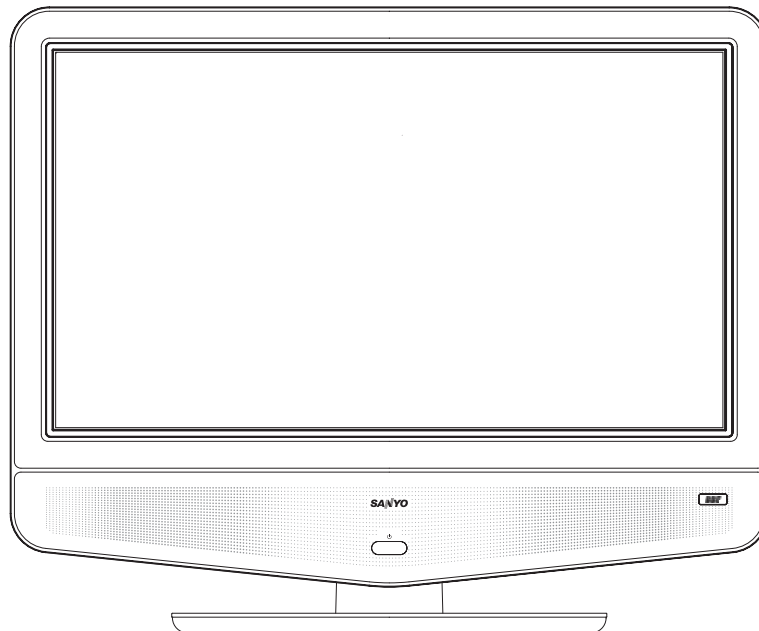


INSTRUCTION MANUAL

Colour Television

CE17LC4-B
CE17LC4BK-B
CE17LC4W-B
CE23LC4-B
CE23LC4BK-B
CE23LC4W-B



Specification

Common specification

Power source	AC 110~120V, 220~240V 50Hz
Television system	System I
Colour system	PAL (PAL/NTSC3.58 in AV mode)
Channel coverage	UHF: 21-69,
Aerial input impedance	75 ohm

AV terminal

AV1: CENELEC Standard
Input: Composite video, RGB and audio-L/R
Output: TV-output with composite video and audio-L/R
AV2: CENELEC Standard
Input: Composite video, RGB, S-VHS and audio-L/R
Output: Monitor-output with composite video and audio-L/R

Side AV terminal

AV3: RCA jacks
 Input: Composite video and audio-L/R

Headphone socket Mini Jack

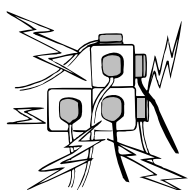
	CE17LC4-B CE17LC4BK-B CE17LC4W-B	CE23LC4-B CE23LC4BK-B CE23LC4W-B
Sound output (Continuous)	2 x 2W	2 x 5W
Contrast Ratio	600:1	800:1
Screen(inches) (viewing measured diagonally)	17	23
Display Resolution	1280 x 768 (WXGA)	1280 X 720 (WXGA)
Viewing angles	H:176°, V:176°	H:176°, V:176°
Dimensions (WxHxDmm) (including stand)	452 x 409 x 237	580 x 480 x 257
Weight (kg)	6.5	8.4

Please read this Instruction book before using your television.
We wish you many hours of pleasure from your new television.

SAFETY PRECAUTIONS / SERVICING

CAUTION: Please read and retain for your safety. This unit has been engineered and manufactured to assure your personal safety, but improper use can result in potential electric shock or fire hazards. In order not to defeat the safeguards incorporated in this receiver observe the following basic rules for its installation, use and servicing.

Installation



Do not allow anything to rest on the power cord. **Do not** locate this television receiver where the cord will be damaged by people walking on it.

Do not overload wall outlets and extension cords as this can result in fire or electric shock.

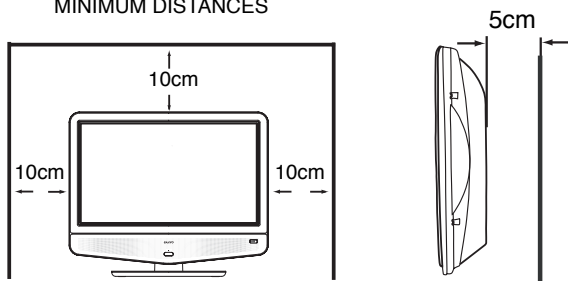
Slots and openings in the cabinet and in the back or bottom are provided for ventilation to ensure reliable operation and to protect it from overheating. These openings **must not** be blocked or covered. The opening **should never** be covered with a cloth or other material, and the bottom openings **should not** be blocked by placing the television receiver on a bed, sofa, rug, or other similar surface.

Do not place this television near any heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).

Do not place the television in direct sunlight.

Do not place your television receiver on an unstable stand, shelf or table. Serious injury to an individual, and damage to the television may result if it should fall. Your sales person can recommend approved stands or shelf and wall mounting instructions. A special wall mounting kit is available for this model.

MINIMUM DISTANCES



If the television is built into a unit, or enclosed, the minimum distances for ventilation must be maintained. Heat build up can reduce the life of your television, and can be dangerous.

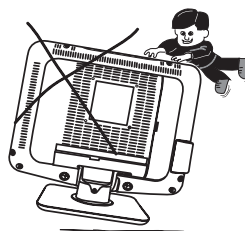
Use

This television receiver should be operated only from the type of power source indicated on the television or as indicated in the Operating Instructions. If you are not sure of the type of power supply in your home, consult your sales person or your local power company.

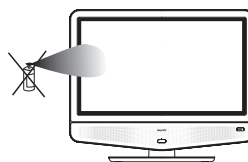
Never add accessories that have not been specifically designed for this television.

Do not drop or push objects into the television cabinet slots or openings. Some internal parts carry hazardous voltages and contact may result in an electric shock hazard. **Never** spill liquids of any kind on the television receiver. **Do not** place items such as vases containing liquid on top of the TV set.

