You can connect a set of headphones to your set if you wish to watch a TV programme without disturbing the other people in the room.

Plug a set of headphones into the 3.5mm mini-jack socket on the rear panel of the set.

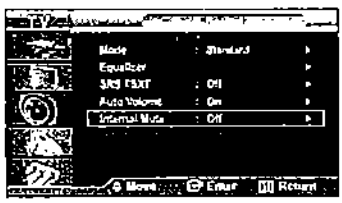
Result: The sound is heard through the headphones.

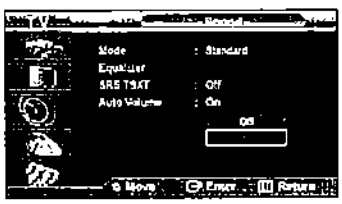
➢ For further details on how to set your headphone preferences, refer to the section below.

➢ Prolonged use of headphones at a high volume may damage your hearing.

➢ You will not receive sound from the speakers when you connect headphones to the system.

Selecting the Internal Mute





If you want to hear the sound through separate speakers, cancel the internal amplifier.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.

3 Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **Internal Mute**.
Press the **ENTER** button.

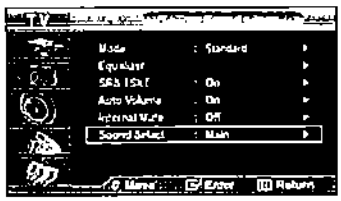
5 Press the ▲ or ▼ button to select **On**.
Press the **ENTER** button.

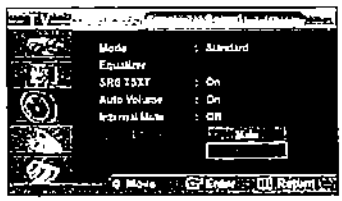
6 Press the **EXIT** button to return to normal viewing.

➢ When **Internal Mute** is set to **On**, Sound menus except **Mode** option cannot be adjusted.

Listening to the Sound of the Sub Picture

During the PIP feature is activating, you can listen to the sound of the sub picture.





1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.

3 Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **Sound Select** and then press the **ENTER** button.

Result: **Main** and **Sub** are displayed.

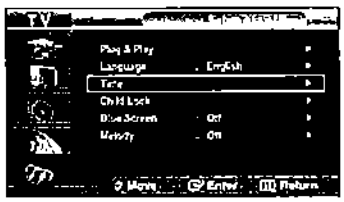
➢ You can select this option when the PIP is in "**On**".

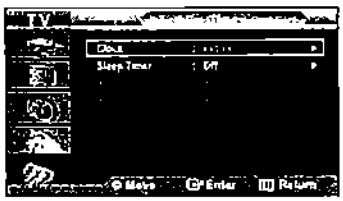
5 Select the **Sub** by pressing the ▲ or ▼ button.
Press the **ENTER** button.

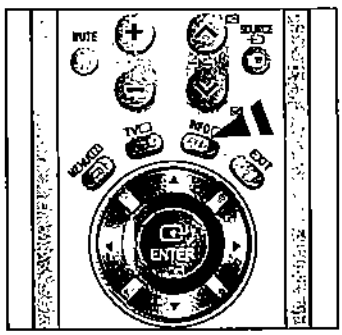
Result: You can listen to the sound of the sub picture.

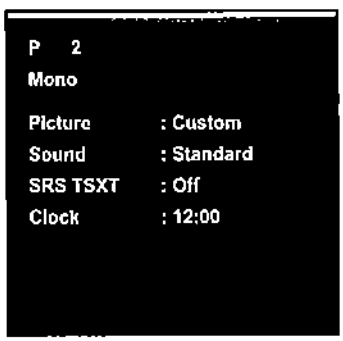
➢ To listen the sound of current main picture, set to **Main**.

Setting and Displaying the Current Time









You can set the TV's clock so that the current time is displayed when you press the INFO button. You must also set the time if you wish to use the automatic On/Off timers.

➢ If you disconnect the power cord, you have to set the clock again.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button.

Result: The options available in the **Setup** group are displayed with **Time** selected.

3 Press the **ENTER** button.

Result: The **Time** menu is displayed with **Clock** selected.

4 Press the **ENTER** button.

5

To...	Press the...
Move to **Hour** or **min**	◄ or ► button
Set the **Hour** or **min**	▲ or ▼ button

6 When you have satisfied with the setting, press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

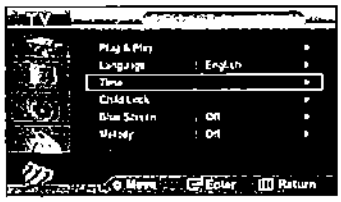
7

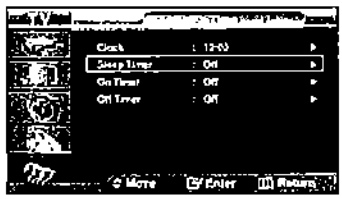
To display the...	Press the...
Current time and selected audio/video setting status	INFO button

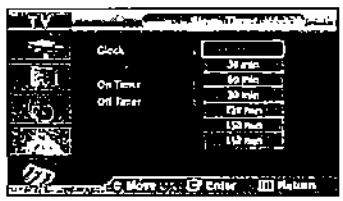
➢ You can also set hour and minute by pressing the number buttons on the remote control.

Setting the Sleep Timer

You can select a time period of between 30 and 180 minutes after which the television automatically switches to standby mode.







1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button

Result: The options available in the **Setup** group are displayed with **Time** selected.

3 Press the **ENTER** button.

Result: The **Time** menu is displayed with **Clock** selected.

4 Press the ▲ or ▼ button to select **Sleep Timer**.
Press the **ENTER** button.

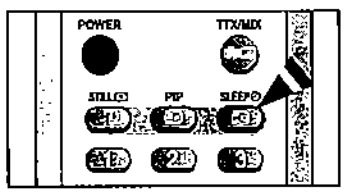
5 Press the ▲ or ▼ button repeatedly and cycle through the preset time intervals (Off Timer, 30 min, 60 min, 90 min, 120 min, 150 min, 180 min).

Result: The TV automatically switches to standby mode when the timer reaches 0.

6 To cancel the sleep timer function, select **Off Timer** by pressing the ▲ or ▼ button and then press the **ENTER** button.

7 Press the **EXIT** button to return to normal viewing.

You can set the sleep timer by simply pressing the **SLEEP** button on the remote control.

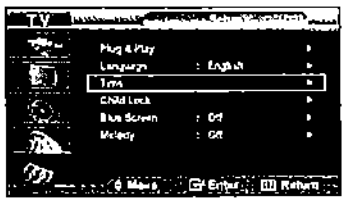


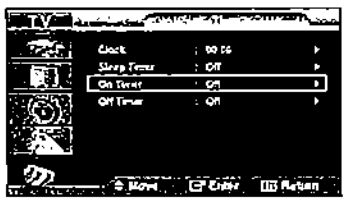
1 Press the **SLEEP** button on the remote control.

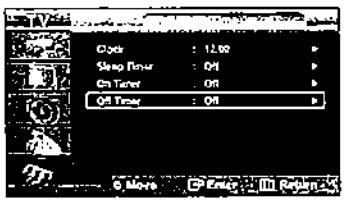
Result: If the sleep timer is not yet set, **Off** is displayed. Otherwise, the remaining time before which the television switches to standby mode is displayed.

