HUMAX

LEU-20A

LCD Analogue TV

To reduce the risk of electric shock, do not remove cover (or back).
No user serviceable parts inside. Refer servicing to qualified service personnel.
Indicates a situation which, if not avoided, could damage the equipment or other
apparatus.

This symbol indicates dangerous voltage inside the PDP-TV that presents a risk
of electric shock or personal injury. Indicates a hazardous situation which, if not
avoided, could result in serious injury.

This symbol indicates important instructions accompanying the LCD-TV.

Read this manual carefully and make sure you understand the instructions provided.
For your safety, check what the result of each action will be. Throughout the whole
manual, pay special attention to the following instructions that indicate hazardous
situations. Indicates additional information to the user to make the user aware of
possible problems and information of any importance to help the user to understand,
to use and to maintain the installation.

The information in this document is subject to change without notice.

User Instructions

**A still image displayed too long may cause permanent damage to the
LCD Panel.**
Watching the LCD TV in 4:3 format for a long period of time may leave traces
of borders displayed on the left, right and center of the screen caused by the
difference of light emission on the screen.

Playing a DVD or a game console may cause similar effect to the screen. Damages
caused by the above effect are not covered by the Warranty.

Power

- Plug the power cord into the correct power outlet. An unstable connection may
  cause fire.
- Do not use damaged power cords or plugs, or use a loose wall outlet. This may
  cause electrical shock or fire.
- Do never touch the power cord with wet hands. This may cause electrical shock.
- Do not use multiple devices with one outlet. Overheating the outlet may cause
  fire.
- Do not bend or pull out the power cord using force, nor place heavy objects over
  it. This may cause electrical shock or fire.
- Make sure you pull out the power cord holding the plug itself. An internal
  disconnection may cause fire.
- When removing the product, turn off the power and pull out the plug from
  the power outlet. Also make sure other devices including the antenna or
  the connectors are removed from the outlets before relocating the product.
  Otherwise you may suffer electrical shock or fire due to a damaged power cord.

Installation

▪ Keep the product away from any heating devices. Placing it close to a heating device may cause fire.

▪ Keep the power cord away from any heating devices. A melted coating may cause fire or electrical shock.

▪ Place the antenna as far away as possible from any high-voltage cables. Touching the high voltage wiring may cause fire or electrical shock.

▪ Do not install the product in oily, smoky or humid (or exposed to rain/water) places or automobiles. This may cause fire.

▪ The connection between the external antenna and the internal wiring should be turned inside to avoid any inflow of rain. Exposing the PDP to water (rain) will cause electrical shock or fire.

▪ Do not use the product in humid places. Humidity will shorten the life of the product and may cause an electrical shortage or fire.

▪ Do not use the product in places with low temperatures (below 5°C).

▪ Avoid installing the product in poorly ventilated places. Internal overheating may cause an electrical shortage and fire.

▪ Be sure not to cover the ventilator (with a table-cloth or curtain, etc.). Internal overheating may cause an electrical shortage and fire.

▪ Do not install the product in an unstable place or on a small stand. The product may cause serious injury, if it falls on somebody (especially children). Install it on an even, stable place as it is front-heavy.

▪ Do not install the product on the floor. Someone (especially children) may trip over it.

Cleaning

▪ Regular clean the product (at least once a year) according to the advice of the Customer Service. Leaving dust inside the product for an extended time may cause fire or malfunction.

▪ When not using the product for an extended time period, unplug the power cord. Dust over or inside the PDP may cause electrical shock, leakage or even fire from possible heat generation.

▪ When cleaning the product, unplug the power cord and use only a soft, dry cloth. Do not use chemicals like wax, benzene, alcohol, thinners, aroma, lubricator or cleanser.

▪ Do not wipe over the screen with your nails or any sharp-edged objects. This will scratch the surface.
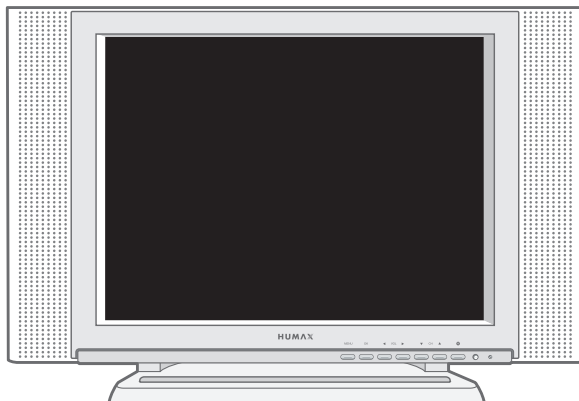
Contents

+ Please check all package contents before using your TV.
+ Package Contents may be different according to the area.

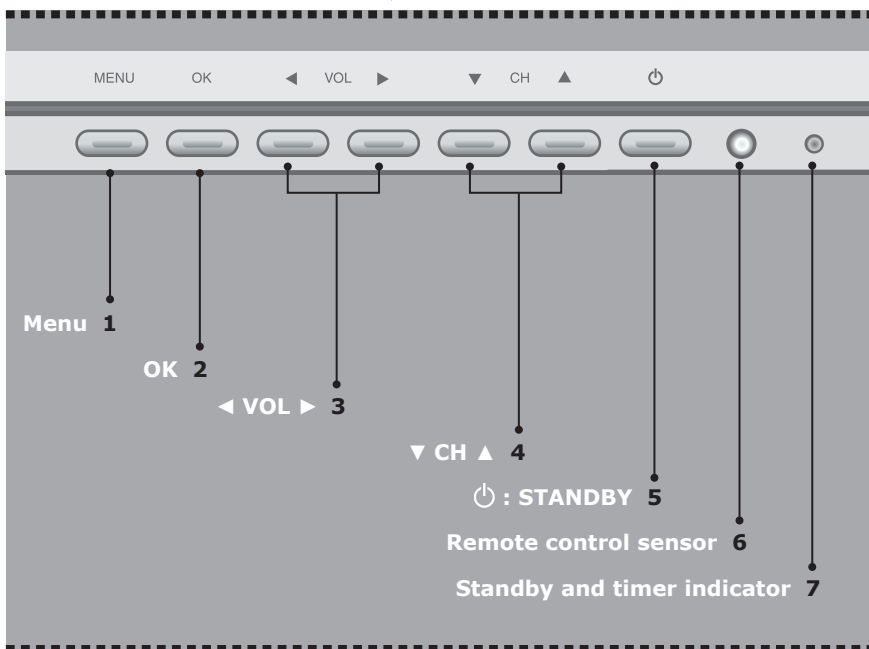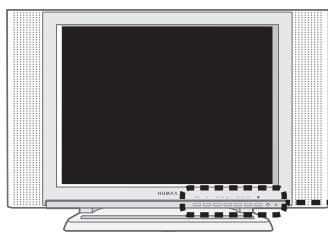**LCD - TV**

Remote Control

AAA Batteries (X2)

User's Manual

Menu 1

OK 2

◄ VOL ► 3

▼ CH ▲ 4

⏻ : STANDBY 5

Remote control sensor 6

Standby and timer indicator 7

1. MENU
Menu display

2. OK
Your choice confirmation

3. ◄ VOL ►
Volume adjustment

4. ▼ CH ▲
Channel selection

5. ⏻ : STANDBY
Switches between operation and standby modes.

6. Remote control sensor

7. Standby and timer indicator

8 Common Interface

Red	: R
White	: L
Red	: Pr
Blue	: Pb
Green	: Y

7 Component Input

1 Power

ANT.IN 75Ω   H/P   AV 1   AV 2   S-VIDEO   VIDEO   L-AUDIO-R   AUDIO INPUT   PC INPUT

AV 3

2 ANT.IN

H/P 3

AV1/AV2 4

AV 3 5

AUDIO INPUT / PC INPUT 6

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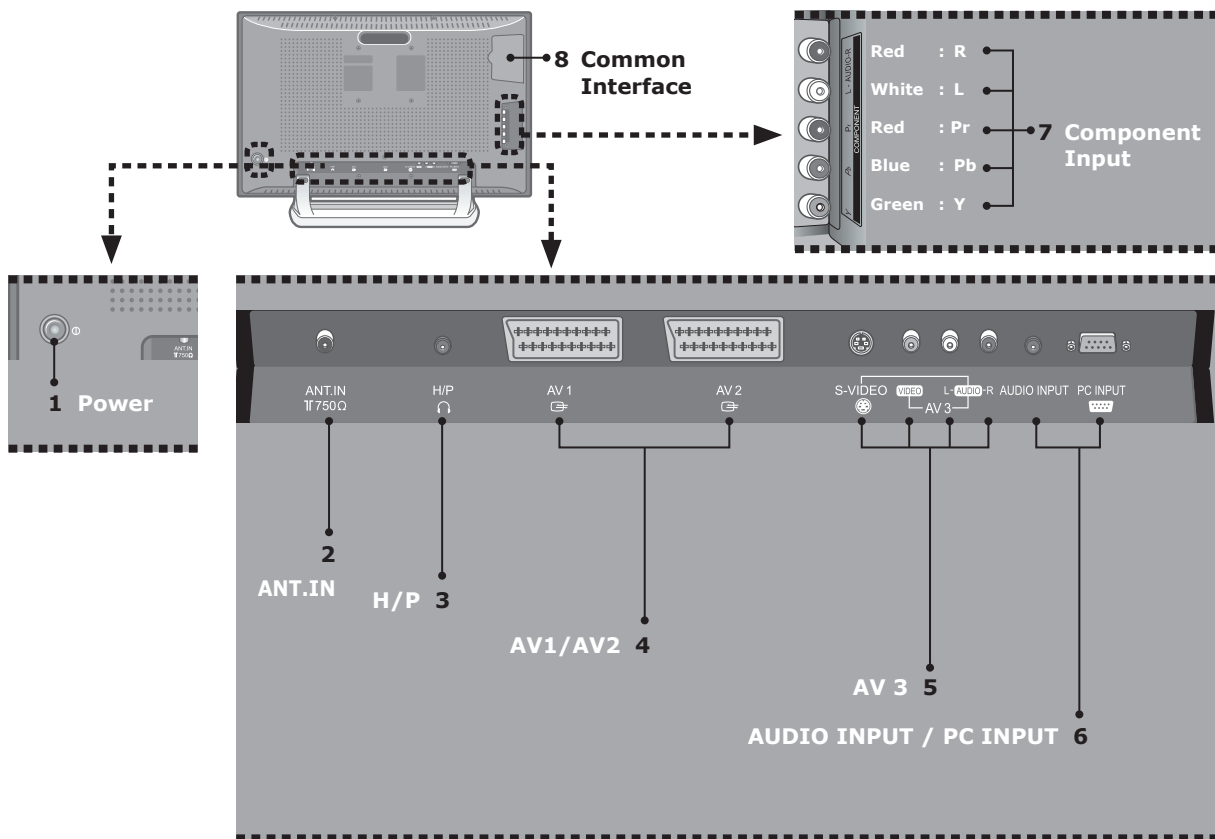
1. ⏻ : POWER
Power on/off

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2. ANT.IN
Connect to an antenna or a cable TV system.