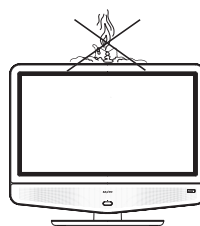
Do not expose the television receiver to rain or use near water. For example, near a bathtub, kitchen sink, in a wet basement, etc. **Do not** use immediately after moving the television from a low temperature to a high temperature environment, as this causes condensation, which may result in fire, electric shock, or other hazards. Before cleaning, unplug the television receiver from the wall socket.



Never stand on, lean on or push the television or its stand. **Never** allow children to play with the television or its stand. Serious injury may result if it should fall.



Do not apply liquid cleaners or aerosol cleaners directly onto the television receiver. Use a soft cloth for cleaning.



Do not place candles or hot objects upon the TV, next to it or behind it. Open flames must never be used near the TV set.

Important recycling information.



Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of this equipment at your local community waste collection/recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help us to conserve the environment we live in!

Note: This symbol mark and recycle system are applied only to EU countries are not applied to other countries of the world.

SAFETY PRECAUTIONS

Important:

This equipment is fitted with an approved non rewirable UK mains plug. To change a fuse in this type of plug proceed as follows:

1. Remove the fuse cover and fuse.
2. Fit a new fuse which should be a BS1362 3Amp A.S.T.A. or BSI approved type.
3. Ensure that the fuse cover is correctly refitted.

If the fuse cover is lost or damaged the plug must **NOT** be used but replaced with a serviceable plug.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place. If the mains plug contains a fuse, this should have a rating of 3 Amp, ensure the fuse cover is correctly fitted. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 Amp.

Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13Amp socket elsewhere.

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

Blue -----> Neutral
Brown ----> Live

1. The Blue wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
2. The Brown wire must be connected to the terminal with the letter "L" or coloured RED.
3. **Do not** connect either wire to the earth terminal in the symbol or coloured GREEN or GREEN and YELLOW.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the wires.

THIS UNIT IS NOT DISCONNECTED FROM THE MAINS UNLESS THE MAINS LEAD IS UNPLUGGED.

Care of your product

● Cleaning your LCD screen.

Your LCD screen is coated in a non reflective film. Damage to this film will result in possible discolouration. Any scratches will not be repairable.

Clean your screen with a soft cloth, only rub lightly, do not use detergents.

Do not stick anything to the screen, use solvent or alcohol based cleaners, hit the screen with a hard object or rub the surface hard.

● Placement of your LCD TV.

Table top stand

This LCD TV is supplied with a table top stand fitted. The stand can rotate 360° to the left or right. To rotate your TV hold the base and gently push the edge of the TV.

Wall mounting bracket

An optional wall bracket is available for your LCD TV. Before you consider wall mounting this TV, check that you have an appropriate wall made from solid materials such as concrete or bricks. You will have to remove the table top stand to use this.

Servicing

Your television is fully transistorised and does not contain any user serviceable components.

You must not remove the rear cover of the TV by yourself. The apparatus is working with high voltages and could damage objects or even endanger people. Leave all required repair and service jobs to an authorised service technician. He will exclusively use such spare parts that are complying with the same safety standards as applicable to the original parts. The use of original spare parts can prevent fire, shock and other hazards.

Unplug the television receiver from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- If the power cord or plug is damaged.
- If liquid has been spilt into the television receiver.
- If television receiver has been exposed to rain or water.
- If the television receiver has been dropped or the cabinet has been damaged.
- If the television receiver exhibits a distinct change in performance.
- If the television receiver does not operate normally by following the operating instructions.

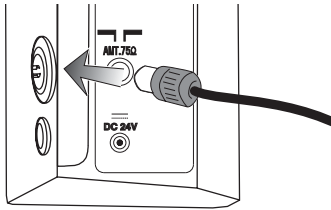


Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage. This will often require extensive work by a qualified technician to restore the television receiver to normal operation.

INSTALLATION

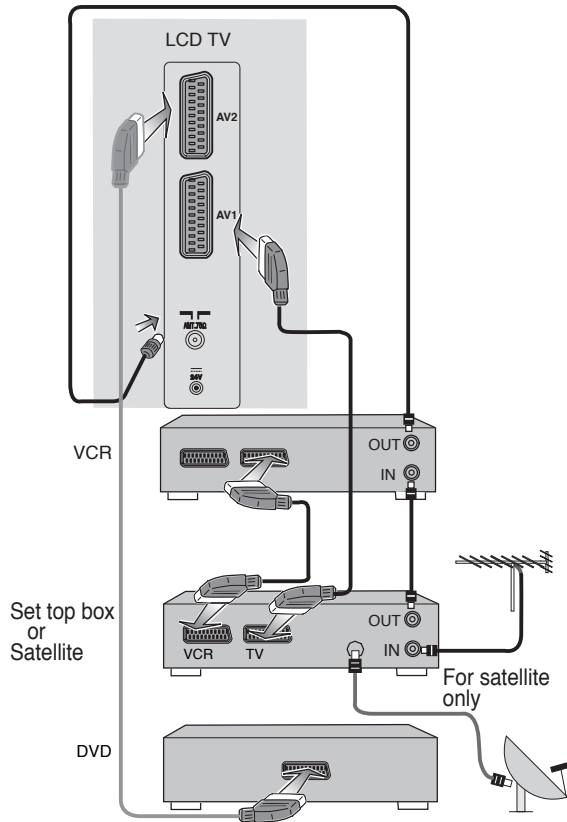
Step : 1 Connections (Essential)

1. Connect your aerial cable socket to the back of the TV set. Fit the aerial cable as shown or as shown below when AV equipment is connected.

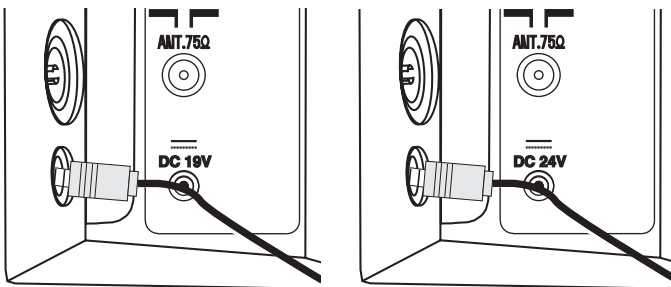


● Connecting DVD / VCR player/ Satellite receiver or Set top box.