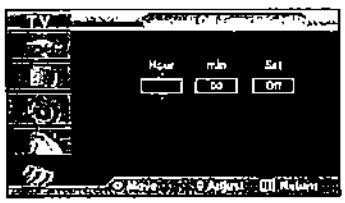
2 Select the preset time interval for staying on by pressing the **SLEEP** button repeatedly.

Switching the Television On and Off Automatically









You can set the On/Off timers so that the set 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.***

➢ The first step is to set the television's clock (refer to "Setting and Displaying the Current Time" on page 40).

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button.

Result: The options available in the **Setup** group are displayed with **Time** selected.

3 Press the **ENTER** button.

Result: The **Time** menu is displayed with **Clock** selected.

4 Press the ▲ or ▼ button to select **On Timer.**
Press the **ENTER** button.

Result: The **On Timer** menu is displayed.

5 Set the time, channel and volume level at which you wish the set to be switched on.

To...	Press the...
Move to **Hour, min, Programme** and **Volume**	◄ or ► button
Set **Hour, min, Programme** and **Volume**	▲ or ▼ button
Move to **Set**	◄ or ► button
Select **On** to enable above setting	▲ or ▼ button

Press the **ENTER** button.

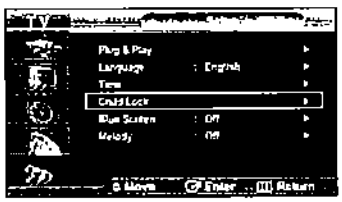
6 Press the ▲ or ▼ button to select **Off Timer.**
In the same way, set the time at which you wish the set to be switched off automatically.

➢ You can also set hour and minute by pressing the number buttons on the remote control.

Activating the Child Lock

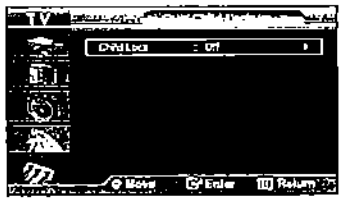
This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by muting out video and audio. Child Lock cannot be released using front panel buttons. Only remote control can release the Child Lock setting, so keep the remote control away from children.

➢ *This function does not work in PC mode.*



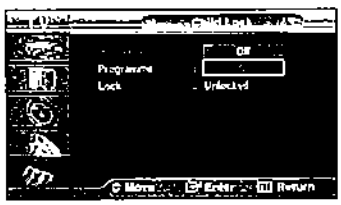
1 Press the **MENU** button.

Result: The main menu is displayed.



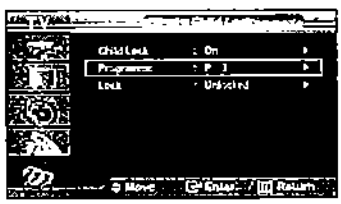
2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button

Result: The options available in the **Setup** group are displayed.



3 Press the ▲ or ▼ button to select **Child Lock.**
Press the **ENTER** button.

Result: The options available in the **Child Lock** group are displayed.

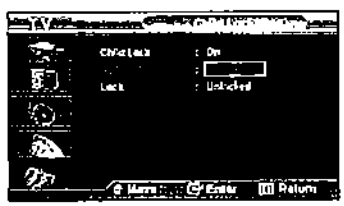


4 Press the **ENTER** button again.

Result: The **Child Lock** is selected.

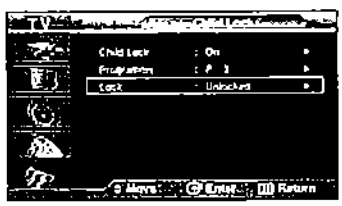
5 Press the ▲ or ▼ button to select **On**.
Press the **ENTER** button.

6 Press the ▲ or ▼ button to select **Programme**.
Press the **ENTER** button.



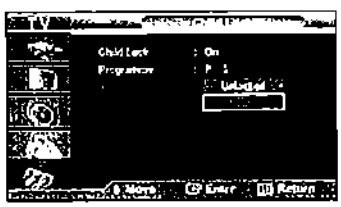
7 Press the ▲ or ▼ button to select the channels to lock.
Press the **ENTER** button.

8 Press the ▲ or ▼ button to select **Lock**.
Press the **ENTER** button.



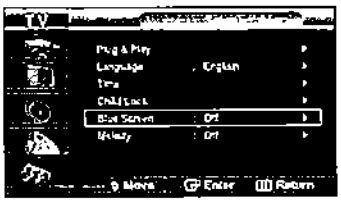
9 Press the ▲ or ▼ button to select **Locked** to lock the channels.
Press the **ENTER** button.

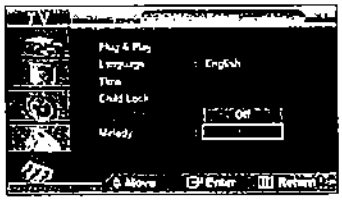
10 Repeat steps **6** and **9** for each channel to be locked or unlocked.



11 Press the **EXIT** button to return to normal viewing.

Setting the Blue Screen Mode





If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background.
If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button

Result: The options available in the **Setup** group are displayed.

3 Press the ▲ or ▼ button to select **Blue Screen.**
Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **On**.
Press the **ENTER** button.

5 Press the **EXIT** button to return to normal viewing.

Selecting the Melody

You can hear melody sound when the television is powered on or off.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button

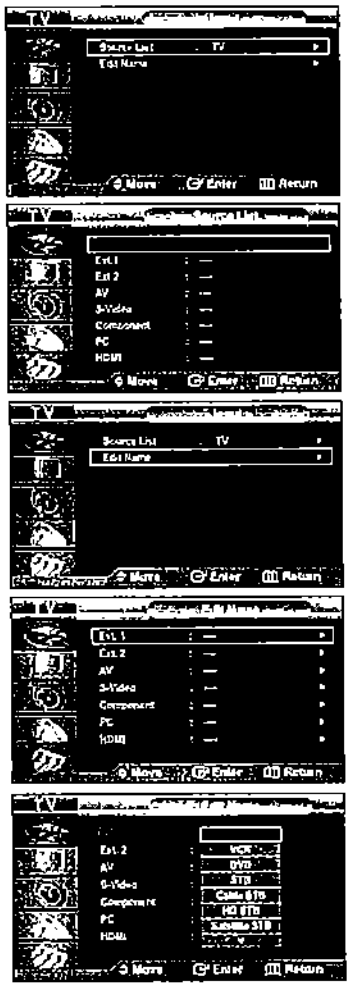
Result: The options available in the **Setup** group are displayed.

3 Press the ▲ or ▼ button to select **Melody.**
Press the **ENTER** button.

4 Press the ▲ or ▼ button to select **On**.
Press the **ENTER** button.

5 Press the **EXIT** button to return to normal viewing.

Selecting a Device from External Sources



Your set enables you to choose which audio/video signals are output to the external connector.

1 Press the **MENU** button.
Press the **ENTER** button to select **Input.**

Result: The options available in the **Input** group are displayed.

2 Press the **ENTER** button.

Result: The options available in the **Source** List menu are displayed.

3 Select the required device by pressing the ▲ or ▼ button.
Press the **ENTER** button.

4 Repeat step **1**. Press the ▲ or ▼ button to select **Edit Name**.
Press the **ENTER** button.

Result: The options available in the **Edit Name** menu are displayed.

