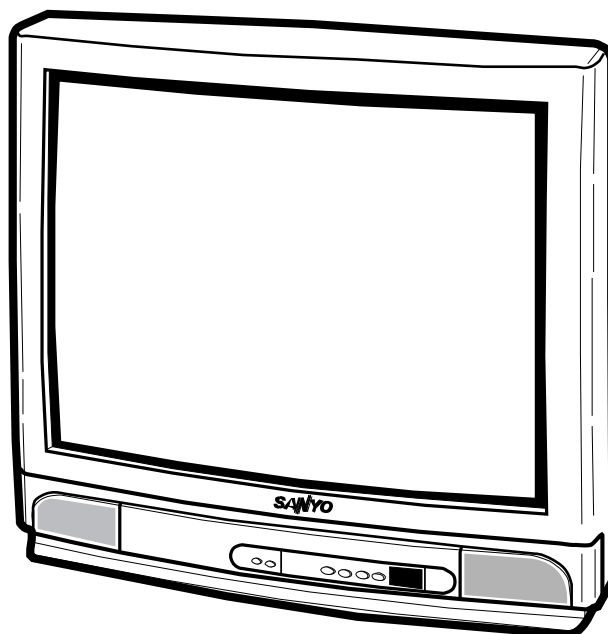


INSTRUCTION MANUAL

CE25MT4-B CE28MT4-B

Colour Television



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

TV Specifications		<u>CE25MT4-B</u>	<u>CE28MT4-B</u>
Common specification			
Power source	AC 220~240V 50Hz	Sound output (Continuous) 1 x 1.5W	1 x 1.5W
Television system	System I	Picture tubes (inches) 25	28
Colour system	PAL/NTSC4.43 (PAL/NTSC4.43/NTSC3.58 in AV mode)	Dimensions (WxHxD mm) 584 x 533.5 x 446.6	628 x 567 x 469
Channel coverage	UHF: 21-69,	Weight (kg) 24.5	30.4
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		

SAFETY PRECAUTIONS

CAUTION: Please read and retain for your safety.

This television receiver 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

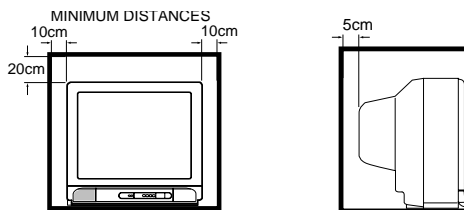
Do not allow anything to rest on the power cord. **Do not** locate this television receiver where the cord will be damaged by people walking on it.

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. This television receiver **should never** be placed near or over a radiator or heater.

This television receiver **should not** be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

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.



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.

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.

Use

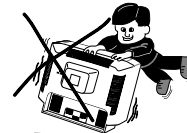
This television receiver should be operated only from the type of power source indicated on the television or as indicated in the Operating Instructions. If you are not sure of the type of power supply in your home, consult your sales person or your local power company.

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

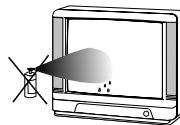


Do not drop or push objects into the television cabinet slots or openings. Some internal parts carry hazardous voltages and contact may result in an electric shock hazard. **Never** spill liquids of any kind on the television receiver. **Do not** place items such as vases containing liquid on top of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

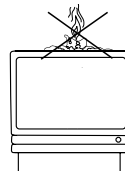
Do not expose the television receiver to rain or use near water. For example, near a bathtub, kitchen sink, in a wet basement, etc. Before cleaning, unplug the television receiver from the wall socket.



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 damp 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:

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 5Amp 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 5 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

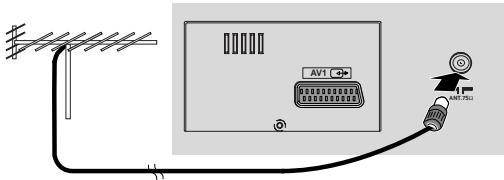
1. The Blue wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
2. The Brown wire must be connected to the terminal with the letter "L" or coloured RED.
3. **Do not** connect either wire to the earth terminal in the symbol or coloured GREEN or GREEN and YELLOW.

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

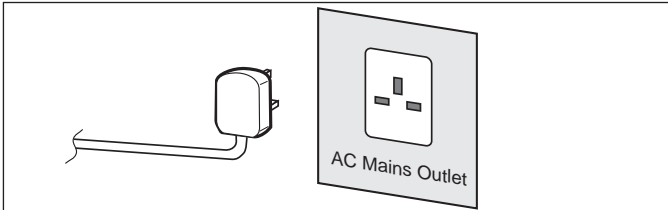
INSTALLATION

Step : 1 Connections (Essential)

Insert an aerial cable socket to the back of the TV set.