We recommend that you connect all other equipment before Plug and Play. The following examples are our recommended standard connection. For further information please consult your local dealer.



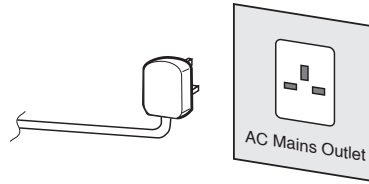
2. Connect the DC power supply adaptor to the LCD TV set. (supplied with the set).



CE17LC4-B
CE17LC4BK-B
CE17LC4W-B

CE23LC4-B
CE23LC4BK-B
CE23LC4W-B

3. Connect the power cord of the LCD TV adaptor to a wall outlet.



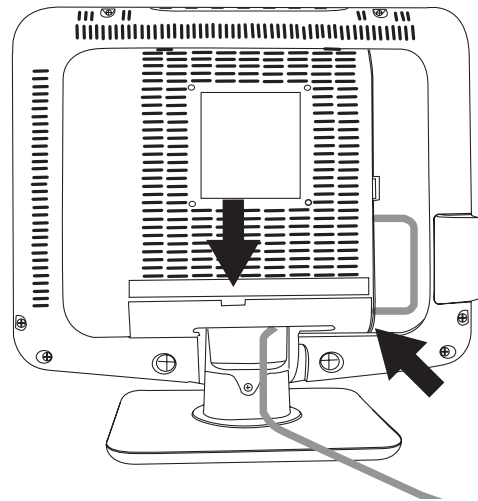
The TV set adaptor is prepared for a mains voltage AC220~240V, 50Hz. To completely switch off the mains, or when the TV set is not to be used for an extended period of time, it is advisable to disconnect the adaptor power cord from the power outlet.

For all aerial problems please consult your local dealer.



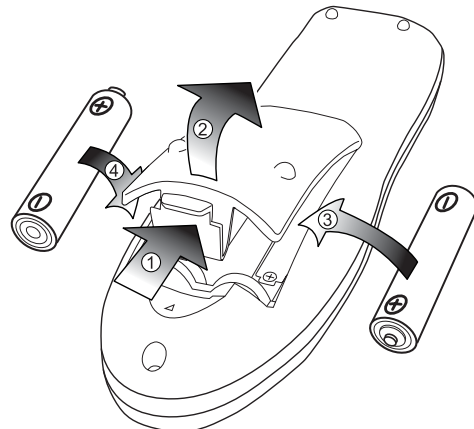
WARNING! High voltages are used in the operation of this set. Refer service to qualified service personnel.

Push the catch downwards to open the door. Place leads behind the door to keep them tidy, and push the door closed.



Step : 2 Remote control battery installation

Install two "AA" 1.5 volt batteries so that the "+" and "-" marks on the batteries match the "+" and "-" marks inside the unit into the remote control handset.

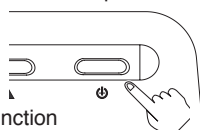


INSTALLATION

Step : 3 Switching on / Plug & Play

The LCD TV will have a red Standby light to show there is power.

Press the standby button on the top of the LCD to start Plug and Play.



This TV set provides a self - automatic tuning function called Plug and Play which automatically searches and stores all of the available TV stations in your reception area.

Auto sort

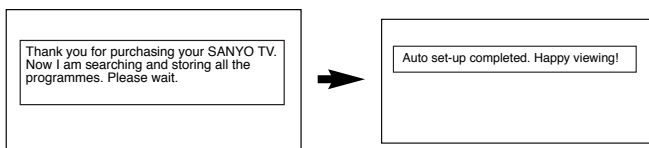
OSD language	English
Country	UK
Start	OK?

Press the **P▲** or **P▼** to highlight **OSD language**. Select your language by pressing the **▲-** or **▲+** button (English).

Press **P▼** to select **Country** identification and by pressing the **▲-** or **▲+** buttons select **UK** or **IRE** (for Ireland).

When you are happy with your selection press **P▼** to select **Start**. Press the **F/OK** button to select **OK**. This will automatically start Plug and Play.

A welcome message will appear while Plug and Play is in operation and then after all channels have been tuned a second screen appears to tell you the operation has been completed.



To remove the completed message press the **MENU** button.

Now the installation is complete!

After Plug & Play the TV set automatically allocates the following major stations in the UK.

- Position 1 : BBC1
- Position 2 : BBC2
- Position 3 : ITV
- Position 4 : CH4 or S4C
- Position 5 : CH5
- Position 6 : SKY, BBC-World or BBC-Prime

After Plug & Play the TV set automatically allocates the following major stations in Ireland.

- Position 1 : RTE1
- Position 2 : RTE2
- Position 3 : TV3
- Position 4 : TG4
- Position 5 : BBC1
- Position 6 : BBC2
- Position 7 : ITV
- Position 8 : CH4

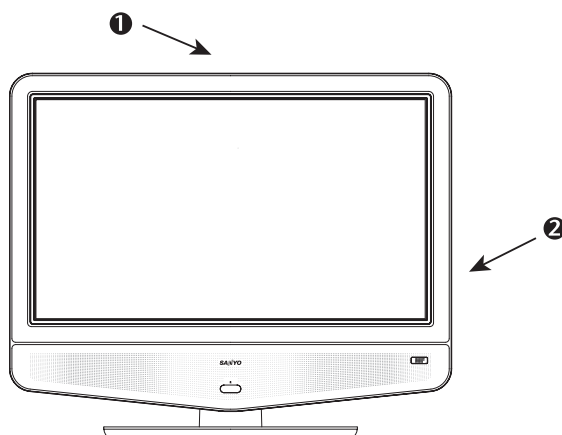
If any other channels are available in your reception area, the remaining stations will be stored from programme position 7 for UK and 9 for IRELAND in sequence as found.