5 Select the device that you wish to edit by pressing the ▲ or ▼ button.
The following options are available:
TV - Ext. 1 - Ext. 2 - AV - S-Video - Component - PC - HDMI

6 Press the **ENTER** button.

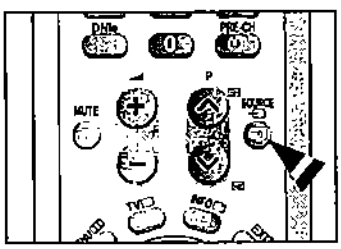
7 Select the required device by pressing the ▲ or ▼ button repeatedly.
The following options are available:
---- - VCR - DVD - STB - Cable STB - HD STB - Satellite STB - AV Receiver - DVD Receiver - Game - Camcorder - DVD Combo - DHR - PC

8 When you are satisfied with the setting, press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

➢ When no external device is connected to TV, only **TV**, **EXT. 1**, **EXT. 2** are activated in the **Source** List. **AV**, **S-Video**, **Component**, **PC**, **HDMI** are activated only when they are connected to TV.

➢ DHR: DVD HDD Recorder

Viewing Pictures from External Sources



Once you have connected up your various audio and video systems, you can view the different sources by selecting the appropriate input.

1 Check that all the necessary connections have been made.

2 Press the **SOURCE** button.

Result: The edited device and audio status are displayed on top-left of the set.

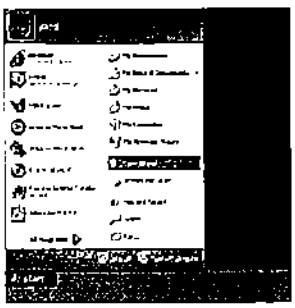
3 Press the **SOURCE** button until the required input source is selected.

➢ If you change the external source while viewing, pictures might take a short period of time to be switched.

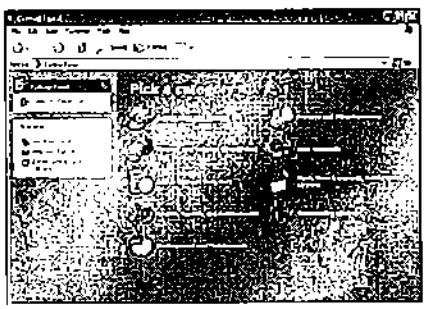
➢ TV mode can be selected by pressing the TV or ⊙/⊘ button on the remote control but you cannot select it by pressing the **SOURCE** button.

Setting up Your PC Software (Based on Widows XP)

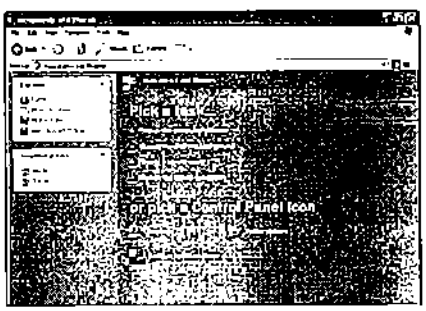
The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will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



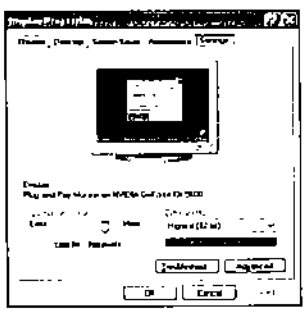
1 First, click on "Control Panel" on the Windows start menu.



2 When the control panel window appears, click on **"Appearance and Themes"** and a display dialog-box will appear.



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



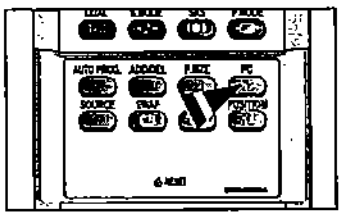
4 Navigate to the **"Settings"** tab on the display dialog-box.

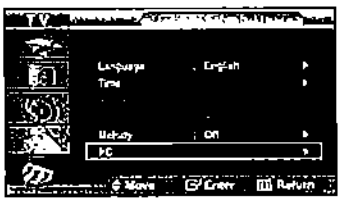
The correct size setting (resolution)
- **LE26R51B : 1280 X 768 pixels**
- **LE32R51B : 1360 X 768 pixels**
- **LE40R51B : 1360 X 768 pixels**

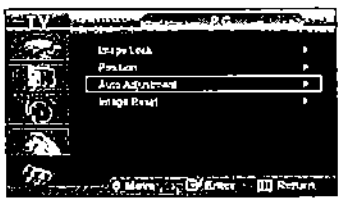
If a vertical-frequency option exists on your display settings dialog box, the correct value is **"60"** or **"60 Hz"**. Otherwise, just click **"OK"** and exit the dialog box.

*See "Display Modes" on page 59.

Adjusting the PC Screen Automatically







Auto adjustment allows the PC screen of set to self-adjust to the incoming PC video signal.
The values of fine, coarse and position are adjusted automatically.

➢ Press the **PC** button on the remote control to select the PC mode.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button

Result: The options available in the **Setup** group are displayed.

3 Press the ▲ or ▼ button to select **PC**.
Press the **ENTER** button.

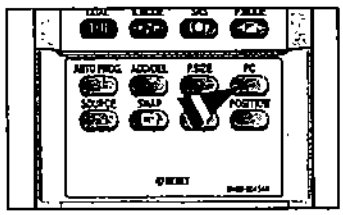
Result: The options available in the **PC** menu are displayed.

4 Press the ▲ or ▼ button to select **Auto Adjustment**.
Press the **ENTER** button.

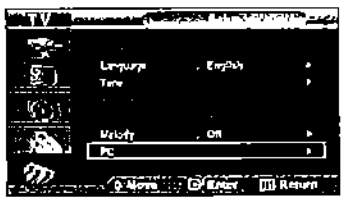
Result: After the PC screen twists during the auto adjustment procedure, the screen quality and position are automatically adjusted.

Coarse and Fine Tuning of the Image

The purpose of picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (coarse) and Fine-tune again. After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.



➢ Press the **PC** button on the remote control to select the PC mode.

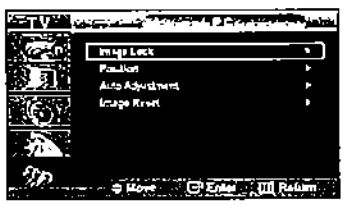


1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button.

Result: The options available in the **Setup** group are displayed.

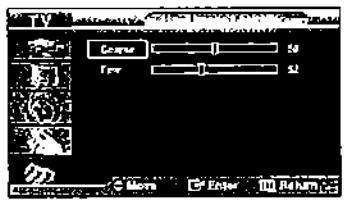


3 Press the ▲ or ▼ button to select **PC**.
Press the **ENTER** button.

Result: The options available in the **PC** menu are displayed.

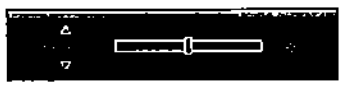
4 Press the **ENTER** button again.

Result: The **Image Lock** menu is selected.



5 Press the ▲ or ▼ button to select **Coarse** or **Fine**.
Press the **ENTER** button.

Result: The horizontal bar is displayed.