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3. H/P
Connect the headphones.

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4. AV1 / AV2
Connect to the SCART jack of a VCR, DVD player and similar devices.

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5. AV3
Connect to the audio and video (or S-Video) jacks of a camcorder, video game and similar devices.

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6. AUDIO INPUT / PC INPUT
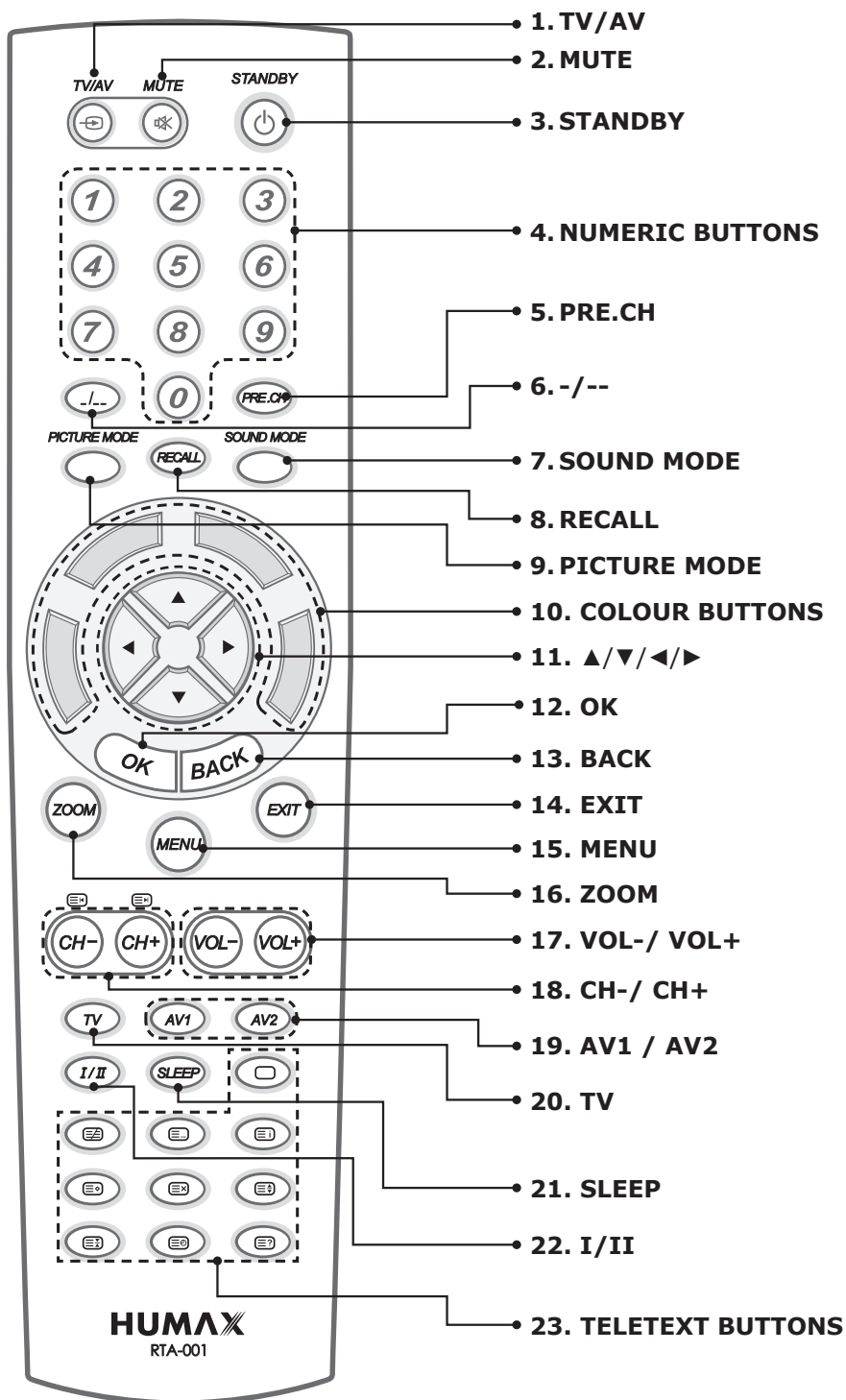Connect to the audio and video output jacks of a PC.

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7. COMPONENT INPUT
Connect to the audio and video output jacks of a DVD player, DTV receiver and similar devices.

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8. COMMON INTERFACE
For one CA Module with a smart card.

1. **TV/AV**
2. **MUTE**
3. **STANDBY**
4. **NUMERIC BUTTONS**
5. **PRE.CH**
6. **-/--**
7. **SOUND MODE**
8. **RECALL**
9. **PICTURE MODE**
10. **COLOUR BUTTONS**
11. **▲/▼/◄/►**
12. **OK**
13. **BACK**
14. **EXIT**
15. **MENU**
16. **ZOOM**
17. **VOL-/ VOL+**
18. **CH-/ CH+**
19. **AV1 / AV2**
20. **TV**
21. **SLEEP**
22. **I/II**
23. **TELETEXT BUTTONS**

HUMAX
RTA-001

1. **TV/AV**
   Used to display all of the available input sources. Press the ▲ or ▼ button to select required input source.

2. **MUTE**
   Used to temporarily cut off the sound. To turn the sound back on, press the **MUTE**, **VOL+**(**VOL►**), or **VOL-**(**◄VOL**) button.

3. **STANDBY**
   Used to switch between operation and standby modes.

4. **Numeric buttons (0~9)**
   Used to display the corresponding channels.

5. **PRE.CH**
   Used to switch repeatedly between the last two channels displayed.

6. **-/--**
   Used to select the one or two-digit channel.

7. **PICTURE MODE**
   Used to select the picture mode (**Custom**, **Dynamic**, **Standard**, **Movie**, or **Mild**).

8. **RECALL**
   Used to display information.

9. **SOUND MODE**
   Used to select the sound mode (**Custom**, **Standard**, **Music**, **Movie**, or **Speech**).

10. **Colour buttons**
    Used to access directly teletext linked page.

11. **▲/▼/◄/►**
    Used to control the cursor in the on-screen menu system.

12. **OK**
    Used to confirm (store or enter) your choice in the on-screen menu system.

13. **BACK**
    Used to return to the previous display.

14. **ZOOM**
    Used to change the picture size. (**Normal**, **Zoom**, or **Wide**)

15. **MENU**
    Used to display the on-screen menu.

16. **EXIT**
    Used to exit from any display.

17. **CH-(▣◁) / CH+(▣▷)**
    Used to change the channel or teletext page.

18. **VOL-/ VOL+**
    Used to adjust the volume.

19. **AV1 / AV2**
    Used to switch the AV1 or AV2 input mode directly.

20. **TV**
    Used to switch the TV mode directly.

21. **SLEEP**
    Used to select the preset time interval for switching the TV to standby mode automatically.

22. **I/II**
    Used to select the sound mode (stereo, dual, or mono sound).

23. **TELETEXT BUTTONS**

    ▢ **(teletext off)**
    Used to deactivate teletext service.

    ▤ **(teletext on/mix)**
    Used to view the teletext information. Used to overlap the teletext with the broadcasting screen.

    ▤ **(mode)**
    Used to select the teletext mode (LIST/ FLOF)

    ▤i **(index)**
    Used to display the teletext index.

    ▤⟳ **(store)**
    Used to store the teletext pages.

    ▤✕ **(cancel)**
    Used to display the broadcast when searching for a page.

    ▤⬍ **(size)**
    Used to display the double-size letters.

    ▤⫶ **(hold)**
    Used to hold the teletext page.

    ▤⓪ **(sub-page)**
    Used to display the teletext sub-page.

    ▤? **(reveal)**
    Used to reveal the hidden text.

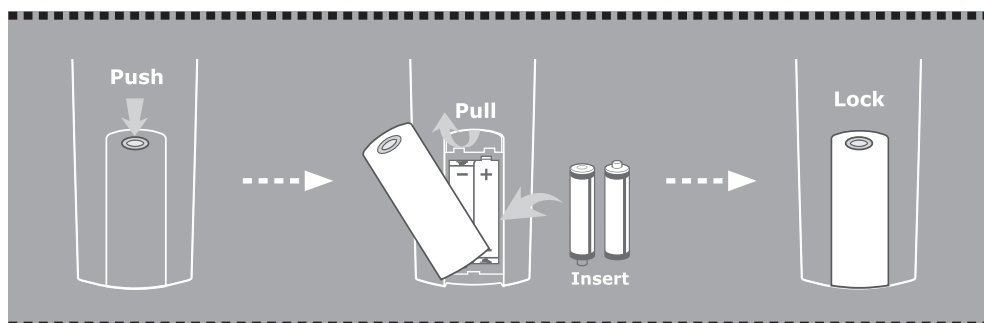## Inserting the Batteries into the Remote Control

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

+ Purchase the TV

+ Find that the remote control is no longer operating correctly

1. Remove the cover on the rear of the remote control by pressing the symbol (⬭) downwards and then pulling firmly to remove it.

**2.** Insert two AAA size 1.5V batteries ensuring that the "+" and "-" ends of the batteries are correctly aligned.

3. Replace the cover.

Note : **Do not mix battery types, i.e. alkaline and manganese.**

1. Attach the LCD to the stand-base.

2. Firmly secure the stand-base and the LCD by using the 4 screws.

Note : **Firmly secure the stand-base for the LCD before moving it, as the stand-base may fall and could cause serious injury.**
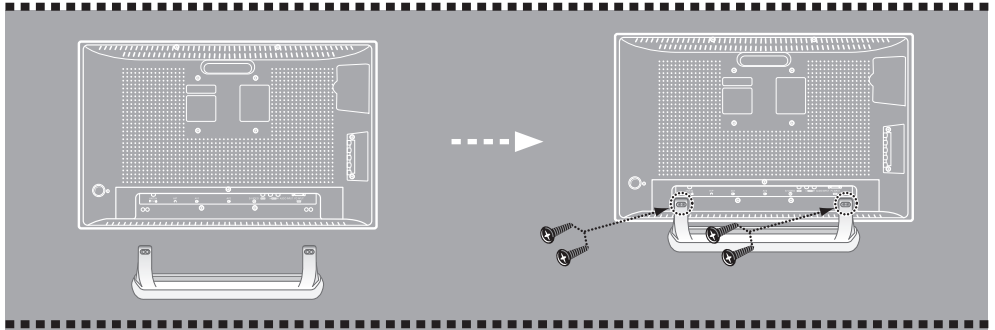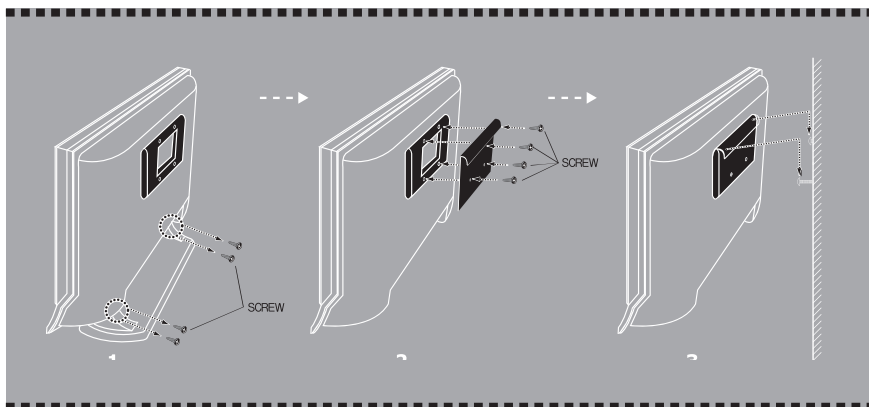
Installing on the Wall

You can install the TV on the wall using a mounting bracket (sold separately).
To reduce the risk of damage from falling, this TV should be secured at all times.
Do not install on a weak surface such as plaster or foam board.