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



✓ The TV set is prepared for a mains voltage AC220~240V, 50Hz. When the TV set is not to be used for an extended period of time, it is advisable to disconnect the power cord from the power outlet.

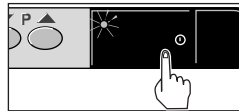
✓ For all aerial problems please consult your local dealer.

Step : 2 Remote control-battery installation

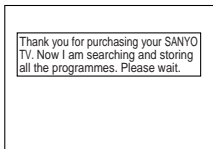
Install two "AA" 1.5 volt batteries so that the "+" and "-" marks on the batteries match the "+" and "-" marks inside the remote control handset.

Step : 3 Switching - on / Plug & Play

Press the Mains ON/OFF switch on the front of the TV set.

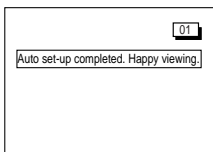


This TV set has a self-automatic tuning and sorting system function called "Plug & Play". It will automatically begin searching, storing and sorting all of the available channels when the TV set is switched on for the first time.



■ The self-automatic tuning and sorting system will start as follows;

The welcome message will appear on the screen.



After completing this procedure, the set returns to programme position 1 and the ending message will appear on the screen.

■ To make this message disappear, press any of the control buttons.

Now the installation is completed !

The programme positions 1 to 6 are especially prepared for the following major stations in the Ireland.

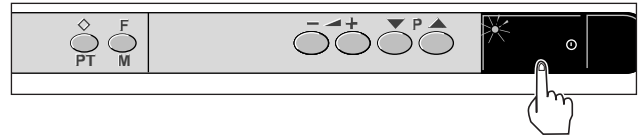
- Programme position 1 : BBC1
- Programme position 2 : BBC2
- Programme position 3 : ITV
- Programme position 4 : CH4
- Programme position 5 : BBC1
- Programme position 6 : BBC2

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

✓ If you move to another city or cable is installed, please follow the description "Automatic Tuning". (on page 6).

✓ This procedure only appears the first time you switch on.

TV front controls



Press the **⊕** button repeatedly to select **Volume, Brightness, Contrast, Colour, Sharpness or Text bright**. Press the **⊖** or **⊕** button to adjust the selected control. When the control menu is not displayed, the **⊖** or **⊕** button enable you to switch programme position.

Tint : To adjust the colour phase. (This appears when NTSC signals are input.)

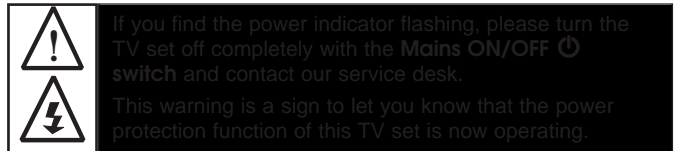
Text Bright : To adjust text brightness level.

Switching into / from standby mode

To switch the TV set into standby mode, press the **⏻** button.

The red power indicator illuminates more brightly.

To switch the TV set ON from standby mode, press any of the following buttons: **⏻** button, **P▲**, **P▼**, **0 to 9 Numeric buttons**.



✓ The **⏻** must be in the ON position before using the remote control handset.

✓ 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.

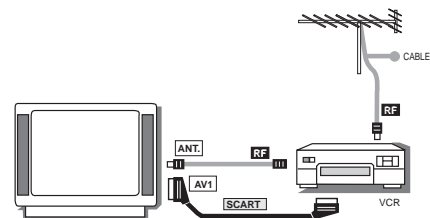
Auto Shut Off

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.

✓ If the aerial is removed the TV set will automatically switch into the standby mode after 10 minutes.

AV equipment

You can connect a VCR, Satellite Tuner, PAY TV Decoder or Camcorder, to this TV via the SCART terminal. There are various types of connections depending on the equipment which you have or its use. For further information please consult your local dealer.



Connection

✓ Connect RF cables. Roof aerial to VCR & VCR to TV.

✓ If you do not have a 21 pin Scart cable, you can connect your VCR or other AV equipment via the aerial socket.

The VCR should be tuned to programme position 0 on the TV, this has been especially designed for VCR use.

GENERAL OPERATION - REMOTE CONTROL

General use

Standby / Power on-off - To switch the TV ON and OFF.