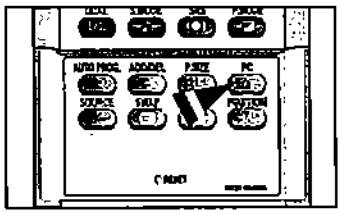


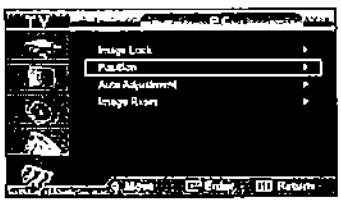
6 Press the ◄ or ► button to adjust the screen quality.

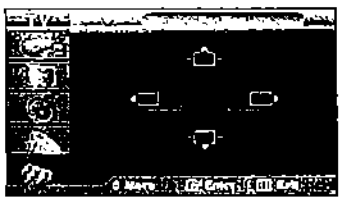
➢ Vertical stripes may appear or the picture may become blurry.

7 When you are satisfied with the settings, press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

Changing the Image Position







➢ Press the **PC** button on the remote control to select the PC mode.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button.

3 Press the ▲ or ▼ button to select **PC**.
Press the **ENTER** button.

Result: The options available in the **PC** menu are displayed.

4 Press the ▲ or ▼ button to select **Position**.
Press the **ENTER** button.

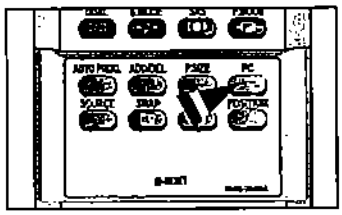
Result: You can adjust the image **Position**.

5 Press the ◄ or ► button to adjust horizontal position.
Press the ▲ or ▼ button to adjust vertical position.

6 Press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

Initializing the Image Settings

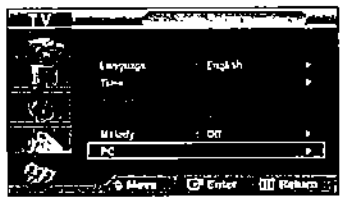
You can replace all image settings with the factory default values.



➢ Press the **PC** button on the remote control to select the PC mode.

1 Press the **MENU** button.

Result: The main menu is displayed.



2 Press the ▲ or ▼ button to select **Setup**.
Press the **ENTER** button.

3 Press the ▲ or ▼ button to select **PC**.
Press the **ENTER** button.

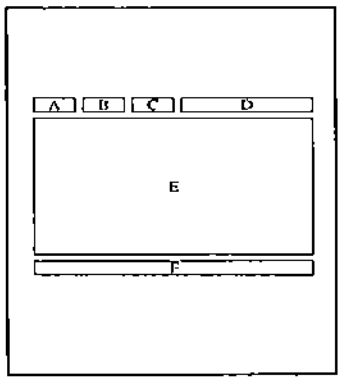
Result: The options available in the **PC** menu are displayed.

4 Press the ▲ or ▼ button to select **Image Reset**.
Press the **ENTER** button.

Result: You can initialize all image setting to the factory default values.

5 Press the **MENU** button to return to the previous menu or press the **EXIT** button to return to normal viewing.

Teletext Decoder



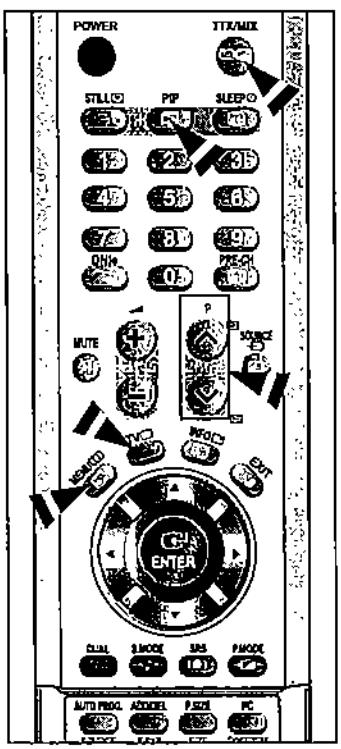
Most set channels carry " teletext ", pages of written information that provide information such as:

- ◆ *Television programme times.*
- ◆ *News bulletins and Weather forecasts.*
- ◆ *Sports results.*
- ◆ *Subtitles for the hard of hearing.*

The teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting station identity.
C	Current page number or search status.
D	Date and time.
E	Text.
F	Status information.

Displaying the Teletext Information



You can display teletext information at any time, but signal reception must be good. Otherwise:

- ◆ *Information may be missing.*
- ◆ *Some pages may not be displayed.*

To activate the teletext mode and display the contents page:

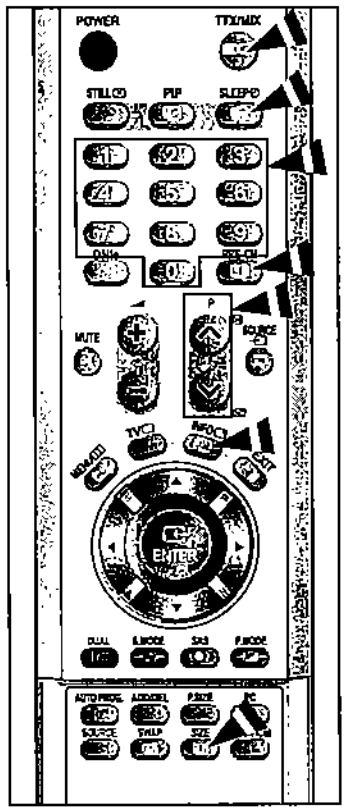
1. Using the ⌃ (⊟) or ⌄ (⊟) button, select the channel providing the teletext service.
2. Press the **TTX/MIX** (⊟/⊠) button to activate the teletext mode.

   Result: The contents page is displayed. It can be redisplayed at any time by pressing the **MENU** (⊟) button.
3. To display the actual broadcast simultaneously with the teletext page, press the **TTX/MIX**(⊟/⊠) button.
4. To return to normal viewing, press the **PIP** (⊠) button.
5. Press the **TV**(□) button again to exit from the Text display.

➢ If any broken character appears while Text is being viewed, make sure that the Text language is identical with the language in the "Setup" menu mode. If both languages are different, select the same language with the Text language on the "Setup" menu.

Selecting a Specific Teletext Page

Press the number buttons on the remote control to enter the page number directly:



1 Enter the three-digit page number listed in the contents by pressing the corresponding numeric buttons.

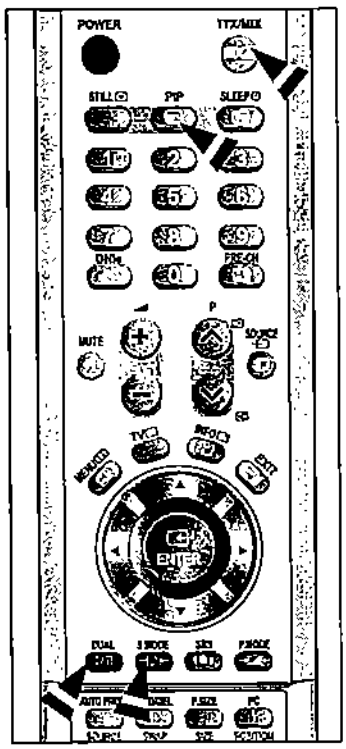
Result: The current page counter is incremented and the page is then displayed.

2 If the selected page is linked with several secondary pages, the secondary pages are displayed in sequence. To freeze the display on a given page, press the **PRE-CH** (⊟).
Press the **PRE-CH** (⊟) button again to resume.