If you move to another city or cable is installed, please follow the description "**Preset**". (on page 8).

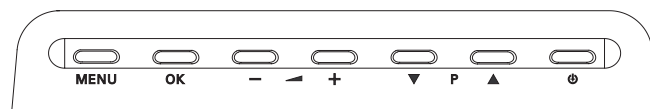
This procedure should only appear the first time you switch on your LCD.

Refer to helpful hints on page 12 if you have a problem with the Plug & Play.

Terminals



1. On the top of LCD TV



Press the **P▲** or **P▼** button to increase or decrease the programme position.

Press the **▲+** or **▲-** button to increase or decrease the sound volume.

Press the **⏻** button to switch the set into and out of Standby.

Press the **MENU** button to enter and exit sub menus.

Press the **OK** button to save a setting in a menu.

2. Left side terminals

To select the AV3 mode press the **TV/□** button repeatedly.

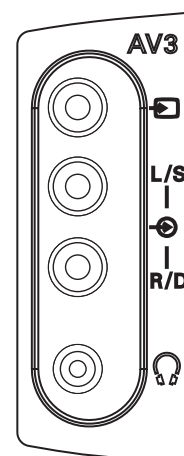
When the headphones are inserted the sound from the TV speakers is muted.

3.2 mm Mini Headphone din.

AV3 Video in.

AV3 Left Audio in.

AV3 Right Audio in.



REMOTE CONTROL

TV/AV switch

To switch from TV, AV1, AV2 or AV3 mode press repeatedly.

Screen mode selector

To select the screen mode, Auto, Natural, Full Cinema 1, Cinema 2, Subtitle or Normal. Refer to page 11.

Stereo/Bilingual selector

To switch the sound mode as follows; **STEREO(NICAM)** or **MONO** in the stereo programmes. **A** or **B** in the bilingual programmes. If the **STEREO** sound reception is poor in quality, you can switch to **MONO** sound reception by pressing **A•B** button.

Direct programme selector

For direct access to programmes using **(0-9) numeric buttons** in analogue and digital. For selection of programme position 10 - 99, for example 23, first press **-/-** button and press **2** and **3** numeric buttons.

MENU

To enter and exit sub menus. Also see page 7.

Volume up/down

To adjust the sound level.

Picture mode selection

Press the **→←** button repeatedly to select the following picture modes.

Personal - Personal preference mode.

Dynamic - Suitable for brightly lit rooms.

Standard - Normal viewing mode.

Eco - Suitable for dimly lit rooms and gives a cinema - like effect.

Surround mode selector

To select the surround mode, **ACTIVE**, or **OFF**.

F/OK

To save the setting in the menu.

Standby

To switch the TV on and off. Also see page 10.

Programme information call

To display the programme information. You can also select colour systems in AV mode as follows **AUTO -> PAL -> NTSC->**

CS button

Press button to scan through all available channels and back to the original channel.

Programme swap

To switch between current and previous programme position watched.

Programme up and down

To select the next programme number or previous programme number.

Sound mute

To switch the sound from the speakers. The sound changes as follows;
Normal volume -> Mute

Bass selection

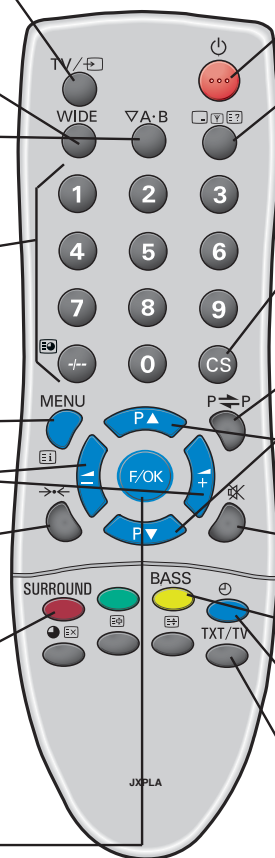
To get an emphasised bass sound **ON** or **OFF**.

Time display

In the TV mode, if the teletext is available the teletext clock will be displayed on the screen. To remove the clock press the button again.

Teletext/TV selector

To access this feature press the **TXT/TV** button the picture changes from **TV - TXT - MIX** and back to **TV**.








MENU OPERATION

Many of your TV's functions are controlled through the menu function.

Main menu


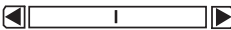

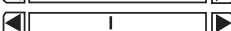
Sound	—	Volume	
		Balance	
		Bass	
		Treble	
		Sound preset	— Personal / Music / Talk / Normal
		BBE	— On / Off
		Surround	— Mid / Max / Off
Picture	—	Brightness	
		Contrast	
		Colour	
		Sharpness	
		Tint (only when NTSC is detected)	
		Picture preset	— Personal / Standard / Eco / Dynamic
		Dyn. skin tone	— On / Off
		Text brightness	— Max / Mid / Min
Setting	—	Child lock	— On / Off
		OSD language	— English
		Text language	— East / West
		AV2	— S-Video / Video
		Timer	▶ — Off Timer Alarm timer
Preset	—	Program sort	▶
		Auto sort	OK?
		Country	UK or IRE
		Program pos.	12
		Program name	Sky
		Frequency	799.12 MHz
		Sound system	S-3
		Skip	Off / On
		Memory	OK? / OK

During the menu operation the following buttons are used.

- MENU**  : To enter the menu function.
 : To go back and to exit the menu function.
 : To navigate up and down in the menus.
 : To navigate downwards in the menus.
 : To navigate forwards to the next screen or to activate settings.

Sound menu

1. Press the **MENU** button and select **Sound** using the **P▲** or **P▼** buttons.
2. Press the **▲+** button to select.

Sound	
Volume	25 
Balance	1 
Bass	2 
Treble	-2 
Sound preset	Personal / Music / Talk / Normal
BBE	Off / On
Surround	Off / Mid / Max

Select and adjust to obtain the best sound settings for your environment using the **P▲**, **P▼** and **▲+**, **▲-** buttons.