Direct programme selector
For direct access to programmes using (0-9) numeric buttons.
 For selection of programme position 10-99, eg.23, first press **-/--** button and press **2** and **3** numeric buttons.

TV/AV switch - To switch to TV to AV mode press repeatedly.

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

Picture mode selection -
Press the **→←** button repeatedly to select the following picture modes.

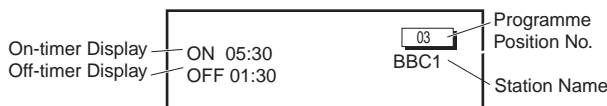
PERSONAL - Personal preference mode.

STANDARD - Normal viewing mode.

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

DYNAMIC - Suitable for brightly lit rooms.

Programme information call
To display the programme information.



You can also select colour systems in AV mode as follows:

AUTO-> PAL-> NTSC4.43-> NTSC3.58->

Programme swap
To switch between current and previous programme position watched.

Menu - See pages 5 and 6.

Programme down/up
To select the next programme number or previous programme number. Also operates as up and down cursor.

Level up/down
To adjust the sound volume level. Also operates as left and right cursor. + button also memorises in some cases.(refer to individual sections).

F/OK button - Press repeatedly to select settings. (See page 5).

CS button

To select channels directly. Press button to display current channel number on the screen. Press button repeatedly until **C--** appears and enter number eg. 5 and 9 for channel 59.
If you do not know the channel number press the **P▲** or **P▼** button to start channel searching. Repeat if not desired channel. The channel number changes from white to yellow momentarily when you press the **F/OK** button. This shows the channel is stored.

- No operation.

- No operation.

- No operation.

- No operation.

- No operation.

VCR / DVD controls

With selected Sanyo DVD/VCR players you can use this remote. The following table shows all available function buttons for the VCR and DVD. When you use a compatible Sanyo DVD player, first press and hold the DVD button and then press your desired function button.

VCR		DVD (blue symbols)
	Power	Power
	Play	Play
	Pause	Pause
	Stop	Stop
	Fast/Cue	Next chapter selection
	Rewind/Review	Previous chapter selection
	Record, press both buttons at the same time.	
	n/a	DVD command mode selection
	n/a	Enter
	n/a	Cursor selection

Teletext

Teletext - This is a free service to give you lots of varied information such as news, sports results, weather and travel features.

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

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.

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.

Index page selector - This selects one of the teletext index pages.

Up / down page access - Press the button to select the next page or previous page number.

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. "Subcode ----" will appear. Enter 0004.

Cancel - To view the TV picture in the teletext mode while waiting for sub page to change or page to update.

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

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

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

Teletext reception

If your aerial signal is poor, the teletext reception operation may be erratic.

Teletext brightness level

You can change the teletext brightness level. Please return to TV mode. Press the F/OK button repeatedly until "Text bright" appears. Using **▲+** or **▲-** buttons select Max, Cen, or Min.

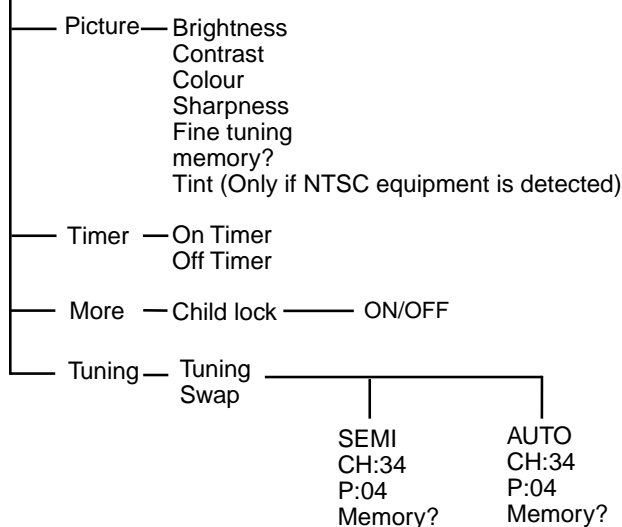
Sound volume control

In teletext mode sound volume and muting can be controlled. However they are not displayed on the screen.

MENU OPERATION

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

MENU

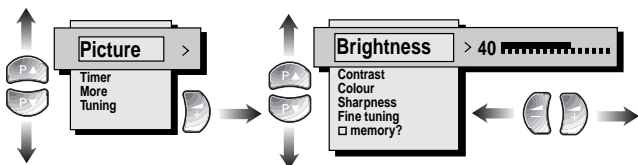


During the menu operation the following buttons are used.