Before you install the TV on the wall, separate the LCD and stand-base.
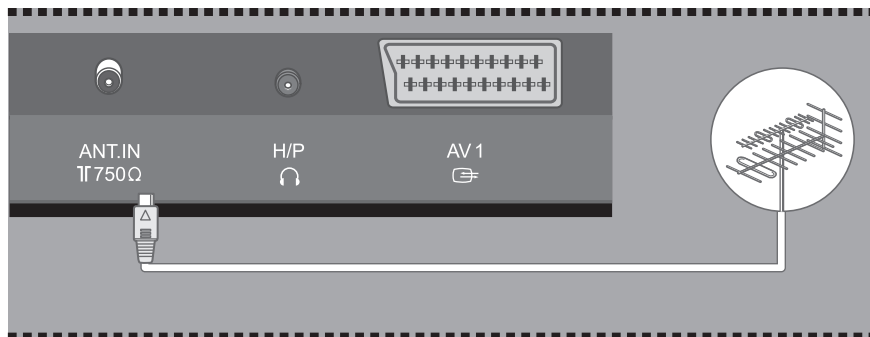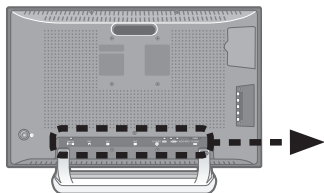

Convenient Movement

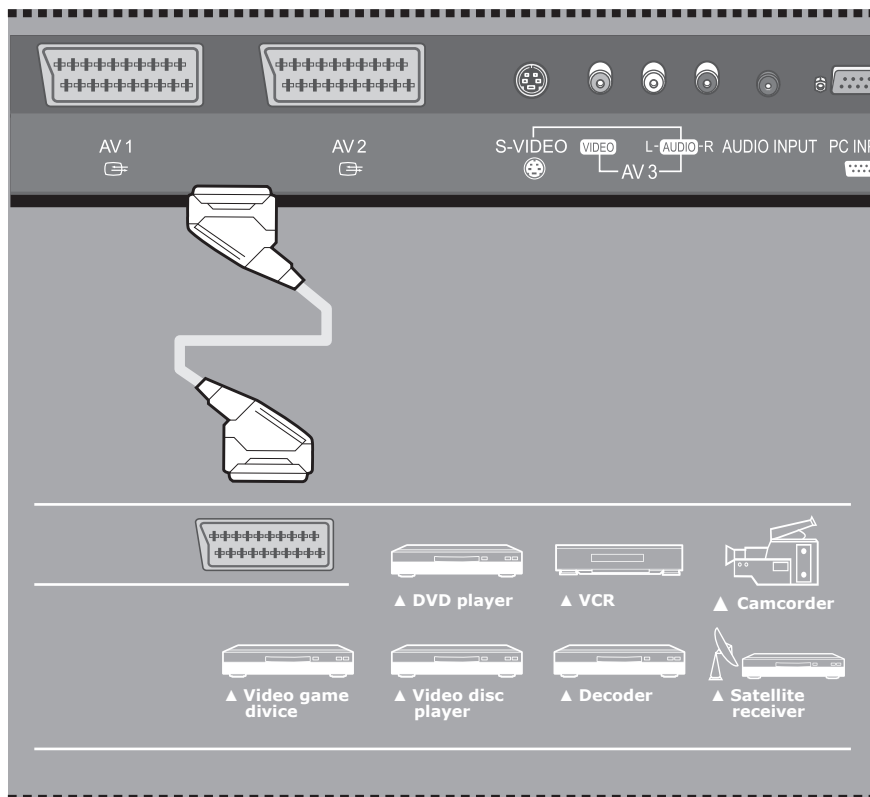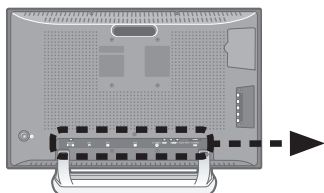You can move the TV to other place conveniently.
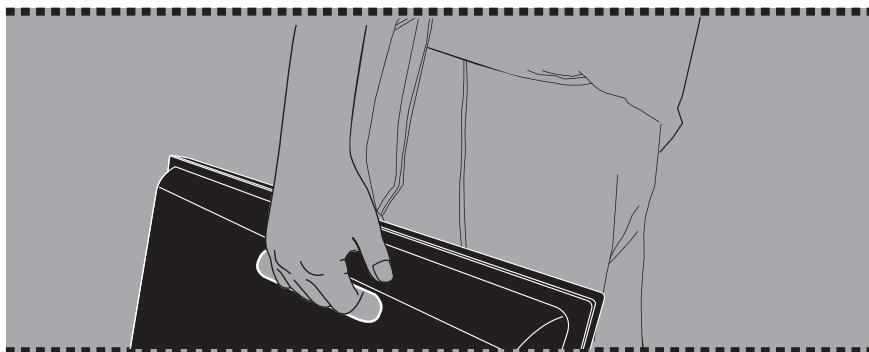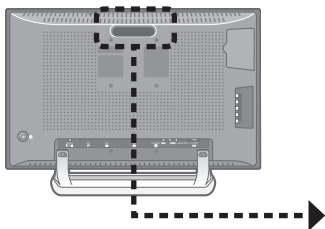
Connecting to an Aerial

To view the TV channels correctly, a signal must be received by the TV. Connect the aerial or network input cable to the **ANT.IN** jack on the rear of the TV.

Using the SCART cable

1. Connect the SCART cable between the **AV1** (or **AV2**) input jack on the TV and the video output jack on the required equipment.

2. Turn the TV on, then press the **TV/AV** button to select **AV1** or **AV2**.

▲ DVD player   ▲ VCR   ▲ Camcorder

▲ Video game divice   ▲ Video disc player   ▲ Decoder   ▲ Satellite receiver
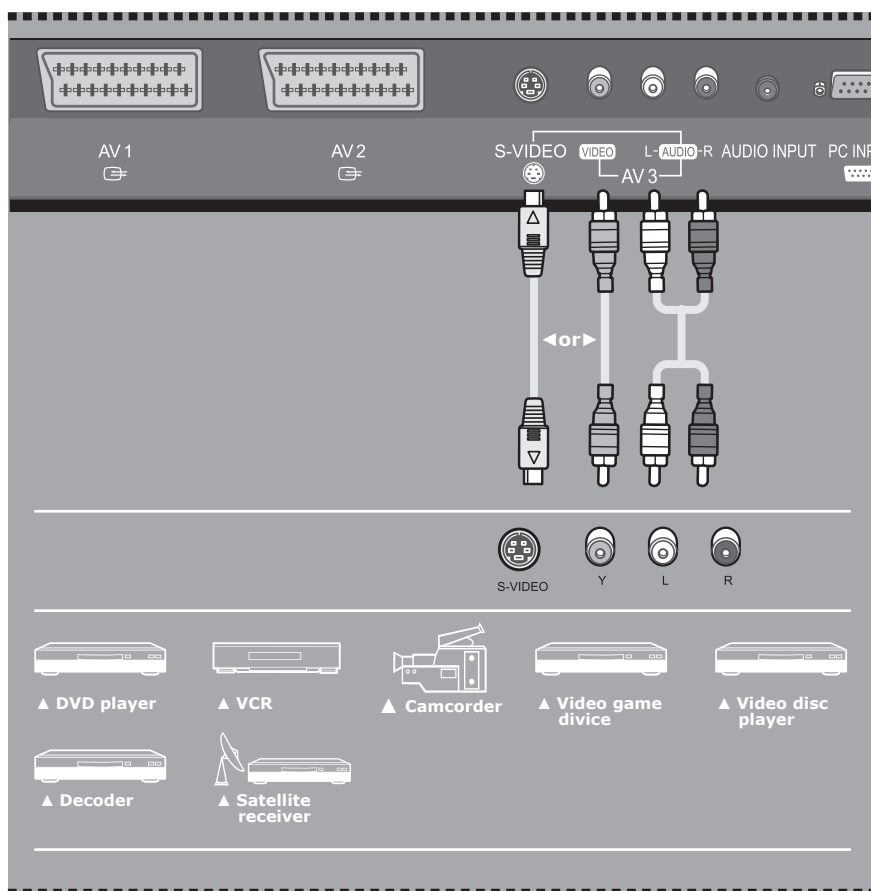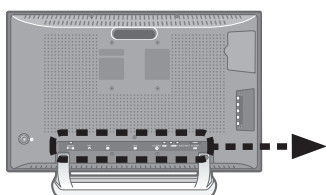
Using the Audio/Video cable

1. Connect the video cable between the **VIDEO (AV3)** input jack on the TV and the video output jack on the required equipment.

Note : **For the equipment with an S-VIDEO jack, connect the S-Video cable between the S-VIDEO (AV3) input jack on the TV and the S-Video output jack on the required equipment.**

2. Connect the audio cable between the **AUDIO-L/R (AV3)** input jack on the TV and the audio output jack on the required equipment.