3 Using the various display options:

To display...	Press the...
◆ Both teletext information and the normal broadcast	**TTX/MIX** (⊟/⊟)
◆ Hidden text (answers to quiz games, for example)	**INFO** (⊟)
◆ The normal screen	**INFO** (⊟) again
◆ A secondary page, by entering its 4-digit number	**SLEEP** (⊟)
◆ The next page	**Page Up** (⊟)
◆ The previous page	**Page Down** (⊟)
◆ Double-size letters in the:	**SIZE** (⊟)
• Upper half of the screen	•Once
• Lower half of the screen	•Twice
◆ Normal screen	•Three times

Using FLOF to Select a Teletext Page



The various topics included in the teletext pages are colour-coded, and can be selected by pressing the coloured buttons on the remote control.

1 Display the teletext contents page by pressing the **TTX/MIX** (▤/◪) button.

2 Press the coloured button corresponding to the topic that you wish to select (The available topics are listed on the status information line).

Result: The page is displayed with additional colour-coded information that can be selected in the same way.

3

To display the:	Press the:
Previous page	Red button.
Next page	Green button.

4 When you have finished, press the **PIP** (▣) button to return to the normal broadcast.

Troubleshooting: Before Contacting Service Personnel

Before contacting Samsung after-sales service, perform the following simple checks.
If you cannot solve the problem using the instructions below, note the model and serial number of your set and contact your local dealer.

No sound or picture	◆ Check that the mains lead has been connected to a wall socket. ◆ Check that you have pressed the **POWER** ⏻ button on the front of the panel. ◆ Check the picture contrast and brightness settings. ◆ Check the volume.
Normal picture but no sound	◆ Check the volume. ◆ Check whether the **MUTE** 🔇 button has been pressed on the remote control.
No picture or black and white picture	◆ Adjust the colour settings. ◆ Check that the broadcast system selected is correct.
Sound and picture interference	◆ Try to identify the electrical appliance that is affecting the set and move it further away. ◆ Plug your set into a different mains socket.
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 is displayed.	◆ Check that the signal cable is firmly connected to the PC or video sources. ◆ Check that the PC or video sources are turned on.
On PC mode, "Not Supported Mode" message is displayed.	◆ Check the maximum resolution and the frequency of the video adapter. ◆ Compare these values with the data in the Display Modes.
The image is too light or too dark.	◆ Adjust the Brightness and Contrast.
On PC mode, horizontal bars appear to flicker, jitter or shimmer on the image.	◆ Adjust the Fine function.
On PC mode, vertical bars appear to flicker, jitter or shimmer on the image.	◆ Adjust the Coarse function and then adjust the Fine function.
On PC mode, screen is black and power indicator light blinks every 1 second.	◆ The TV is using its power management system. ◆ Move the computer's mouse or press any key on the keyboard.
On PC mode, image is not stable and may appear to vibrate.	◆ Check that the display resolution and frequency from your computer or video board is an available mode for your set. On your computer check: Control Panel, Display, Settings. ◆ If the setting is not correct, use your computer utility programme to change the display settings. ➢ Your set supports multiscan display functions within the following frequency domain:

	26"(LE26R51B)	32"(LE32R51B)	40"(LE40R51B)
Horizontal frequency(kHz)	30~68	30~61	30~61
Vertical frequency(Hz)	30~61	60~75	60~75
Maximum refresh rate (at 60Hz)	55~65	1360x768	1360x768

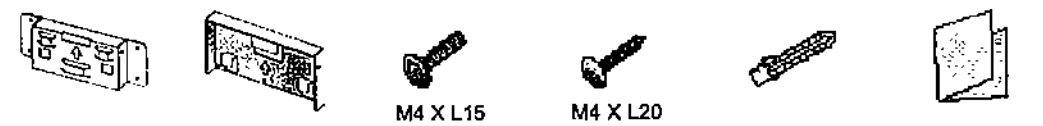
On PC mode, image is not centered on the screen.	◆ Adjust the horizontal and vertical position.

The TFT LCD panel uses a panel consisting of sub pixels (LE26R51B - 2,949,120 / LE32R51B - 3,133,440 / LE40R51B - 3,133,440) which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

Installing the Wall Mount Kit

Note: This installation is to be used when attaching the wall mount to a concrete wall.
When attaching to other building materials, please contact your nearest dealer.

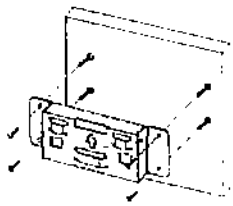
Components (Sold separately)



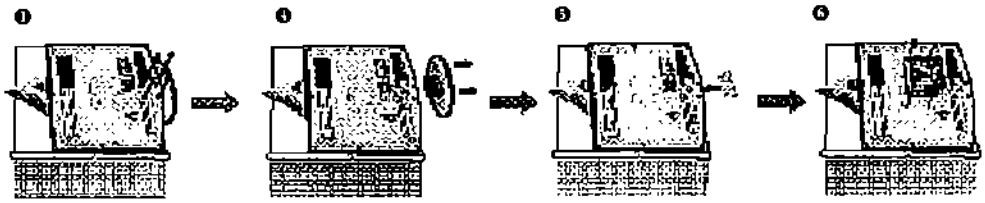
A Wall-Bracket B Set-Bracket C Screw: 8EA D Wood Screw: 4EA E Anchor: 4EA F Installation Guide

How to assemble the Wall Mount Bracket

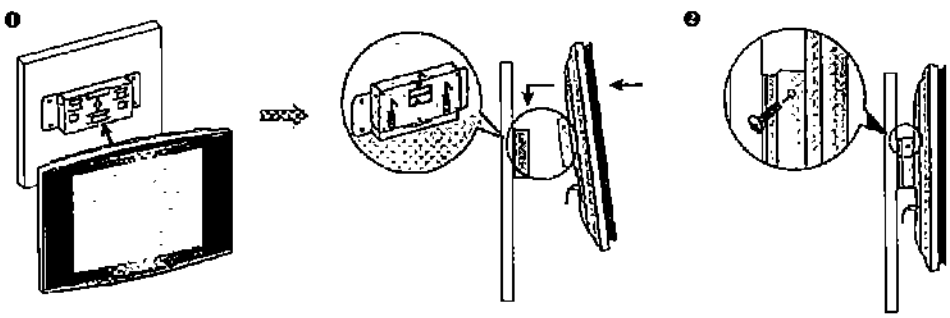
1 ❶ Mark the location of hole on the wall.
❷ Make over 35mm-depth-hole on the marked location using drill.
❸ Fix anchors E on each hole on the wall.
❹ Connect wall-bracket A to the wall with wood screws D after fitting anchors E into the wall-bracket A.
Note: If the bracket is not firmly fixed to the wall, LCD TV can fall off.



2 ❶ Turn the power off and unplug the power cord from the outlet.
❷ Place the TV faced down on a soft cloth or cushion on a table.
❸ Remove the four screws from the back of the TV.
❹ Separate the stand from the TV.
❺ Cover the bottom hole with a cap
❻ Attach the set-bracket B onto the rear side of the TV set and secure the screws C.