Sound preset: Rotates between Personal, Music, Talk and Normal settings.





BBE: To make the sound more natural, clearer and well defined.

Press the **MENU** button repeatedly to exit.

Picture menu

Press the **MENU** button and select **Picture** using the **P▲** or **P▼** button.

Press the **▲+** button to select.

Picture	
Brightness	20 
Contrast	25 
Colour	26 
Sharpness	22 
Picture preset	Personal / Standard / Eco / Dynamic
Dyn. skin tone	On / Off
Text brightness	Min / Mid / Max

Select Brightness, Contrast, Colour etc. using the **P▲** and **P▼** buttons and adjust using the **▲+** and **▲-** buttons to obtain the best picture settings for your environment.

Tint : Colour phase if NTSC equipment is detected.

Picture preset: Rotates between your **Personal** settings, **Standard**, **Eco** and **Dynamic**.

Dyn. Skin tone: Makes the skin tone more realistic.

Text brightness : Brightness of Teletext screen Minimum / Middle / Maximum.

Press the **MENU** button repeatedly to exit.

Setting menu

■ Child lock


You can prevent small children from operating the TV with the front buttons of the TV set.

1. Press the **MENU** button and select **Setting** using the **P▲** or **P▼** buttons, press the **▲+** button to enter.

Setting	
Child lock	On / Off
OSD language	English
Text language	East / West
AV2	S-Video / Video
Timer	▶

2. Press the **P▲** or **P▼** button to select **Child lock**, select **On / Off** by pressing the **▲+** or **▲-** button.

Press the **MENU** button repeatedly to exit.

 The child lock mode will be reset to "Off" when the LCD TV set is disconnected completely from the adaptor power cord.

■ OSD language

1. Press the **MENU** button and select **Setting** using the **P▲** or **P▼** button, press the **▲+** button to enter.

2. Press the **P▲** or **P▼** button to select **OSD language**, select English by pressing the **▲+** or **▲-** button.

Press the **MENU** button repeatedly to exit.

MENU OPERATION

Setting menu

Setting	
Child lock	On / Off
OSD language	English
Text language	East / West
AV2	S-Video / Video
Timer	▶

■ Text Language

1. Press the **MENU button** and select **Setting** using the **P▲** or **P▼** button, press the **▶+ button** to enter.
2. In the setting menu press **P▲** or **P▼** buttons to select **Text Language**.
2. Press **◀-** or **▶+** buttons to select East or West.

Please refer to table below.

WEST		EAST	
ENGLISH	GREEK □	GERMAN □	POLISH □
SWEDISH	ITALIANO	ROMANIANO	CZECH
FINNISH	HUNGARIANO	SLOVAKIANO	CROATIANO □
FRENCH	SPANISH □	BOSTONIANO □	□
TURKISH	GERMANO	□	□

■ Setting of AV2 input mode

If you use a VCR which has S-VHS, you should connect it to AV2 and change the AV2 menu to S-Video.

1. Press the **MENU button** and select **Setting** using the **P▲** or **P▼** button, press the **▶+ button** to enter.
2. Press the **P▲** or **P▼** button to select **AV2**, select **S-Video / Video** by pressing the **▶+** or **◀-** button.

Press the **MENU button** repeatedly to exit.

■ Off-timer setting

The Off timer will switch the TV set into the standby mode when the selected time has elapsed.

1. Press the **MENU button** and select **Setting** using the **P▲** or **P▼** button, press the **▶+ button** to enter.
2. Press the **P▲** or **P▼** button to select **Timer**, press the **▶+** button to enter.
3. Press the **P▲** or **P▼** button to select **Off timer**. Press the **▶+** or **◀-** button to select the time.

Timer	
Off Timer	Off / 5 / 10 / 15 / 120
Alarm timer	Off / 1 / 2 / 3 / 180

The time changes in 5 minute steps. The maximum time is 2:00hrs.

Once set the time will show on the screen with the remaining time for a few seconds.

Press the **MENU button** repeatedly to exit.

*☞ If the TV set is switched off by disconnecting the adaptor power cord, or by pressing the **⏻** button on the remote control, or during Auto sort, the timer settings will be cancelled.*

■ Alarm timer setting

This function can be set so that an alarm goes off. This only happens when the TV is switched on.

1. Press the **MENU button** and select **Setting** using the **P▲** or **P▼** button, press the **▶+ button** to enter.
2. Press the **P▲** or **P▼** button to select **Timer**, press the **▶+ button** to enter.
3. Press the **P▲** or **P▼** button to select **Alarm timer**.
4. Press the **▶+** or **◀-** button to select the time.

The display changes in 1 minute steps and the maximum time period is 3:00 hours.

When the time period is up, the time up signal will appear on the screen and the alarm will sound for approximately 10 seconds.

To cancel the alarm timer, press any button and the display will disappear.

☞ If the TV set is disconnected with the adaptor power cord, or switched off the Standby button on the remote control or a power failure occurs the timer settings will be cancelled.

MENU OPERATION

Preset menu

The preset menu can be used to tune new channels, to reorder channels and their programme positions, and to make fine adjustments to the tuning.

The preset menu is used for the following.

Program sort : To rearrange channel positions after Auto sort.

Auto sort: To automatically search, sort and store all channels.

Frequency : To manually search and add channels. To fine tune existing channels.

Preset	
Program sort	▶
Auto sort	Busy / OK?
Country	UK / IRE
Program pos.	6
Program name	Sky
Sound system	S-3
Frequency	631.25 MHz
Skip	On / Off
Memory	OK?

☞ Preset function can be disabled, see Hotel mode on page 11.

■ Program sort

1. Press the **MENU button** and select **Preset** using the **P▲** or **P▼** button, press the **▲+ button** to enter.
2. Select **Program sort** using the **P▲** or **P▼** button. Using **▲+**, **▲-** buttons and **P▲** or **P▼** buttons. Select which channel you want to move eg. Programme position 4. (highlighted yellow). Press (Green) Move button, the programme position number turns green. Screen shows Move to at the bottom of the screen.