3. Turn the TV on, then press the **TV/AV** button to select **AV3**.

Note : **If you have connected the TV and the required equipment using an S-Video cable, select S-Video.**

AV 1   AV 2   S-VIDEO   VIDEO   L-AUDIO-R   AUDIO INPUT   PC INPUT
                                              AV 3

◄or►

S-VIDEO   Y   L   R

▲ DVD player   ▲ VCR   ▲ Camcorder   ▲ Video game divice   ▲ Video disc player
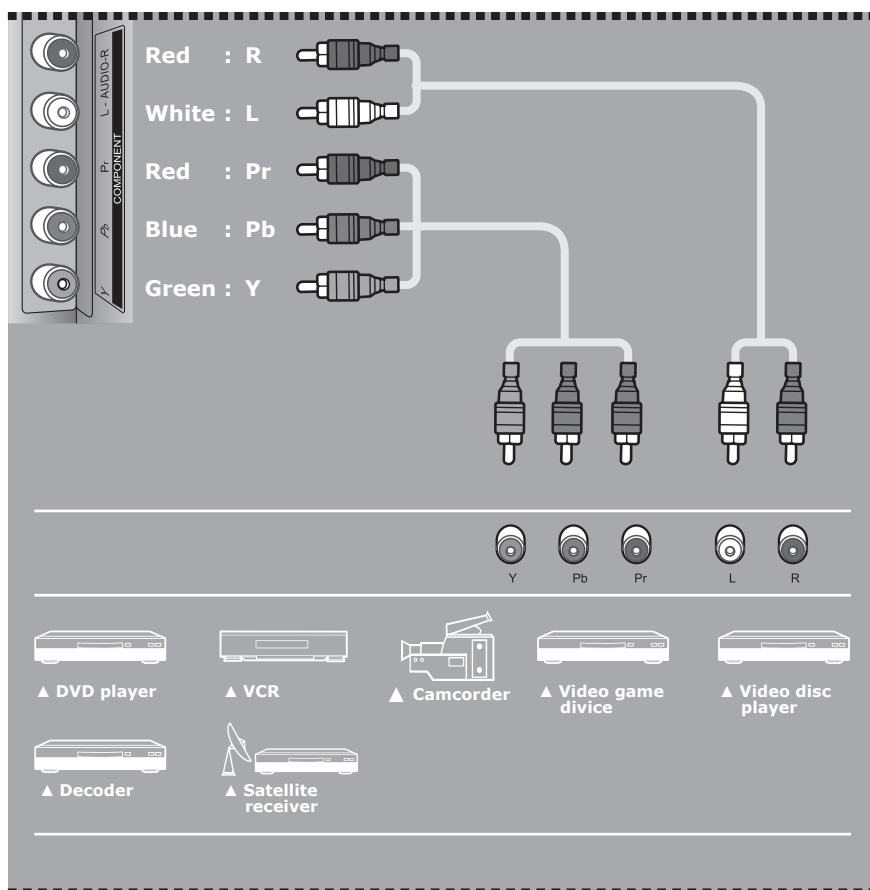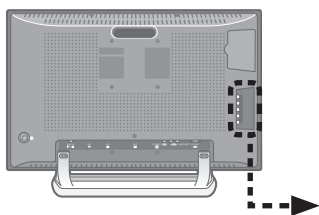
▲ Decoder   ▲ Satellite receiver

Connecting to the Component Input

1. Connect the video cable between the **VIDEO-Y/Pb/Pr** input jacks on the TV and the video output jacks on the required equipment.

Note : **Depending on the manufacturer, the Y/Pb/Pr jacks may be identified as Y/PB/PR, Y/B-Y/R-Y or Y/CB/CR.**

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2. Connect the audio cable between the **AUDIO-L/R** input jacks on the TV and the audio output jacks on the required equipment.

3. Turn the TV on, then press the **TV/AV** button to select **Component**.

Red   : R
White : L
Red   : Pr
Blue   : Pb
Green : Y

Y   Pb   Pr   L   R

▲ DVD player   ▲ VCR   ▲ Camcorder   ▲ Video game divice   ▲ Video disc player

▲ Decoder   ▲ Satellite receiver

Connecting a PC

1. Connect the PC cable between the **PC INPUT** jack on the TV and the PC output jack on the PC.

2. Connect the audio cable between the **AUDIO INPUT** jack on the TV and the audio output jack on the PC.

3. Turn the TV on, then press the **TV/AV** button to select **PC**.
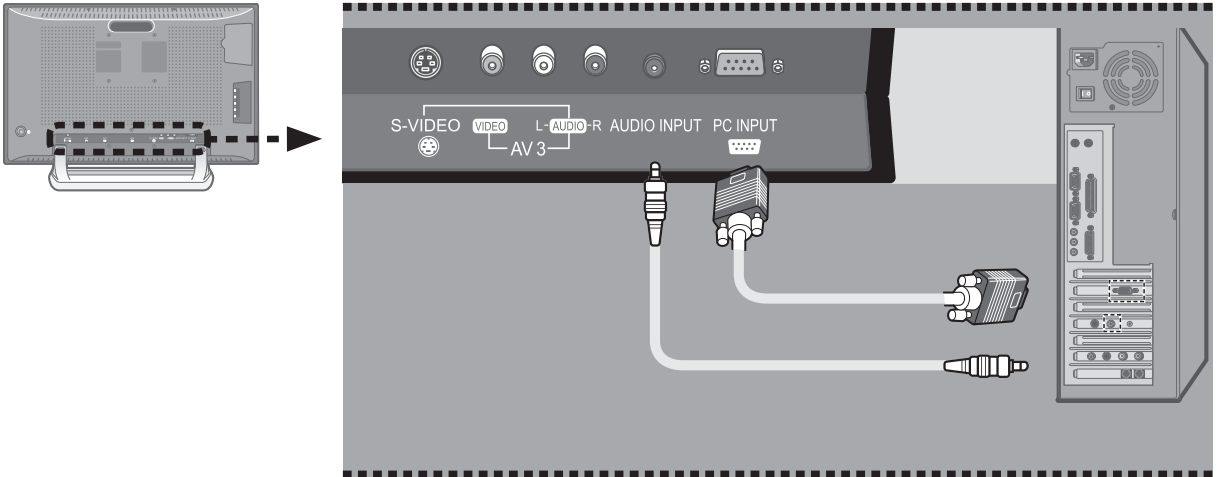
Connecting to the Monitor Output

1. If you have a second VCR (or DVD player) and wish to copy, connect the source VCR (or DVD player) to **AV1** and the target VCR (or DVD player) to **AV2** so that you can redirect the signal from **AV1** to **AV2**.

2. When you wish to record a programme, connect the receiver to **AV1** and the VCR (or DVD player) to **AV2** so that you can redirect the signal from **AV1** to **AV2**.

Note : **For more details about how to record, refer to your required equipment's instructions.**

Source Device

▲ DVD player

▲ VCR

Target Device

▲ DVD player

▲ VCR
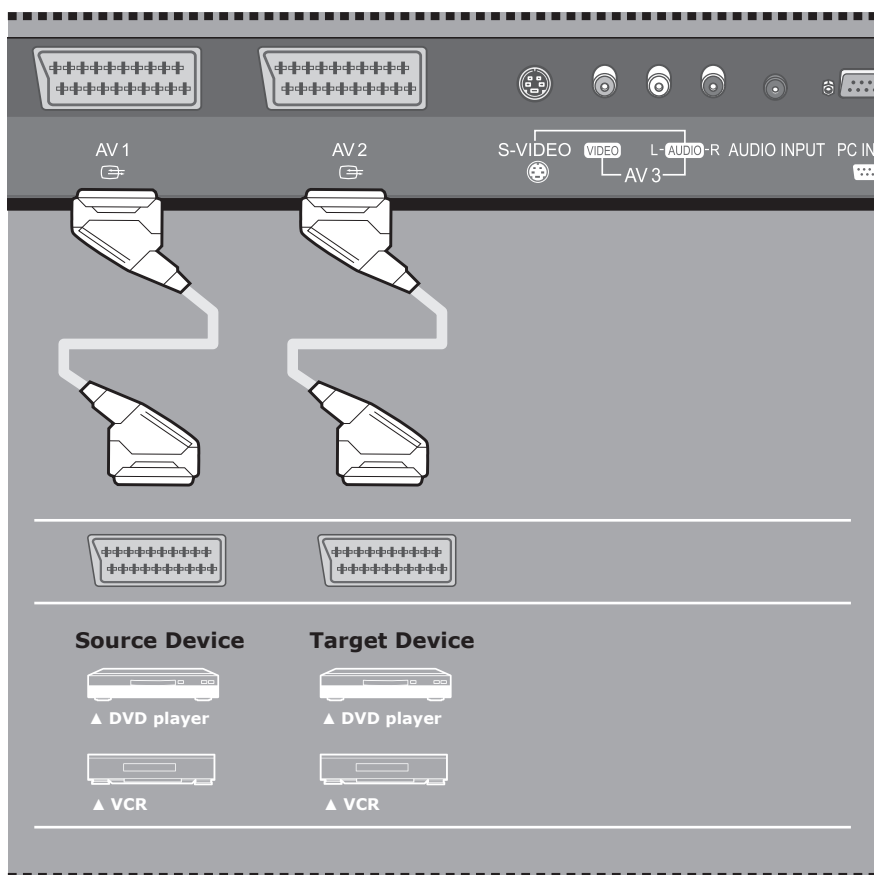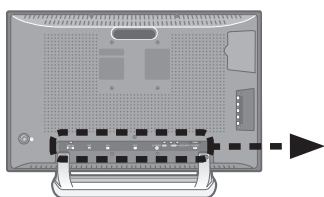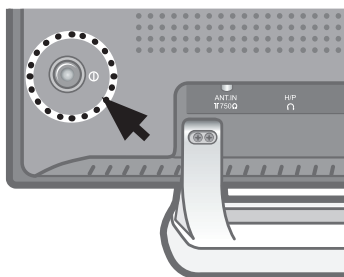
Switching On and Off

1. Connect the power cord of the TV to a wall outlet.

2. Press the ⓛ button on the rear of the TV.
   The standby indicator lights up.

3. Press the **STANDBY** button on the remote control (or ⏻ on the rear of the TV) to switch the TV on.

▲ Rear or TV

Note : **To place the TV in standby mode, press the STANDBY button again on the remote control (or ⏻ on the rear of the TV).**
It can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

4. To switch the TV off, press the ⓛ button on the rear of the TV.

Note : **Do not leave the TV in standby mode for too long (on holiday, for example). Turn the TV off by pressing the ⓛ button on the rear of the TV. It is best to disconnect the power cord.**

Viewing the Input Source

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

1. Press the **TV/AV** button.

2. Press the ▲ or ▼ button to select required input source as followings.

   TV – AV1 – AV2 – AV3 – S-Video – Component – PC

3. Press the **OK** button.
   It is switched to selected source.

Note : **You can select TV, AV1, or AV2 by simply pressing the TV, AV1, or AV2 button on the remote control.**
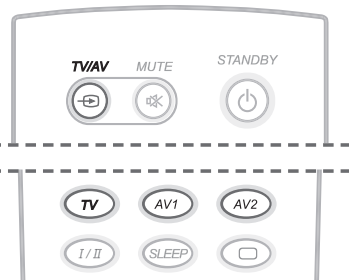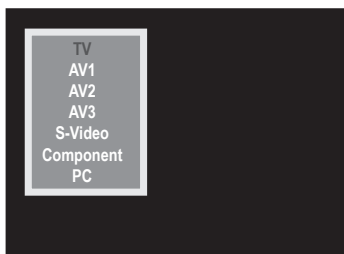
Changing Channels

Using the CH- / CH+ buttons.