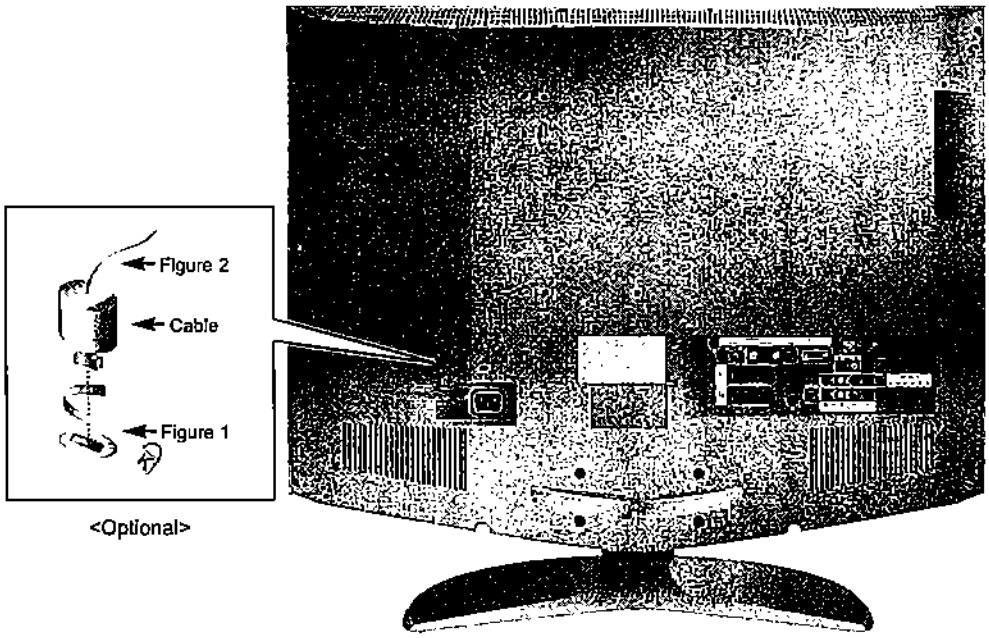


3 ❶ Insert three Hangers of the set-bracket B into the grooves of the wall-bracket A.
❷ Fix set-bracket B and wall-bracket A with screws C.



Using the Anti-Theft Kensington Lock

The Kensington lock is a device used to physically fix the system when using it in a public place.
The locking device has to be purchased separately. The appearance and locking method may differ from the illustration depending on the manufacturer. Please refer to the manual provided with the Kensington lock for proper use.



1. Insert the locking device into the Kensington slot on the LCD TV (Figure 1), and turn it in the locking direction (Figure 2).
2. Connect the Kensington lock cable.
3. Fix the Kensington lock to a desk or a heavy stationary object.

Technical and Environmental Specifications

Model Name	LE26R51B	LE32R51B	LE40R51B
Panel			
Size	26" Diagonal	32" Diagonal	40" Diagonal
Display Size	556.4 (H) x 339.84 (V) mm (21.91(H) x 13.38(V) inches)	687.36 (H) x 412.42 (V) mm (27.06(H) x 16.24(V) inches)	687.36 (H) x 412.42 (V) mm (27.06(H) x 16.24(V) inches)
Type	a-si TFT active matrix	a-si TFT active matrix	a-si TFT active matrix
Pixel Pitch	0.4425 (H) x 0.4425 (V) mm (0.0174(H) x 0.0174(V) inches)	0.537 (H) x 0.537 (V) mm (0.021(H) x 0.021(V) inches)	0.537 (H) x 0.537 (V) mm (0.021(H) x 0.021(V) inches)
Viewing Angle	170/170 (H/V)	170/170 (H/V)	170/170 (H/V)
Frequency			
Horizontal	30 ~ 68 kHz	30 ~ 61 kHz	30 ~ 61 kHz
Vertical	56 ~ 85 Hz	60 ~ 75 Hz	60 ~ 75 Hz
Display Colour	16,700,000 colours	16,700,000 colours	16,700,000 colours
Resolution			
Maximum	1280 x 768 @ 60 Hz	1366 x 768 @ 60Hz	1366 x 768 @ 60Hz
Input Signal			
Sync.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.	H/V Separate, TTL, P. or N.
Video Signal	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm
TV			
Colour System	PAL, SECAM-B/G, D/K, I, I/I, L/L', NTPB (AV3.58, 4.43)	PAL, SECAM-B/G, D/K, I, I/I, L/L', NTPB (AV3.58, 4.43)	PAL, SECAM-B/G, D/K, I, I/I, L/L', NTPB (AV3.58, 4.43)
Sound System	BG, DK, I, L	BG, DK, I, L	BG, DK, I, L
Video			
Colour System	PAL/NTSC/SECAM	PAL/NTSC/SECAM	PAL/NTSC/SECAM
Video System	CVBS, S-VHS, RGB	CVBS, S-VHS, RGB	CVBS, S-VHS, RGB
SCART 1			
Video Input/Output	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm
RGB Input	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm	0.7 Vp-p @ 75 ohm
Audio Input/Output	500mVrms	500mVrms	500mVrms
SCART 2			
Video Input/Output	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm	1.0 Vp-p @ 75 ohm
Audio Input/Output	500mVrms	500mVrms	500mVrms
Power Supply			
Input	AC 100 ~ 240 V, 60/50 Hz ±3Hz	AC 100 ~ 240 V, 60/50 Hz ±3Hz	AC 100 ~ 240 V, 60/50 Hz ±3Hz
Power Consumption			
Maximum	130W	160 W	160 W
Power Saving	< 5.0 W	< 5.0W	< 5.0W
Dimension (W x D x H)			
Body	827 x 112.5 x 504.5 mm (32.56 x 4.43 x 19.86 inches)	972 x 116 x 565 mm (38.27 x 4.57 x 22.24 inches)	972 x 116 x 565 mm (38.27 x 4.57 x 22.24 inches)
With stand	827 x 278 x 520 mm (32.56 x 10.94 x 20.47 inches)	972 x 317 x 577.5 mm (38.27 x 12.48 x 22.74 inches)	972 x 317 x 577.5 mm (38.27 x 12.48 x 22.74 inches)
Weight			
With stand	18.0 kg (39.68 lbs)	21.5 kg (47.40 lbs)	21.5 kg (47.40 lbs)

Technical and Environmental Specifications

Model	LE26R51B	LE32R51B	LE40R51B
Environmental Considerations			
Operating Temperature	10 °C to 40 °C (50 °F to 104 °F)	10 °C to 40 °C (50 °F to 104 °F)	10 °C to 40 °C (50 °F to 104 °F)
Operating Humidity	10% to 80%, non-condensing	10% to 80%, non-condensing	10% to 80%, non-condensing
Storage Temperature	-25 °C to 45 °C (-13 °F to 113 °F)	-20 °C to 45 °C (-4 °F to 113 °F)	-20 °C to 45 °C (-4 °F to 113 °F)
Storage Humidity	5% to 95%, non-condensing	5% to 95%, non-condensing	5% to 95%, non-condensing
Audio Characteristics			
Audio Input	RCA Jack (L, R), 0.5Vrms (-9dB)	RCA Jack (L, R), 0.5Vrms (-9dB)	RCA Jack (L, R), 0.5Vrms (-9dB)
Audio Input (PC)	3.5Ø Stereo Jack, 0.5Vrms (-9dB)	3.5Ø Stereo Jack, 0.5Vrms (-9dB)	3.5Ø Stereo Jack, 0.5Vrms (-9dB)
Headphone Output	Max. 10mW Output (3.5Ø Stereo Jack, 32Ω)	Max. 10mW Output (3.5Ø Stereo Jack, 32Ω)	Max. 10mW Output (3.5Ø Stereo Jack, 32Ω)
Frequency Response	RF: 80Hz ~ 15kHz (at- 3dB) A/V: 80Hz ~ 20kHz (at- 3dB)	RF: 80Hz ~ 15kHz (at- 3dB) A/V: 80Hz ~ 20kHz (at- 3dB)	RF: 80Hz ~ 15kHz (at- 3dB) A/V: 80Hz ~ 20kHz (at- 3dB)