Program sort		
1	6	11
2	7	12
3	8	13
4	9	14
5	10	15

▲ ▼	◀ ▶	■ Move ■ Delete

3. Select programme position to move to eg. 2 . Press **Green Move** button again to move.
4. To delete a channel. Select the Programme position. ie.17. Press **Red** button. (highlights number red). Press **Red** button again to delete. Programme position 17 is now deleted.

Press the **Menu button** repeatedly to exit.

■ Auto sort

1. Press the **MENU button** and select **Preset**, press the **▲+ button** to enter.
2. Select **Country** by pressing the **P▲** or **P▼** buttons. Select (UK / IRE) by pressing the **▲+** or **▲-** buttons.
3. Select **Sound system** by pressing the **P▲** or **P▼** buttons. Select **S-3** by pressing the **▲+** or **▲-** buttons.

System S-3 MUST be selected for correct sound in the UK and Ireland.

4. Select **Auto sort** by pressing **P▲** or **P▼** buttons. Press the **F/OK button** to start automatically tuning, sorting and storing all available channels.

After completion Auto sort changes from Busy to OK?

4. Press the **MENU button** repeatedly to exit.

Note : Auto sort can be cancelled at any time by pressing any button except for the **F/OK** button.

: You can change the order of the station selection, by using the Program sort function.

■ Tuning - Frequency (Manual)

1. Press the **MENU button** and select **Preset**.
 2. Select **Programme position** using the **P▲** or **P▼** buttons and select the programme position where you wish to preset a channel using the **0-9**, **-/-**, buttons or **▲+**, **▲-** buttons.
 3. Select **Programme name** using the **P▲** or **P▼** buttons. Press the **▲+ button**, the first character space turns red. Press the **P▲** or **P▼** buttons until the number or first letter you require appears (0-9, A-Z, a-z, ?, !, -, +). Press the **▲+ button** to select the second character.
- You can assign 7 characters of information. When finished press the **▲+** button repeatedly until no character is highlighted.
4. Select **Frequency** by using the **P▲** or **P▼** button. (Refer to the channel table on page 9.)

You can either...

- a) Enter the frequency using the 0-9 buttons referring to the channel table.
- b) Press and hold the **▲+** or **▲-** buttons until the frequency starts scanning (about 5 seconds), scanning will stop when a channel is found.
- c) Keep pressing to de-tune the frequency.

Repeat above until the correct channel is found.

5. Press the **P▲** or **P▼** button to select Memory. Press the **F/OK** button to store the new frequency.
6. Repeat for other programme positions if required.

■ Skip

Skip ON : In normal operation when the **P▲** or **P▼** button is pressed this position will be skipped.

Skip OFF : Position is not skipped when **P▲** or **P▼** button is pressed.

1. Press the **MENU button** select **Preset - Program. pos.**
2. Select a program position that you wish to Skip.
3. Select **Skip** by pressing the **P▼** button. Using the **▲+** or **▲-** buttons select On or Off.
4. Press the **P▲** or **P▼** button to select Memory. Press the **F/OK** button to memorise.

Press the **Menu button** repeatedly to exit.

☞ You can still view a programme position that has been skipped by using the 0-9 numeric buttons to select the programme position directly.

☞ To memorise any setting, using the **P▲** or **P▼** button select Memory and press the **F/OK** button.

OPERATION

Selecting of picture size

Screen options

Today there are various transmission formats with different size ratios, eg. 4:3, 14:9, 16:9 and video formats such as letterbox.

Auto

It automatically switches to the optimum screen mode according to the WSS signal provided in the receiving signal source. If the signal does not have it, the TV keeps current screen mode.

☞ This setting may cause the picture to change when a different format is received eg. when an advert is received.

☞ WSS (Wide screen signalling)

Some broadcasters transmit this signal and some VCR tapes have it included. The signal identifies the picture format ratio (16:9, 14:9, 4:3 etc.).

If WSS is not being received and you are not happy with your picture this TV provides you the option to change it with the following options.

Press the **WIDE** button repeatedly to select your desired setting.

Natural

4:3	14:9	16:9	Letterbox Video
Stretches the picture horizontally to fill the screen. The picture is more stretched at the edges.	The height is expanded to fill the whole screen.	The picture fills the screen and is proportionally correct.	The black bars top and bottom remain and the height is compressed to fit the picture area.

Full

4:3	14:9	16:9	Letterbox Video
The whole screen is filled stretching the width.	The whole screen is filled stretching the height slightly at the edges.	The whole screen is filled with the correct picture ratio.	The black bars top and bottom are present and the height is compressed.

Cinema 1

4:3	14:9	16:9	Letterbox Video
The correct picture width is maintained but the top and bottom are cropped.	Zooms in slightly cropping the top and bottom.	Zooms in slightly cropping the top and bottom.	The black bars top and bottom are smaller and the picture height is compressed slightly.

Cinema 2

4:3	14:9	16:9	Letterbox Video
The correct picture width is maintained but the top and bottom are cropped.	Zooms in slightly cropping the top and bottom.	Zooms in slightly cropping the top and bottom.	The black bars top and bottom are smaller and the picture height is compressed slightly.

Subtitle

4:3	14:9	16:9	Letterbox Video
As Cinema 2, but bottom is compressed even more to allow subtitles to be seen.	As Cinema 2, but bottom is compressed even more to allow subtitles to be seen.	As Cinema 2, but bottom is compressed even more to allow subtitles to be seen.	As Cinema 2, but bottom is compressed even more to allow subtitles to be seen.

Normal

4:3	14:9	16:9	Letterbox Video
The correct ratio is maintained with black bars on the left and right.	Black bars left and right, picture height is stretched.	Black bars left and right, picture height is stretched.	Black bars left, right, top and bottom.

Channel Table

The table below shows the receivable channels and channel allocation for this LCD TV set.