The TV changes channels in sequence. You can select all channels that the TV has memorized.

Note : **You can not select channels that were either erased or not memorized.**

Using the numeric (0~9) buttons.

Press the numeric buttons to quickly tune to any channel.

Note : **You can select all channels that were either erased or not memorized. For example, to select channel 27, press the 2, then 7. The TV will change channels when you press the second number. To change to single-digit channels (0~9) faster, press the 0 before the single digit. (For channel 4, press the 0, then 4.)**

Displaying Information

You can display the channel information and setting status you selected by pressing the **RECALL** button. Press it again to exit.

```
P 2 ABC
NICAM Stereo

Picture          Dynamic
Sound            Custom
Sound Effect     Ess
Clock            12:00  AM
Sleep            117 Min
```
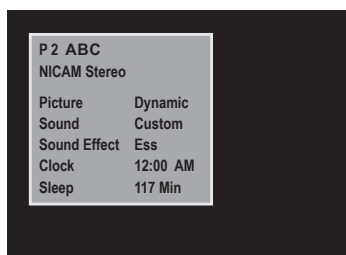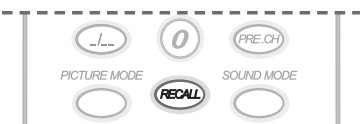
Choosing Your Language

When you start using your TV for the first time, you must select the language which will be used for displaying menus and indications.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button. The **Language** is selected.

3. Press the **OK** button again.

4. Press the ◄ or ► button to select required language.

```
Setup
    Language          English ►
    Time
    PC Setup


  Move    OK Enter    Back Return
```

Scanning Channels Automatically

Auto Search

System	PAL/SECAM ►
Search Start	

Move   *OK* Enter   *Back* Return

Auto Search

System	PAL/SECAM
Searching...	
Pr 1 :	
	37 %
Stop	

Move   *OK* Enter   *Back* Return

You can automatically scan channels for the frequency ranges available (availability depends on your country).

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button. The **Auto Search** is selected.

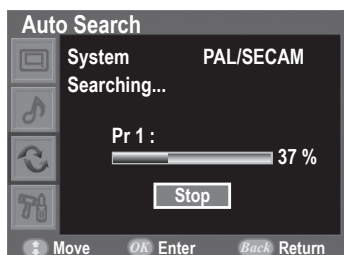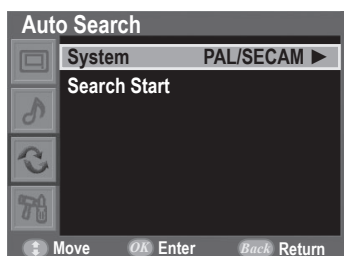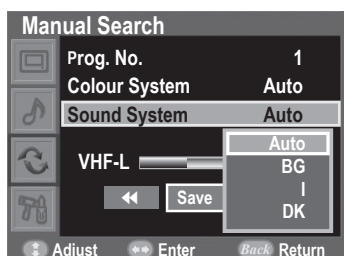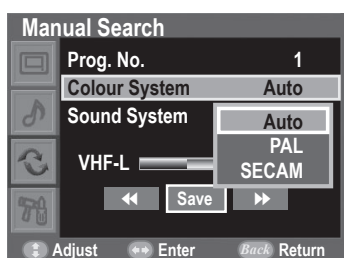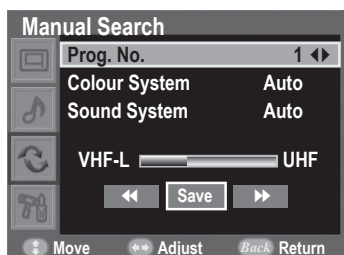**3.** Press the ► or **OK** button again. The **System** is selected.

4. Press the ▲ or ▼ button to select required system (**PAL/SECAM** or **PAL/SECAM-L**)**.**

5. Press the ▲ or ▼ button to move to **Search Start**, then press the **OK** button. The scan starts. The scanned channels are automatically stored in the order. If you want to stop, press the **BACK** button.

Scanning Channels Manually

Manual Search

Prog. No.	1 ◄►
Colour System	Auto
Sound System	Auto
VHF-L	UHF
◄◄ Save ►►	

Move   ◄► Adjust   *Back* Return

Manual Search

Prog. No.	1
Colour System	Auto
Sound System	Auto
	PAL
VHF-L	SECAM
◄◄ Save ►►	

Adjust   ◄► Enter   *Back* Return

Manual Search

Prog. No.	1
Colour System	Auto
Sound System	Auto
	Auto
	BG
VHF-L	I
◄◄ Save	DK

Adjust   ◄► Enter   *Back* Return

You can choose whether or not to store each of the channels found and the programme number of each stored channel which you wish to identify.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Manual Search**, then press the **OK** button. The **Prog. No.** is selected.

4. Press the ◄ or ► button to select the programme number to be assigned.

5. If you do not know the programme numbers, move to **Save** by pressing the ▲ or ▼ button and start the search by pressing the ◄ or ► button.

6. Press the ▲ or ▼ button to move to **Colour System**, then press the **OK** button.

7. Press the ▲ or ▼ button to select required broadcasting standard (**Auto**, **PAL**, or **SECAM**), then press the ◄ or ► button.

8. Press the ▲ or ▼ button to move to **Sound System**, then press the **OK** button.

9. Press the ▲ or ▼ button to select required sound standard (**Auto**, **BG**, **I**, or **DK**), then press the ◄ or ► button.

10. Press the ▲ or ▼ button to move to **Save**, then press the **OK** button to store your settings.
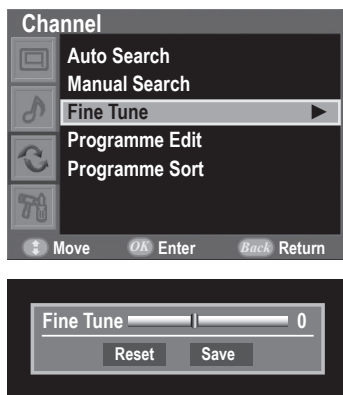
Fine Tuning Channel Reception

Channel

- Auto Search
- Manual Search
- **Fine Tune** ▶
- Programme Edit
- Programme Sort

Move   *OK* Enter   *Back* Return

Fine Tune ▭▬▭ 0
Reset   Save

If the signal is weak or distorted, you may have to fine tune the channel manually.

1. Press the **MENU** button.

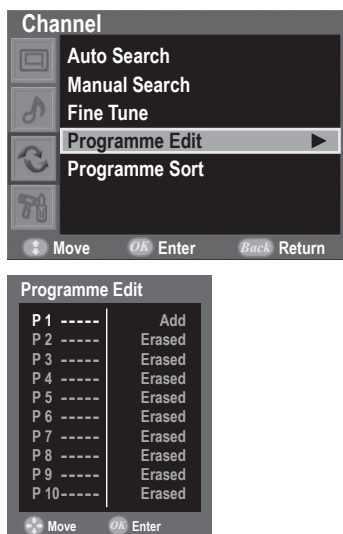**2.** Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Fine Tune**, then press the **OK** button.

4. Press the ▲ or ▼ button to obtain a good quality of the picture and sound until you reach the optimal setting.

5. Press the ▶ button to move to **Save**, then press the **OK** button.

6. If you reset the fine tuning to **0**, move to **Reset** by pressing the ▶ button and press the **OK** button.

Adding and Erasing Channels

Channel

- Auto Search
- Manual Search
- Fine Tune
- **Programme Edit** ▶
- Programme Sort

Move   *OK* Enter   *Back* Return

Programme Edit

P 1 -----	Add
P 2 -----	Erased
P 3 -----	Erased
P 4 -----	Erased
P 5 -----	Erased
P 6 -----	Erased
P 7 -----	Erased
P 8 -----	Erased
P 9 -----	Erased
P 10-----	Erased

Move   *OK* Enter

You can add channels that were not memorized or delete unwanted channels from memory.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Programme Edit**, then press the **OK** button.

4. Press the ▲ or ▼ button to select the channel to be added or erased, then press the ◄ or ▶ button.

5. Press the **OK** button repeatedly to select **Add** or **Erased**.

6. Press the **BACK** button to return to the previous menu.
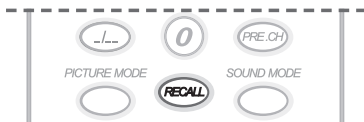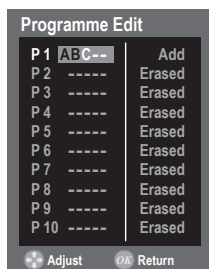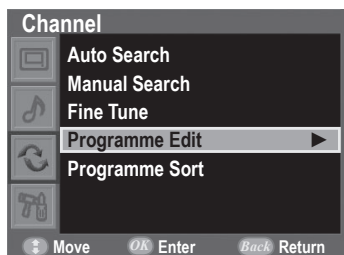
Assigning Names to Channels

You can assign an easy-to-remember name to any channel. When the **RECALL** button is pressed, the channel name will appear next to the channel number.

Channel
- Auto Search
- Manual Search
- Fine Tune
- **Programme Edit** ►
- Programme Sort

Move | OK Enter | Back Return

Programme Edit

P 1	ABC--	Add
P 2	-----	Erased
P 3	-----	Erased
P 4	-----	Erased
P 5	-----	Erased
P 6	-----	Erased
P 7	-----	Erased
P 8	-----	Erased
P 9	-----	Erased
P 10	-----	Erased

Adjust | OK Return

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Programme Edit**, then press the **OK** button.

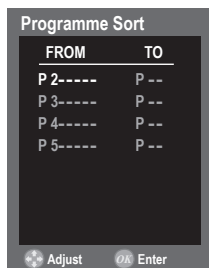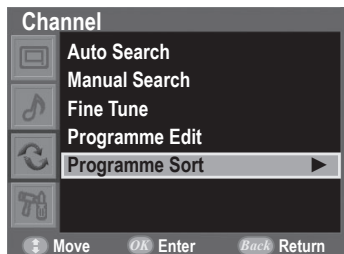4. Press the ▲ or ▼ button to select the channel to be assigned to a new name, then press the **OK** button.

5. Press the ▲ or ▼ button to select a letter (A~Z), a number (0~9) or a symbol (space, _, -, *). Move on to the previous or next letter by pressing the ◄ or ► button.

6. When you have finished, press the **BACK** button to return to the previous menu.

_-/--_ 0 PRE.CH
PICTURE MODE   SOUND MODE
RECALL

Sorting the Stored Channels

You can change the programme numbers of stored channels. This operation may be necessary after using the auto search.