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

Picture menu

Press the **MENU** button to display the main menu and select **Picture**.



Select and adjust to obtain the best picture settings for your environment.

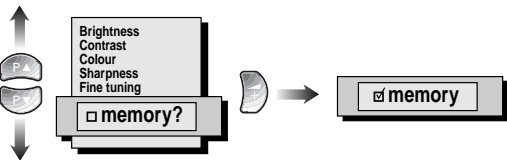
- Text bright** : Brightness of Teletext screen
- Tint** : Colour phase if NTSC equipment is detected.

■ Storing picture preferences

If you have altered any of the settings in the Picture menu you can store them. You can be recall again later.

In the picture menu select **memory**.

Press the **PL** button, a tick appears in the box and the settings are stored.



To return to the TV mode, press the **MENU** button repeatedly until menu display disappears.

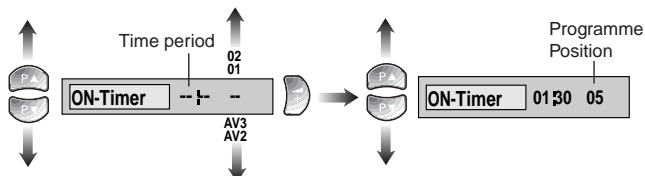
Timer setting

■ On-timer setting

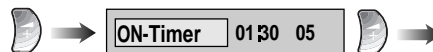
The On-timer will switch the TV on from the standby mode or change programme positions when the selected time period has elapsed.

Press the **MENU** button repeatedly to display main menu and select **Timer - ON Timer**.

When the time period --:-- is selected its colour changes to yellow. The time changes in 15 minute steps with a maximum of 24:00hrs.



When the start up programme position -- is selected its colour changes to yellow.



When you are ready to store your settings press the **PL** button and both the time period and the start up programme position numbers turn green in colour.

If you switch your TV into standby it will switch on after the time elapses. If you do not switch into standby it will switch to the selected programme position.

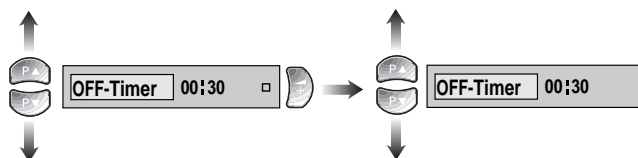
If the TV set is switched on by on timer the TV will automatically switch into Standby after 3hrs if no keys are pressed. This is a safety feature.

■ Off-timer setting

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

Press the **MENU** button repeatedly to display main menu select **Timer - OFF Timer**.

When the time setting column is selected its colour changes to yellow. The time changes in 30 minute steps. The maximum time is 2:00hrs.



When you are ready to store your settings press the **PL** button and the setting column numbers colour changes to green.

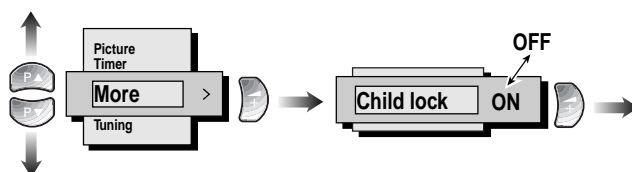
If you have set the off timer, then one minute before the TV switches, a display appears on the screen.

If the TV set is switched off by the Mains Switch , or you enter the preset mode, the timer settings will be cancelled.

Child lock

You can prevent small children from operating the TV with the front buttons of the TV set by selecting "ON".

Press the **MENU** button repeatedly to display main menu and select **More - Child lock**



The child lock mode will be reset to "OFF" when the TV set is switched off with the **Mains ON/OFF** switch.

MENU OPERATION

Tuning

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.

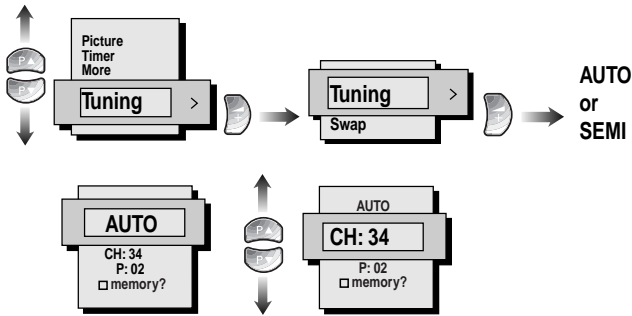
There are two ways to tune in new channels.

Auto : Searches for all channels and stores them automatically.

Semi : Manual search to add channels.