Display Mode (PC)

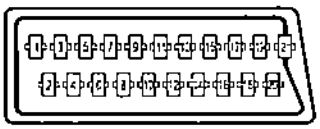
Both screen position and size will vary depending on the type of PC monitor and its resolution. The table below shows all of the display modes that are supported:

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
IBM	640 x 480	31.469	59.940	25.175	- / -
	720 x 400	31.469	70.087	28.322	- / +
VESA	640 x 480	37.861	72.809	31.500	- / -
	640 x 480	37.500	75.000	31.500	- / -
	800 x 600	37.879	60.317	40.000	+ /+
	800 x 600	48.077	72.188	50.000	+ /+
	800 x 600	46.875	75.000	49.500	+ /+
	1024 x 768	48.364	60.000	65.000	- / -
	1024 x 768	56.476	70.069	75.000	- / -
	1024 x 768	60.023	75.029	78.750	+ /+
	1360 x 768	47.712	60.015	85.800	+ /+

- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.
- DVI dose not support PC function.

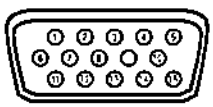
Pin Configurations

SCART Connector



Pin	Signal	Pin	Signal
1	Audio output R	12	-
2	Audio input R	13	Video chassis return (RGB red)
3	Audio output L	14	-
4	Audio chassis return	15	RGB red Input
5	Video chassis return (RGB blue)	16	Blanking signal (RGB switching)
6	Audio input L	17	Video chassis return
7	RGB blue input	18	Blanking signal ground
8	Switching voltage	19	Video output
9	Video chassis return (RGB green)	20	Video Input
10	AV-Link (Ext 1)	21	Screening/chassis return
11	RGB green input		

PC Input Connector (15Pin)



Pin	Signal	Pin	Signal
1	Red (R)	9	Reserved
2	Green (G)	10	Sync Grounding
3	Blue (B)	11	Grounding
4	Grounding	12	Data (DDC)
5	Grounding (DDC)	13	Horizontal sync.
6	Red (R) Grounding	14	Vertical sync.
7	Green (G) Grounding	15	Clock (DDC)
8	Blue (B) Grounding		

Wiring the Mains Power Supply Plug (UK Only)

- ***IMPORTANT NOTICE***

  The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BSI1362 of the same rating must be used. Never use the plug with the fuse cover omitted if the cover is detachable.
  If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer. If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance. However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. DO NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

- ***IMPORTANT***

  The wires in the mains lead are coloured in accordance with the following code:

  BLUE - NEUTRAL BROWN - LIVE

  As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:
  The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL, OR COLOURED GREEN OR GREEN AND YELLOW.

– AFTER SALES SERVICE

– Do not hesitate to contact your retailer or service agent if a change in the performance of your product indicates that a faulty condition may be present.

SAMSUNG

ELECTRONICS

Regulatory and Safety Compliance Guide

Warning! Important Safety Instructions

(Please read the approproate section that corresponds to the marking on your Samsung product before attempting to install the product.)

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVUSING TO QUALIFIED PERSONNEL.

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

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

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
  - Do not cover the slots and openings with a cloth or other materials.
  - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
  - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilations is provided.
- Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
- Do not place the sources of heat on this apparatus, such as a candle, ash tray, incense or other similar material.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water(near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this appratus accidentally gets wet, unplug it and contact an authorizrd dealer immediately. You can clean this apparatus with damp cloth when necessary, but be sure to unplug the apparatus first.
- Do not expose this apparatus set to extreme temperature conditions or to extreme humidity conditions.
- This appratus use batteries. In your community there might be regulations that require you to dispose these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- To cut off the power source, unplug this apparatus from the wall outlet.
- Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adapter outlet, make sure the voltage designation of the DC adapter corresponds the the local electrical supply.
- Never insert anything metallic into this appratus openings. Doing so many create the danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus's case.
- Be sure to hold the plug, not the cord, when disconnecting this apparatus from an electric socket.
- Locate this apparatus near an easily acessible AC outlet.
- If this appratus does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service center.
- Unplug this apparatus from the AC outlet before any service.

Regulatory Compliance Statements

Your Samsung product is marked to indicate its compliance class:

- Federal Communications Commission (FCC) - USA
- Industry Canada Equipment Standard for Digital Equipment (ICES-003) - Canada
- Voluntary Control Council for Interference (VCCI) - Japan
- Bureau of Standards Metrology and Inspection (BSMI) - Taiwan
- Ministry of Information and Communication (MIC) - Republic of Korea
- Italian Post Ministry (Homologation) - Italy

FCC Information

FCC Class A Notice

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Class B Notice

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.

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.

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 with 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.

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD.
America QA Lab of Samsung
3351 Michelson Drive
Suite #290, Irvine, CA92612 USA

Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.
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.

This television receiver provides display of television closed captioning in accordance with Section 15.119 of the FCC rules.(TV broadcast receivers with picture screens 13 inches or larger in diameter models only)

ICES-003 Class A Notice - Avis NMB-003, Classe A

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

ICES-003 Class B Notice - Avis NMB-003, Classe B

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

VCCI Class A Notice

この裝置は、情報處理裝置等電波障害自主規制協議會(VCCI)の基準に基づくクテスA情報技術裝置です。この裝置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な對策を講ずるよう要求されることがあります。

VCCI Class B Notice

この裝置は、情報處理裝置等電波障害自主規制協議會(VCCI)の基準に基づくクテスB情報技術裝置です。この裝置は、家庭環境で使用することを目的としていますが、この 裝置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取級說明書に從って正しい取り扱いをして下さい。

BSMI Class A Notice

The following statement is applicable to products shipped to Taiwan and marked as Class A on the product compliance label.

警告使用者:
這是甲類資訊類產品, 在居住環境中使用時, 可能會造成射頻干擾, 在這種情況下,
使用者會被要求採取某些適當的對策。

European Notice(Europe Only)

Products with the CE marking comply with the EMC Directive(89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive(73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

-EN55022: Radio Frequency Interference

-EN55024: Electromagnetic Immunity of Information Technology Equipment

-EN61000-3-2: Power Line Harmonics

-EN61000-3-3: Voltage Fluctuations

-EN55013: Radio disturbance characteristics of broadcast receivers and associated equipments

-EN55020: Electromagnetic immunity of broadcast receivers and associated equipments

European Class A Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.(Class A product only)

정보통신기기 A급 기기(MIC Class A Notice)

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

정보통신기기 B급 기기(MIC Class B Notice)

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

Italian Homologation Notice

Questo apparecchio e fabbricato in conformita al D.M.28.08.95 n.548
ed in particolare a quanto specificato nell Art.2, comma 1.
Questo apparecchio e fabbricato nella U.E. in conformita al D.M.28.08.95 n.548
Art.2, comma 1 ed al D.M.26.03.92 Art.1

-. For products produced in countries except European Community
Questo apparecchio e fabbricato in conformita al D.M.28.08.95 n.548
ed in particolare a quanto specificato nell Art.2, comma 1.