Displayed channel no.	Italian channels	CCIR channels	OIRT channels	Vision Frequency [MHz]	Displayed channel no.	Italian channels	CCIR channels	OIRT channels	Vision Frequency [MHz]
01	A0	E0		43.250	75	X0	X0	R3	69.250
02	AD	E20	R1	48.250	76	Y0	Y0	R4	76.250
03	AD	E30		55.250	77	C/Z0	Z0	R5	83.250
04	BD	E40	R2	62.250	78	Z+10	Z+10		90.250
05	DD	E50	R6	175.250	79	Z+20	Z+20		97.250
06	ED	E60	R7	182.250	80	S10	S10		105.250
07	FD	E70	R8	189.250	81	S20	S20		112.250
08	G0	E80	R9	196.250	82	S30	S30		119.250
09	GD	E90		205.250	83	S40	S40		126.250
10	HD	E100	R10	210.250	84	S50	S50		133.250
11	H10	E110	R11	217.250	85	S60	S60		140.250
12	H20	E120	R12	224.250	86	S70	S70		147.250
13					87	S80	S80		154.250
14	I210	E210	E21	471.250	88	S90	S90		161.250
15	I220	E220	E22	479.250	89	S100	S100		168.250
16	I230	E230	E23	487.250	90	S110	S110		175.250
17	I240	E240	E24	495.250	91	S120	S120		182.250
18	I250	E250	E25	503.250	92	S130	S130		189.250
19	I260	E260	E26	511.250	93	S140	S140		196.250
20	I270	E270	E27	519.250	94	S150	S150		203.250
21	I280	E280	E28	527.250	95	S160	S160		210.250
22	I290	E290	E29	535.250	96	S170	S170		217.250
23	I300	E300	E30	543.250	97	S180	S180		224.250
24	I310	E310	E31	551.250	98	S190	S190		231.250
25	I320	E320	E32	559.250	99	S200	S200		238.250
26	I330	E330	E33	567.250					245.250
27	I340	E340	E34	575.250	H210	S210	S210		303.250
28	I350	E350	E35	583.250	H220	S220	S220		311.250
29	I360	E360	E36	591.250	H230	S230	S230		319.250
30	I370	E370	E37	599.250	H240	S240	S240		327.250
31	I380	E380	E38	607.250	H250	S250	S250		335.250
32	I390	E390	E39	615.250	H260	S260	S260		343.250
33	I400	E400	E40	623.250	H270	S270	S270		351.250
34	I410	E410	E41	631.250	H280	S280	S280		359.250
35	I420	E420	E42	639.250	H290	S290	S290		367.250
36	I430	E430	E43	647.250	H300	S300	S300		375.250
37	I440	E440	E44	655.250	H310	S310	S310		383.250
38	I450	E450	E45	663.250	H320	S320	S320		391.250
39	I460	E460	E46	671.250	H330	S330	S330		399.250
40	I470	E470	E47	679.250	H340	S340	S340		407.250
41	I480	E480	E48	687.250	H350	S350	S350		415.250
42	I490	E490	E49	695.250	H360	S360	S360		423.250
43	I500	E500	E50	703.250	H370	S370	S370		431.250
44	I510	E510	E51	711.250	H380	S380	S380		439.250
45	I520	E520	E52	719.250	H390	S390	S390		447.250
46	I530	E530	E53	727.250	H400	S400	S400		455.250
47	I540	E540	E54	735.250	H410	S410	S410		463.250
48	I550	E550	E55	743.250					
49	I560	E560	E56	751.250					
50	I570	E570	E57	759.250					
51	I580	E580	E58	767.250					
52	I590	E590	E59	775.250					
53	I600	E600	E60	783.250					
54	I610	E610	E61	791.250					
55	I620	E620	E62	799.250					
56	I630	E630	E63	807.250					
57	I640	E640	E64	815.250					
58	I650	E650	E65	823.250					
59	I660	E660	E66	831.250					
60	I670	E670	E67	839.250					
61	I680	E680	E68	847.250					
62	I690	E690	E69	855.250					

TELETEXT / OTHER FEATURES

Direct access to a page

All the numeric buttons can be used to select a page number directly. If you need page 301, press 3 then 0 and then 1.

Sub page access

Some text pages are made up of several sub pages which rotate automatically. If you wish to view P4 of 8 press the sub page button. "----" will appear. Enter 0004 and it will appear.

Index page selector

This selects one of the teletext index pages.

Cursors

Press the button to select the next page or previous page number.

Cancel

To view the TV picture in the teletext mode while waiting for sub page to change or page to update. Press again to return to teletext.

Hold

This stops the sub pages from changing. The word "HOLD" will appear instead of the page number.

Standby / Power on-off

To switch the TV ON and OFF.

Reveal switch

This reveals hidden items on the teletext page eg: a hidden answer to a quiz question.

Page up and down

Press the button to select the next page or previous page number.

Direct access to subject headings

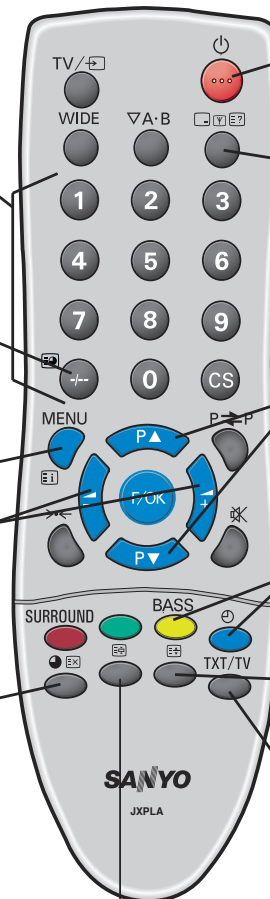
Coloured boxes are displayed at the bottom of the screen. The 4 coloured buttons give access to the corresponding subjects or pages.

Size switch

This will make either the top half or the bottom half of the page expand to fill the whole screen.

Teletext / TV

To access this feature press the TXT/TV button the picture changes from TV - TXT - MIX and back to TV.



Other features

■ Switching into /from standby mode

The Standby mode is used for switching the TV set off for short periods of time. In standby mode the TV is switched off but is still receiving mains power.