Channel
- Auto Search
- Manual Search
- Fine Tune
- Programme Edit
- **Programme Sort** ►

Move | OK Enter | Back Return

Programme Sort

FROM	TO
P 2-----	P --
P 3-----	P --
P 4-----	P --
P 5-----	P --

Adjust | OK Enter

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Channel**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Programme Sort**, then press the **OK** button.

4. Press the ▲ or ▼ button to select the programme number that you with to change.

5. Press the ▲ or ▼ button to select the new programme number that you wish to identify, then press the **OK** button.

6. Press the **BACK** button to return to the previous menu.

Selecting the Picture Mode

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

Picture
Picture Mode	Standard	▶
Custom Picture		
Colour Tone	Normal	
Size	Normal	

Move   *OK* Enter   *Back* Return

Picture
Picture Mode	Standard
Custom Picture	**Custom**
Colour Tone	**Dynamic**
Size	**Standard**
	Movie
	Mild

Adjust   *←→* Enter   *Back* Return

1. Press the **MENU** b**u**tton.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button. The **Picture Mode** is selected.

3. Press the **OK** button again.

4. Press the ▲ or ▼ button to select required picture mode as followings, then press the ▲ or ▼ button.

    Custom – Dynamic – Standard – Movie – Mild

Note : You can select the modes by simply pressing the PICTURE MODE button on the remote control.

_/__   0   PRE.CH

PICTURE MODE   SOUND MODE

          RECALL
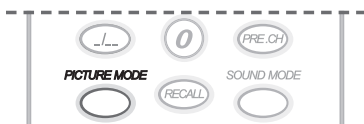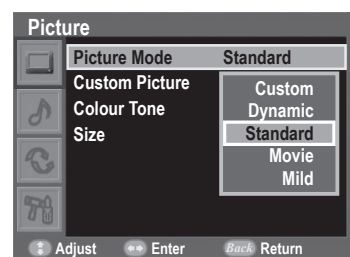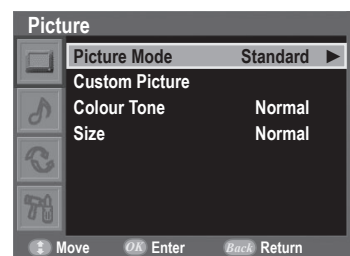
Customizing the Picture Settings

This TV has several setting options that allow you to control the picture quality.

Picture
Picture Mode	Standard	
Custom Picture		▶
Colour Tone	Normal	
Size	Normal	

Move   *OK* Enter   *Back* Return

Custom Picture
Contrast	▬▬▬▬	80
Brightness	▬▬	50
Colour	▬▬	50
Sharpness	▬▬	50
Tint	▬▬	50

Move   *OK* Enter   *Back* Return

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Custom Picture**, then press the **OK** button.

4. Press the ▲ or ▼ button to select required option as followings, then press the **OK** button.

    Contrast – Brightness – Colour – Sharpness – Tint (NTSC only)

The horizontal bar is displayed. Press the ◄ or ► button until you reach the optimal setting. To select other options, press the ▲ or ▼ button.

5. Press the **BACK** button to return to the previous menu.

Notes: ▪ **If you make any changes to the options, the picture mode is automatically switched to Custom.**

        ▪ **Tint is not available in the PAL signal standard.**

Contrast	▬▬▬▬	80

Customizing the Picture Settings (PC mode)

Picture

	Contrast	80
	Brightness	50
	Sharpness	50
	Colour Tone	Custom
	Colour Adjust	

Move   OK Enter   Back Return

Contrast ▭▭▭▭ 80

This TV has several setting options that allow you to control the picture quality.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button.

3. Press the ▲ or ▼ button to select required option as followings, then press the **OK** button.

   Contrast – Brightness – Sharpness
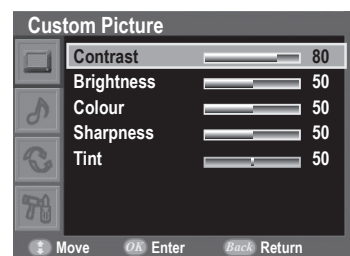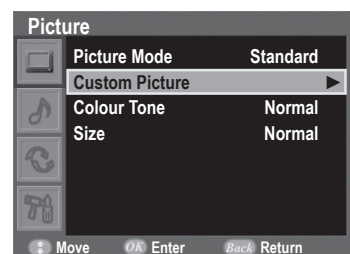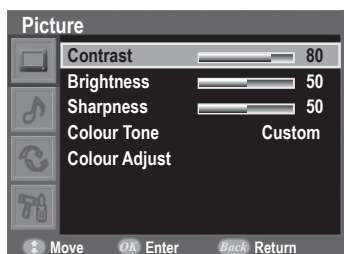
   The horizontal bar is displayed. Press the ◄ or ► button until you reach the optimal setting. To select other options, press the ▲ or ▼ button.

4. Press the **BACK** button to return to the previous menu.

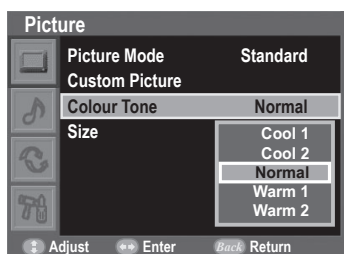## Changing the Colour Tone

Picture

	Picture Mode	Standard
	Custom Picture	
	Colour Tone	Normal
	Size	Cool 1
		Cool 2
		Normal
		Warm 1
		Warm 2

Adjust   Enter   Back Return

▼ PC mode

Picture

	Contrast	80
	Brightness	50
	Sharpness	50
	Colour Tone	Custom
	Colour Adjust	Custom
		Mode 1
		Mode 2
		Mode 3

Adjust   Enter   Back Return

You can change the colour tone which best corresponds to your viewing requirements.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Colour Tone**, then press the **OK** button.

4. Press the ▲ or ▼ button to select required colour tone as followings, then press the ◄ or ► button.

   Cool 1 – Cool 2 – Normal – Warm 1 – Warm 2

   Custom – Mode 1 – Mode 2 – Mode 3 : PC mode

—

Adjusting the Colour (PC mode)

Picture

▭	Contrast	▭▭▭ 80
	Brightness	▭▭ 50
♪	Sharpness	▭▭ 50
	Colour Tone	Custom
↻	**Colour Adjust**	▶
🛠		

Move   OK Enter   Back Return

Colour Adjust

▭	Red	▭▭ 50
	Green	▭▭ 50
♪	Blue	▭▭ 50
↻		
🛠		

Move   OK Enter   Back Return

| Red | ▭▭ | 50 |

You can adjust the RGB colour in PC mode.

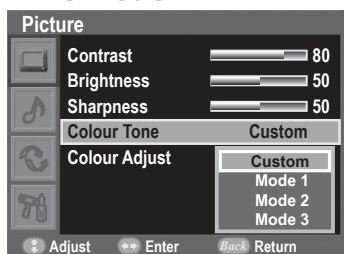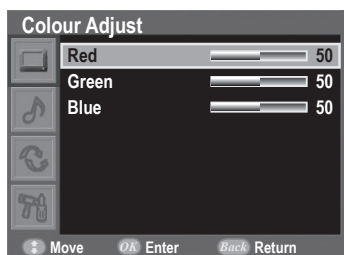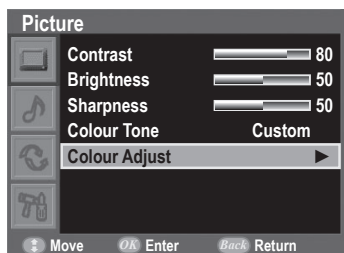**1.** Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Colour Adjust**, then press the **OK** button.

4. Press the ▲ or ▼ button to select required colour as followings, then press the **OK** button.

   Red – Green – Blue

   The horizontal bar is displayed. Press the ▲ or ▼ button until you reach the optimal setting. To select other options, press the ▲ or ▼ button.

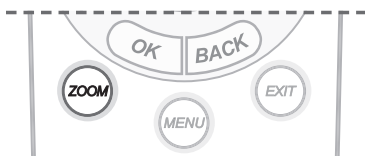**5.** Press the **BACK** button to return to the previous menu.

Changing the Picture Size

Picture

▭	Picture Mode	Standard
	Custom Picture	
♪	Colour Tone	Normal
	Size	**Normal**
↻		Normal
		Zoom
🛠		Wide

Adjust   Enter   Back Return

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

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Picture**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Size**, then press the **OK** button.

4. Press the ▲ or ▼ button to select required picture size as followings, then press the ▲ or ▼ button.

   Normal – Zoom – Wide

Note : **You can select the picture sizes by simply pressing the ZOOM button on the remote control.**
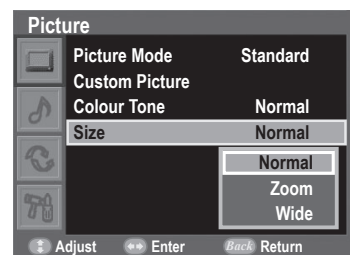
Selecting the Sound Mode

Sound

Sound Mode	Custom
Custom Sound	**Custom**
Sound Effect	Standard
AVL	Music
	Movie
	Speech

Adjust　Enter　Back Return

You can select the sound mode to be used when watching a given broadcast.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Sound**, then press the **OK** button. The **Sound Mode** is selected.

3. Press the **OK** button again.

4. Press the ▲ or ▼ button to select required sound mode as followings, then press the ▲ or ▼ button.

Custom – Standard – Music – Movie – Speech

_.__　0　PRE.CH
PICTURE MODE　RECALL　**SOUND MODE**

Note : **You can select the modes by simply pressing the SOUND MODE button on the remote control.**

Customizing the Sound Settings

▼ Stereo mode

Equalizer

R　100　500　1K　3K　10K
L

Move　Adjust　Back Return

▼ Mono mode

Custom Sound

Treble	50
Bass	50
Balance	50

Move　OK Enter　Back Return

This TV has several setting options that allow you to control the sound quality.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Sound**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Custom Sound**, then press the **OK** button.

4. Stereo mode :
Press the ◄ or ► button to select required option, then press the ▲ or ▼ button until you reach the optimal setting.

Mono mode :
Press the ▲ or ▼ button to select required option, then press the ◄ or ► button until you reach the optimal setting.