-. For products produced in European Community
Questo apparecchio e fabbricato nella U.E. in conformita al D.M.28.08.95 n.548
Art.2, comma 1 ed al D.M.26.03.92 Art.1

Important
Safety Instructions(TV Only)

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particu larly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

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

(EPA applied model only)

As an ENERGY STAR Partner. Samsung has determined that this product or product models meets the ENERGY STAR guidelines for energy efficiency.

■ Optional ■

Do not place the apparatus in a rack or bookcase. Ensure that there is adequate ventilation and that you've followed that manufacturer's instructions for mounting.
(For PDP or Projection TV apparatus)

If you place the apparatus in a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions.

Wiring the Mains Power Supply Plug(UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BSI1362 of the same rating must be used.
Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.
If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.
However, if there is no alternative to cut off the plug, remove the fuse and then safely dispose of the plug.
Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:
The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK.
The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL ⏚, OR COLOURED GREEN OR GREEN AND YELLOW.

Russia Only - PCT Notice

MPR II Compliance
TCO'95-Ecological requirements for personal computers (TCO'95 applied model only)
TCO'99-Ecological requirements for personal computers (TCO'99 applied model only)
TCO'03-Ecological requirements for personal computers (TCO'03 applied model only)
TCO'03 Recycling Information (TCO'03 applied model only)
Medical Requirement (Medical applied model only)

MPR II Compliance

This monitor complies with SWEDAC(MPR II) recommendations for reduced electric and magnetic fields.

TCO'95-Ecological requirements for personal computers (TCO'95 applied model only)

AB general requirements
AB2 Written Eco-document acompanying the products
Congratulations! You have just purchased a TCO'95 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and to the further development of environmentally-adapted electronic products.

Why do we have environmentally-labelled monitors?
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment.The main problem as far as monitors and other electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a monitor, such as energy consumption levels, that are important from both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.) it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

What does labelling involve?
This product meets the requirements for the TCO'95 scheme, which provides for international environmental labelling of monitors. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern among other things restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling and the manufacturer is obliged to have an environmental plan, which must be adhered to in each country where the company conducts its operations policy. The energy requirements include a demand that the monitor after a certain period of inactivity shall reduce its power consumption to a lower level, in one or more stages. The length of time to reactivate the monitor shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example in respect of the reduction of electric and magnetic fields, along with physical and visual ergonomics and good usability.

TCO Development Unit 1996-11-29
On the page this folder you will find a brief summary of the environmental requirements met by this product.
The complere environmental criteria document may be ordered from:
TCO Development Unit
S-11494 Stockholm
Sweden
Fax: +46 8 782 92 07
E-mail (Internet): development@tco.se
Current info ion regarding TCO'95-approved and labelled products may also be obtained via the Internet, using the address:
http://www.tco-info.com/
TCO'95 is a co-operative project between(3 logos)

Environmental Requirements
Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fish eating birds and mammals, due to the bioaccumulative processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

TCO'95 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

Lead
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

TCO'95 requirement Permits the inclusion of lead since no replacement has yet been developed.

Cadmium
Cadmium is present in rechargeable batteries and in the colour generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses.

TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

Mercury
Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses.

TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or electronics components concerned with the display unit.

CFCs (freons)
CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).

The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or its packaging.

TCO'99-Ecological requirements for personal computers (TCO'99 applied model only)

Congratulations!
You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

This product meets the requirements for the TCO'99 scheme which provides for an international environmental and quality labelling labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO(The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen(The Swedish Society for Nature Conservation), Statens Energimyndighet(The Swedish National Energy Administration) and SEMKO AB.

The requirements cover a wide range of issuse: environment, ergonomics, usability, reduction of electric and magnetic fields, energy consumption and electrical safety.

Why do we have environmentally labelled computers?
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labelling involve?
The environmental demands has been developed by Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation). These demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs(freons)and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development
SE-114 94 Stockholm, Sweden
Fax: +46 8 782 92 07
Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address: http://www.tco-info.com/

Environmental requirements
Flame retardants
Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium**
Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

Mercury**
Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as today there is no commercially available alternative. TCO aims on removing this exception when a Mercury free alternative is available.

CFCs (freons)
The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

Lead**
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

Up

- **TCO'03-Ecological requirements for personal computers (TCO'03 applied model only)**

Congratulations!
The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

Some of the features of the TCO'03 Display requirements:

Ergonomics
Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

Energy
Energy-saving mode after a certain time – beneficial both for the user and the environment
Electrical safety

Emissions

- Electromagnetic fields
- Noise emissions

Ecology

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 000
- Restrictions on
  o chlorinated and brominated flame retardants and polymers
  o heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in cooperation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, Please visit
www.tcodevelopment.com

Up

TCO'03 Recycling Information (TCO'03 applied model only)

[European Residents Only]

For recycling information for TCO'03 certified monitors, for the residents in the following countries, please contact the company corresponding to your region of residence. For those who reside in other countries, please contact a nearest local Samsung dealer for recycling information for the products to be treated in environmentally acceptable way.

	[U.S.A. Residents Only]	[European Residents Only]		
	U.S.A.	SWEDEN	NORWAY	GERMANY
COMPANY	Solid Waste Transfer & Recycling Inc	ELKRETSEN	Elektronikkretur AS	vfw AG
ADDRESS	442 Frelinghuysen Ave Newark, NJ 07114	ELKRETSEN Box 1357, 111 83 Stockholm Barnhusgatan 3, 4 tr.	6454 Etterstad 0602 Oslo Fyrstikkalln 3B	Max Plank Strasse 42 50858 Collogne Germany
TELEPHONE	973-565-0181	08-545 212 90	23 06 07 40	49 0 2234 9587 - 0
FAX	Fax: 973-565-9485	08-545 212 99	23 06 07 41	
E-MAIL	none	info@el-kretsen.se	adm@elektronikkretur.no	vfw.info@vfw-ag.de
HOME PAGE	http://www.bcua.org/Solid Waste_Disposal.htm	http://www.el-kretsen.se/	http://www.elretur.no/	

Medical Requirement (Medical applied model only)

Classifications:
In accordance with UL 2601-1/IEC 60601-1, the product is cssified as Continuous duty Class I equipment, which is not protected against ingress of liquids. The product is not suitable for use in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide.

EMC
This equipment has been tested and found to comply with the limits for medical devices to the IEC 601-1-2:1994. These limits are designed to provide reasonable protection against harmful interference in a typical medical 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 other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to other devices, 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 device.
- Increase the separation between the equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device (s) are connected.
- Consult the manufacturer or field service technician for help.

Video In / RS 232 / Video Out
Accessories equipment connected to the analog and digital interfaces must be certified to the respective IEC standards (i.e. IEC 950 for data processing equipment and IEC 601-1 for medical equipment.) Furthermore all configurations shall comply with the system standard IEC 601-1-1. Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 601-1-1. If in doubt, consult the technical services department or your local representative.

Transport and Storage Limitations:
Temperature Range of -40°C to +70°C
Relative Humidity of 10 -95%, non-condensing

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* Bio-accumulative is defined as substances which accumulate within living organisms.
** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

Up