- To turn the TV set into standby mode, press the **⏻** button. *The red power indicator illuminates more brightly.*
- To turn the TV set ON from standby mode, press any of the following buttons: **⏻**, **P▲**, **P▼** or **0-9** buttons.

If you find the power indicator flashing, please turn the TV set off with the Standby switch and disconnect the power cord from the power outlet and contact our Service desk.

This warning is a sign to let you know that the power protection function of this TV set is now operating.

■ Auto shut off

This TV set will automatically switch into the standby mode, 10 minutes after a signal is no longer received. The time until the set will switch off is displayed on the screen.

What is BBE?

By correcting the phase delay and distortion naturally generated by speaker systems, BBE ensures that the sound that reaches your ears is as natural as the original sound. Human voices are clearer and music is well-defined.



Licensed by BBE SOUND, Inc. under USP4638258 and 4482866. BBE and BBE symbol are trademarks of BBE Sound.

Hotel options

This TV set allows you to set up the following:-

- **Maximum volume.**
The current volume will become the maximum.
- **Prohibition of presetting.**
This prohibits the use of tuning.
- **Programme position at Start up.**

SETTING PROCEDURE

1. Press and hold the **□▽△?** button on the Remote control handset and then press the **P▲** button on the TV set.
2. Use the **P▲** or **P▼** button to highlight **Hotel Mode**, use the **▲+** button to switch ON or OFF.
3. Select Max volume using the **P▼** button, use the **▲+** or **▲-** buttons to set the maximum volume.

Hotel	
Hotel mode	On / Off
Max volume	12
On program	0-99 / AV1 - AV3

4. Select **On program** using the **P▼** button, select the start up position using the **▲+** or **▲-** buttons.

(AV3 - AV2 - AV1 - 0 - 1 - 2 - 3 - 499)

5. Press the **MENU** button to exit from the menu.

HELPFUL HINTS / WARRANTY TO CUSTOMER

Helpful hints

■ NO PICTURE, NO SOUND

- Check if TV is plugged in.
- Try a different channel, if OK, probably station trouble.

■ POOR PICTURE, SOUND OK

- Adjust BRIGHTNESS control.
- Adjust FINE TUNING control.
- Check aerial connections.

■ NO COLOUR, PICTURE OK

- Adjust COLOUR control.
- Adjust FINE TUNING control.
- Is the programme in colour ?

■ WEAK PICTURE

- Check aerial connections on back of set.
- Check aerial for broken wires.
- Re-orient aerial.

The following faults are not caused by the receiver:

"GHOSTS"

Reflections of signals from mountains or high buildings will cause multiple images, called "Ghosts". These abnormal conditions can be reduced to minimum by repositioning aerial or by installing new one suited for your area.

"INTERFERENCE"

Interference may be caused by electrical appliances, car ignition systems, etc. This should normally be a temporary condition, but should this interference persist, contact your dealer.

■ Plug and Play.

If you do not fit an aerial into this TV set the Plug and Play feature may start up each time you switch on your LCD TV.

To prevent this follow these instructions.

1. Switch on your LCD TV set, the Plug and Play screen appears.
2. Press the **MENU** button on the remote control to clear the Plug and Play screen.
3. Press the **MENU** button to select the Menu screen. (as shown below).

Main menu	
Sound	▶
Picture	▶▶
Setting	▶▶▶
Preset	▶▶▶▶

4. Select **Preset** Menu by pressing the **P▼** or **P▲** button and **▶** or **▶** button to enter.
6. Press the **P▼** button and select **Memory**. Press the **OK** button to cancel. (The OK? changes to OK).

Preset	
Program sort	▶
Auto sort	Busy / OK?
Country	UK / IRE
Program pos.	6
Program name	Sky
Sound system	S-3
Frequency	631.25 MHz
Skip	On / Off
Memory	OK?

7. The next time you switch on your LCD TV set the Plug and Play screen will not be displayed.

Warranty to customer

SANYO Europe Ltd. (the company) warrants to the initial retail purchaser that if this equipment is or becomes defective and that, in the opinion of the Company, the defect is due to faulty material or workmanship the Company will, for a period of 12 calendar months from the date of sale to the original purchaser repair or replace, at its sole option, free of charge, any such defective component part of the equipment, always provided that:-

- 1: The equipment has at all times been used in accordance with the operating instructions issued by the Company, and has not been connected to an electrical mains supply for which it has not been adjusted.
- 2: Accidental damage or damage caused by negligence of misuse by the user, is specifically excluded.
- 3: Unauthorised repairs, or any modification to the equipment which has not been expressly approved by the Company, shall render this warranty null and void.
- 4: Failure due to fair wear and tear of any item is specifically excluded.

This warranty is not transferable and is only applicable within the United Kingdom (and the Republic of Ireland).

Nothing in this express warranty affects the statutory rights available to the purchaser of this equipment.

Note: This warranty supersedes any other form of guarantee that may inadvertently have been enclosed with or attached to the product.

Dear Customer.

Thank you for buying SANYO. This equipment should give you many years of pleasure and faithful service but in the event that a fault occurs, the following notes for you guidance may be helpful:-

- 1: PLEASE RETAIN YOUR PURCHASE RECEIPT WHICH WILL BE REQUIRED FOR SERVICE DURING WARRANTY.
- 2: If your SANYO equipment proves faulty during the period of guarantee, take it or send it back to the dealer who originally supplied it together with this guarantee and the proof of purchase. We have made arrangements with our approved dealers under which they will carry out in guarantee service repairs on our behalf. In this way, we hope to reduce to a minimum the amount of time you will be without your equipment.
- 3: If for some reason it is impossible to return the equipment to the original supplier, please contact our Service Department at the address below for further advice.
- 4: Should the equipment require servicing after the expiry of the guarantee period, take or send it to the original supplier or any other Sanyo dealer. He will be pleased to give you a quotation for the repair.

Service Department,
SANYO Europe Ltd.
SANYO House,
18, Colonial Way,
Watford, Hertfordshire, WD24 4PT.
Tel: 01923 246363