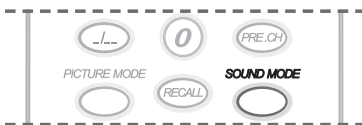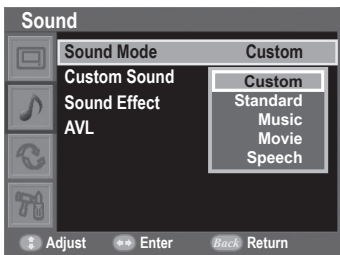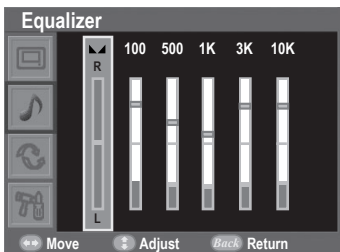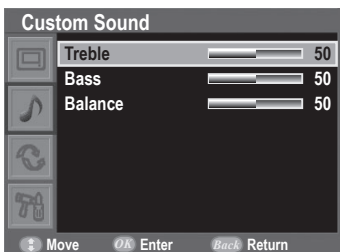**5.** Press the **BACK** button to return to the previous menu.

Changing the Sound Effect

The sound effect can be changed to suit your personal preferences.
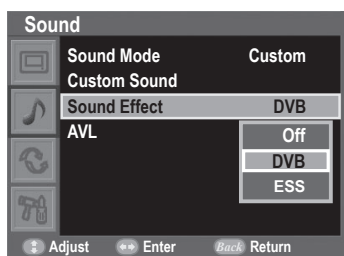
Sound

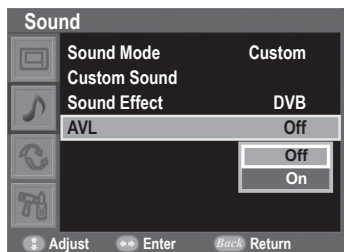|		
	Sound Mode	Custom
	Custom Sound	
	Sound Effect	DVB
	AVL	Off
		DVB
		ESS

Adjust　Enter　*Back* Return

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Sound**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Sound Effect**, then press the **OK** button.

4. Press the ▲ or ▼ button to select required sound effect as followings, then press the ◄ or ►button.

   Off – DVB (**D**ynamic **V**irtual **B**ass) **– ESS** (**E**xtended **S**patial **S**tereo)

Adjusting the Volume Automatically

Each broadcasting station has its own signal conditions, and so it is not easy 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.

Sound

	Sound Mode	Custom
	Custom Sound	
	Sound Effect	DVB
	AVL	Off
		Off
		On

Adjust　Enter　*Back* Return

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Sound**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **AVL** (**A**uto **V**olume **L**evel), then press the **OK** button.

4. Press the ▲ or ▼ button to select required option (**On** or **Off**), then press the ◄ or ► button.

Setting the Current Time

Clock

	Hour	Minute	
Time	11	00	AM

Move   Adjust   *Back* Return

_._.__   0   PRE.CH

PICTURE MODE   RECALL   SOUND MODE

You can set the current time so that the current time is displayed when pressing the **RECALL** button to viewing information.
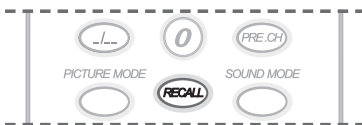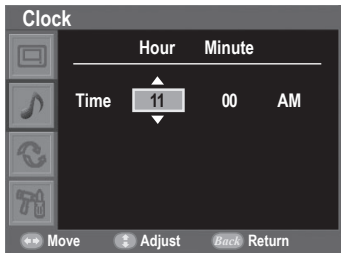
1. Press the **MENU** button.
2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button.
3. Press the ▲ or ▼ button to move to **Time**, then press the **OK** button. The **Clock** is selected.
4. Press the **OK** button again.
5. Press the ◄ or ► button to move to **Hour** and **Minute**, then set them by pressing the ▲ or ▼ button.
6. Press the **BACK** button to return to the previous menu.

Setting the TV On and Off Time

On Time

	Hour	Minute	
Time	7	00	AM
Channel	2		
Volume	20		
Setup	On		

Move   Adjust   *Back* Return

Off Time

	Hour	Minute	
Time	11	00	PM
Setup	On		

Move   Adjust   *Back* Return

You can set the on or off time so that the TV will switch on or off automatically at the time you select.
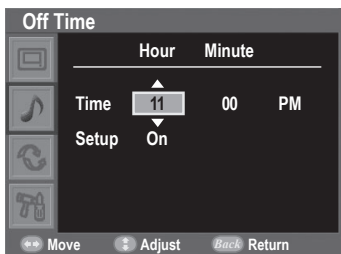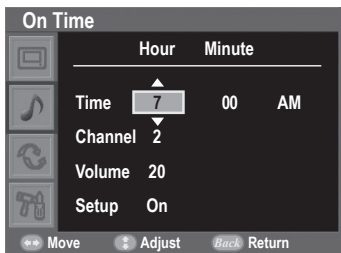
1. Press the **MENU** button.
2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button.
3. Press the ▲ or ▼ button to move to **Time**, then press the **OK** button.
4. To set the time at which you wish the TV to be switched on automatically, move to **On Time** by pressing the ▲ or ▼, then press the **OK** button.
5. Press the ◄ or ► button to move to **Hour**, **Minute**, **Channel**, and **Volume**, then set them by pressing the ▲ or ▼ button.
6. Press the ◄ or ► button to move to **Setup**, then select **On** by pressing the ▲ or ▼ button.
7. When you have finished, press the **BACK** button to return to the previous menu.
8. To set the time at which you wish the TV to be switched off automatically, move to **Off Time** by pressing the ▲ or ▼, then press the **OK** button.
9. Repeat steps **5** to **7** for off time setting.

Setting the Sleep Time

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

Time	
🖵	**Clock**	
	On Time	**On**
♪	**Off Time**	**On**
	Sleep Time	30 ◀▶
↻	**Power Save**	**Off**
🎛		
🔼 Move ◀▶ Adjust *Back* Return	

TV   AV1   AV2

I/II   SLEEP   ⬭

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Time**, then press the **OK** button.

4. Press the ▲ or ▼ button to move to **Sleep Time**, then press the **OK** button.

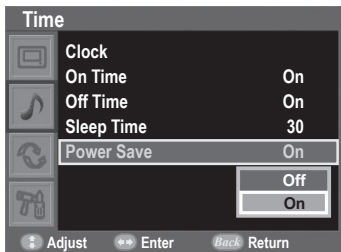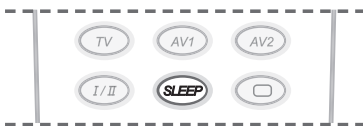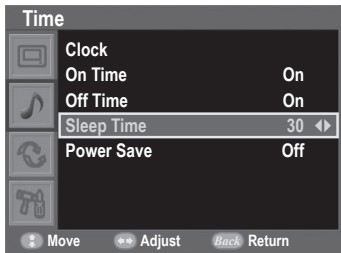**5.** Press the ◀ or ▶ button to select the preset time interval as followings, then press the **BACK** button.

　　Off - 30 (minute) **- 60 - 90 - 120 - 150 - 180**

Note : **You can select the sleep time by simply pressing the SLEEP button on the remote control.**

Switching the TV Off Automatically

Time	
🖵	**Clock**	
	On Time	**On**
♪	**Off Time**	**On**
	Sleep Time	**30**
↻	Power Save	On
		Off
🎛		**On**
🔼 Adjust ◀▶ Enter *Back* Return	

If no signal is received and no controls are operated for 1 hour, the TV will be automatically turned off.

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **Time**, then press the **OK** button.

4. Press the ▲ or ▼ button to move to **Power Save**, then press the **OK** button.

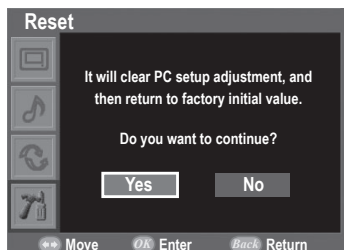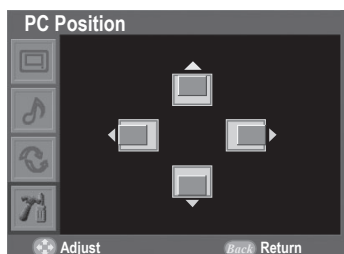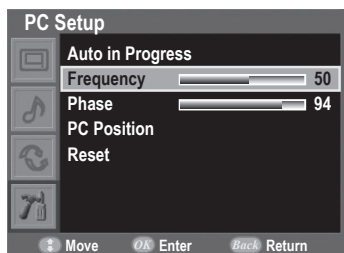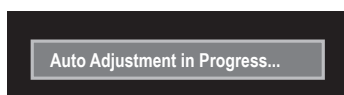**5.** Press the ▲ or ▼ button to select required option (**On** or **Off**), then press the ◀ or ▶ button.

Note : **It is available in PC input mode.**

PC Setup

Auto in Progress ►
Frequency   50
Phase   94
PC Position
Reset

Move   OK Enter   Back Return

Auto Adjustment in Progress...

PC Setup

Auto in Progress
Frequency   50
Phase   94
PC Position
Reset

Move   OK Enter   Back Return

Frequency   50

PC Position

Adjust   Back Return

Reset

It will clear PC setup adjustment, and
then return to factory initial value.

Do you want to continue?

Yes   No

Move   OK Enter   Back Return

Adjusting the Status of PC Screen Automatically

1. Press the **MENU** button.

2. Press the ▲ or ▼ button to move to **Setup**, then press the **OK** button.

3. Press the ▲ or ▼ button to move to **PC Setup**, then press the **OK** button.
The **Auto in Progress** is selected.

4. Press the **OK** button again.
The message **Auto Adjustment in Progress...** is displayed. The picture quality and position are automatically adjusted, and the picture returns to original view about a few seconds later.
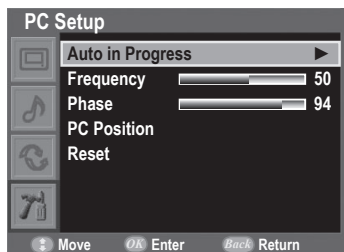
Tuning the PC Screen for Improved Quality

5. Press the ▲ or ▼ button to select **Frequency** or **Phase**, then press the **OK** button. Press the ◄ or ► button until you reach the optimal setting, then press the **BACK** button.

Selecting the Position of PC Screen

6. Press the ▲ or ▼ button to move to **PC Position**, then press the **OK** button.
Select required position by pressing the ▲/▼/◄/▲ buttons, then press the **BACK** button.

Resetting the PC Screen Settings

7. Press the ▲ or ▼ button to move to **Reset**, then press the **OK** button.
The message for initializing is displayed.

8. Press the ◄ or ► button to select **Yes**, then press the **OK** button.
All settings of PC screen are replaced with the factory initial values.

Most TV stations provide written information services via teletext. The index page of the teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.