Automatic tuning/sorting

1. Press the **MENU button** repeatedly to display main menu.
2. Select **Tuning** press **▶** button to select **Tuning sub menu - AUTO**.



3. Select CH: and press the **▶** or **◀** button the automatic tuning and sorting will start.

To cancel this tuning operation, press the **MENU button**.

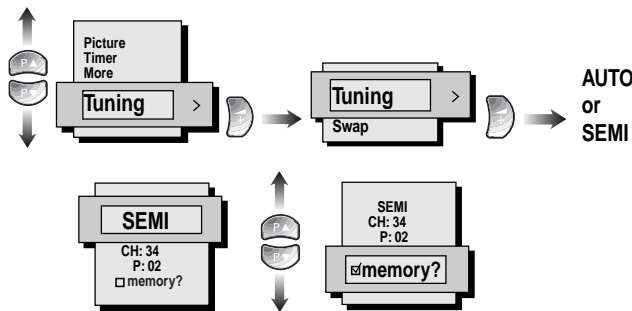
After completing this procedure, the TV set will return to normal TV mode and select programme position 01.

✍ Channel sorting -The channels are stored as shown on page 3.

✍ You can change the order of the station selection, by using the channel swapping function detailed later on this page.

Semi-automatic tuning

1. Press the **MENU button** repeatedly to display main menu.
2. Select **Tuning** then select **Tuning sub menu**, press the **▶** and select **SEMI**.



3. Select CH: and press the **▶** or **◀** button to begin searching.
4. Select the programme option and press the **▶** or **◀** to select where you wish the programme number to be stored.
5. To store your preferred channels select the **memory?** . Press **▶** the **memory** shows that the memorisation is completed.

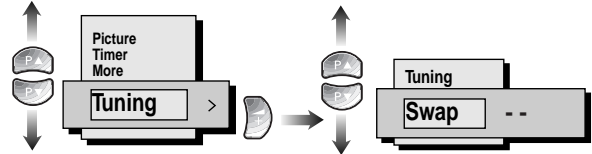
✍ To exit the tuning mode, press the **MENU button** repeatedly until display disappears.

Channel swapping

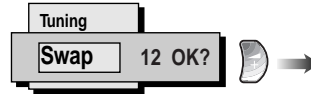
Use the channel swapping feature to swap the channels between two stored programme positions. This feature is particularly useful after automatic pre-setting.

You have to choose a programme that you wish to swap on the TV set. eg. Swap programme position 4 and 12.

1. Select programme position 4.
2. Press the **MENU button** repeatedly to display main menu.
3. Select **Tuning**. Follow the diagram below.



4. Enter the programme number (eg.12) and "OK?" appears, press **▶** the channels are swapped .



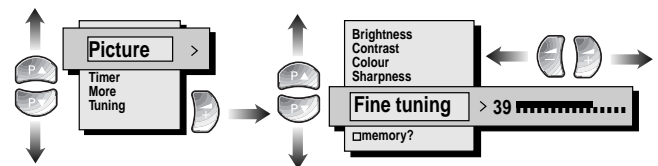
5. The TV displays your selected programme.(eg.12).

IMPORTANT

If the tuning functions do not operate please check that the special function "Prohibition" is set to OFF (see special functions page 7).

Fine Tuning

1. Press **Menu** button repeatedly to display main menu.
2. Select **Picture**. Follow diagram below.
3. Press **▶** or **◀** buttons to fine tune channels.



To return to the TV mode, press the **MENU button** repeatedly until menu display disappears.

✍ The fine tuning does not appear in AV mode.

OTHER FUNCTIONS

Special function

This TV set allows you to set up the following special functions.

■ Maximum volume setting and prohibition of pre-setting

Sets the current volume as the maximum volume level and prohibits the tuning functions.

PROHIBITION OFF or **PROHIBITION ON**

■ Start up programme position

Presets the programme position when the set is switched on.

START POSITION OFF → Last programme position start



START POSITION P1 → Programme position "1" start

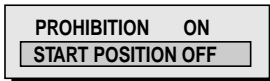
You can use the same procedure for P2 to P7.



START POSITION P8 → Programme position "8" start

START POSITION AV → "AV" start

SETTING PROCEDURE

Press and hold the  button on the **Remote control handset** and then press the  button on the **TV set**.



Use the **P▲** or **P▼** button to highlight the desired option item from the menu, and select the mode by pressing the  or  button.

To return to the normal TV mode, press the  button.

These options become effective when the TV is next switched on.

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 at 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.

Part No. 1KA6P1P0004-- C6TA/ZA

SANYO

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