Note :   **For teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.**

Using the Various Teletext Buttons
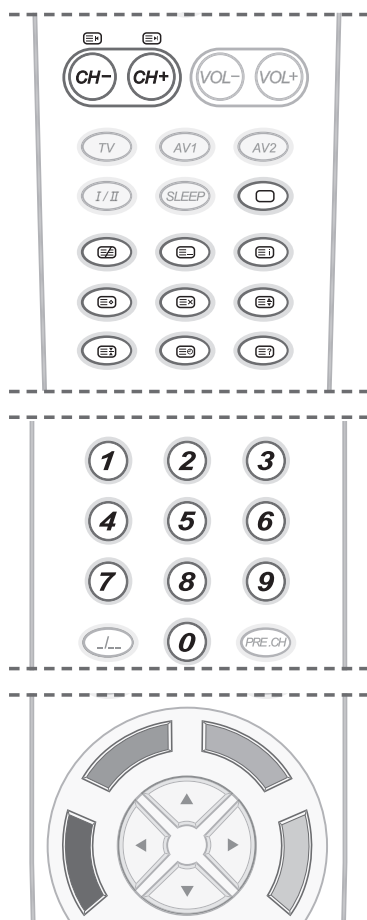
▢ (teletext off)
Press to deactivate teletext service.

▤ (teletext on/mix)
Press to activate teletext mode after selecting the channel providing the teletext service.
Press it again to overlap the teletext with the current broadcasting screen.

▤... (mode)
Press to select the teletext mode (LIST/FLOF).
If you press it once again, it switches into the List save mode. In the List save mode, you can save teletext page into list using the ▤◇ **(store)** button.

▤ⅰ (index)
Press to display the index (contents) page at any time while you are viewing teletext.

▤◇ (store)
Press to store the teletext pages.

▤× (cancel)
Press to view the broadcast when searching for a page.

▤⇕ (size)
Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.

▤⊒ (hold)
Press to hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again.

▤⊘ (sub-page)
Press to display the available sub-page.

▤? (reveal)
Press to display the hidden text (answers to quiz games, for example).
To display normal screen, press it again.

▤◁ (page down) / ▤▷ (page up)
Press to display the previous or next teletext page.

0~9 (numeric buttons)
Press to enter the three-digit page number given in the content directly.

Coloured buttons (red/green/yellow/blue)
If the FASTEXT system is used by a broadcasting company, the different topics covered on a teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.
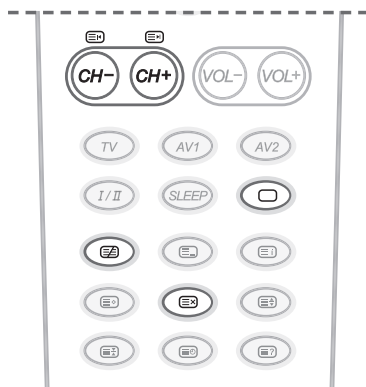
Displaying the Teletext Information

1. Using the **CH-** or **CH+** button, select the channel providing the teletext service.

2. Press the ▤ **(teletext on/mix)** button to activate the teletext mode. The contents page is displayed.

3. To display the actual broadcast simultaneously with the teletext page, press the ▤ **(teletext on/mix)** button again.

4. To return the normal broadcasting mode, press the ▤ **(cancel)** button.

5. Press the ▭ **(teletext off)** button to exit from the teletext display mode.
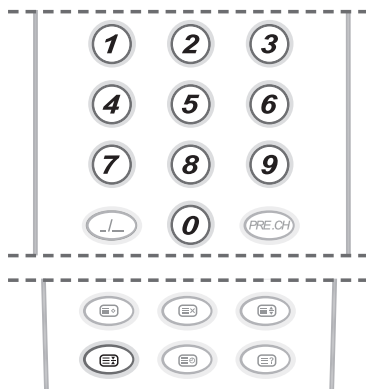

Note : **If any broken character appears while teletext is being viewed, make sure that the teletext language is identical with the language in the Setup menu. If both languages are different, select the same language with the teletext language in the Setup menu.**

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.
    The current page counter is incremented and the page is displayed.

2. If the selected page is linked with several sub-pages, the sub-pages are displayed in sequence.
    To freeze the display on a given page, press the ▤ **(hold)** button. Press the ▤ **(hold)** button again to resume.
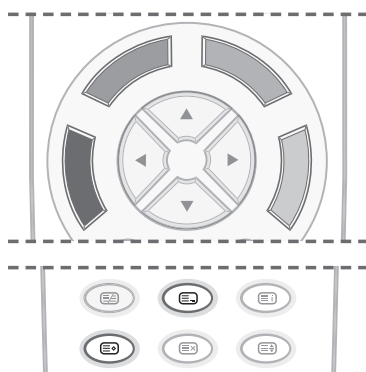
Storing the Current Teletext Page into List

1. Press the ▤ **(mode)** button to display the listed pages.
    The list appears at the bottom of the page.

2. Press the ▤ **(mode)** button again to switch into the list save mode. The list is displayed with the coloured blocks.

3. Press the coloured button corresponding with the block to change into the current page.

4. To save the current teletext page completely, Press the ▤ **(store)** button.

Picture

Picture Mode
- Custom
- Dynamic
- Standard
- Movie
- Mild

Custom Picture
- Contrast
- Brightness
- Colour
- Sharpness
- Tint

Colour Tone
- Cool 1
- Cool 2
- Normal
- Warm 1
- Warm 2

Size
- Normal
- Zoom
- Wide

PC mode ▶ **Picture**

Contrast

Brightness

Sharpness

Colour Tone
- Custom
- Mode 1
- Mode 2
- Mode 3

Colour Adjust
- Red
- Green
- Blue

Sound

Sound Mode
- Custom
- Standard
- Music
- Movie
- Speech

Mono ▶ **Custom Sound**
- Treble
- Bass
- Balance

Stereo ▶ **Custom Sound**
- Equalizer

Sound Effect
- Off
- DVB
- ESS

AVL
- On
- Off

Channel

Auto Search
- System
  - PAL/SECAM-L
  - PAL/SECAM
- Search Start

Manual Search
- Prog.No.
- Colour System
  - Auto
  - PAL
  - SECAM
- Sound System
  - Auto
  - BG
  - I
  - DK

Fine Tune

Programme Edit

Programme Sort

Setup

Language
- English
- Deutsch
- Français
- Italiano
- Español

Time
- Clock
- On Time
- Off Time
- Sleep Time
- Power Save

PC Setup
- Auto in Progress
- Frequency
- Phase
- PC Position
- Reset

Before contacting after-sales service, perform the following simple solutions. If you cannot solve the problem using the following instructions, contact your local dealer.

No picture or sound

- Check if the power cord is connected correctly.
- Check that you have pressed the ① and the **STANDBY** button on the remote control (or the rear of the TV).
- Select an input source channel appropriate for that particular source.
- Check the picture contrast and brightness settings.
- Check the volume.

Normal picture but no sound

- Check the volume.
- Check whether the **MUTE** button on the remote control has been pressed.

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 TV, then move it further away.
- Plug the TV into a different wall outlet.

Blurred or snowy picture, distorted sound

- Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.

Remote control malfunctions

- Press the **TV/AV** button to select the TV or an external device.
- Replace the batteries in the remote control.
- Install batteries ensuring that the <+> and <-> ends of the batteries are inserted correctly.
- Check the angle and distance of the remote control to the TV. Make sure there are no obstacles between the remote control and the TV.
- Check that the correct function button has been pressed.
- Change the location of light sources or the direction of the TV to avoid glare.

Specifications

Specifications

Item		Specification
LCD Panel	**+Type**	- Colour active matrix TFT-LCD
	+Display Area (active area)	- 20.1" (408(H) x 306(V)mm)
	+Display Colour	- 16.7 M
	+Pixel Pitch	- 0.2125(H) x 0.6375(V)
	+Max. Resolution	- 640 x 480 pixels
	+Interface	- TTL Interface
	+Viewing Angle(CR≥10)	- 160degrees Horizontal / 140degrees Vertical
	+Contrast Ratio	- 500 : 1 (Type)
	+Brightness	- 450 cd/m2 (Type)
	+Horizontal Frequency	- 48.5 kHz
	+Vertical Frequency	- 60 Hz
	+Dimension	- 448.60(H) x 339.6(V) x 25.0(D) mm (Type)
PC Monitor	**+Sync**	- Separate
	+Horizontal Frequency	- 31~61 kHz
	+Vertical Frequency	- 60 Hz
	+Max. Resolution	- 1024 x 768 pixels @60Hz
Input/ Output	**+Video Input**	- Analog Tuner(1), SCART(2), S-Video, RCA, RGB, Component
	+Audio Input	- SCART(2), RCA(R/L), PC Audio, Component(R/L)
	+Audio Output	- Speaker, Headphone
TV Signal	**+Area**	- EU
	+Antenna Input	- IEC 169-2 Female
	+Tuning System	- Programmable Frequency Synthesizer
	+Colour System	- PAL, SECAM (NTSC3.58 : AV mode)
	+Sound System	- B/G, I, D/K
	+Stereo System	- NICAM, A2
	+VHF Low	- 48.25 ~ 140.25 MHz (E2 ~ S6)
	+VHF High	- 147.25 ~ 423.25 MHz (S7 ~ S36)
	+UHF	- 431.25 ~ 855.25 MHz (S37 ~ E69)
	+Teletext	- Yes
Regulation	**+Safety**	- CE
	+EMI	- CE
Others	**+Power**	- 55 Watt (Max)
	+Speaker Output	- 3W x 2EA
	+Plug & Play Level	- DDC 1/2 B
	+Weight	- NET : 22.5 kg / Gross : 27.5kg
	+Power Supply	- 90~260V

You can get information such as a troubleshooting guide, software upgrades and product support guide from the web sites and call center (Hotline). Please try to contact to your local dealers first when you have any problem.

Web site and e-mail

Web site

Global : http://www.humaxdigital.com

Germany : http://www.humax-digital.de

UK : http://www.humaxdigital.co.uk

HCSA (**H**UMAX **C**ustomer **S**ervice **A**rea)

(Software Download, Information and Technical Q&A)

English : http://www.humaxdigital.com/hcsa

Deutsch : http://www.humaxdigital.com/deutsch/hcsa

Technical Q&A

Europe & North Africa : tech-info@humax-digital.co.uk

Germany : techinfo@humax-digital.de

Call Center

Technical Support

To receive hardware repair service, contact your retail shop first. For more information, contact the call center.

Technical hotlines (Germany)

Tel.	Hotline number for all our products except the BTCI ▪ Germany : 01805-778870 (€ 0,12/Minute) ▪ Other Countries : + 49 1805-778870 (€ 0,12/Minute + International Call Charge)
Opening Time	Local Time in Germany (GMT+1) 8:00 - 20:00 (Monday - Friday) / 8:00 - 18:00 (Saturday)
Support Language	Deutsch/English

Technical hotlines for BTCI (Premiere Model)

Tel.	Hotline number for BTCI customer ▪ Germany : 01805-778900 (€ 0,12/Minute) ▪ Austria : 0820-400675 (€ 0,12/Minute)

HUMAX

LCD-TV
Analogue