

SANYO

INSTRUCTION MANUAL

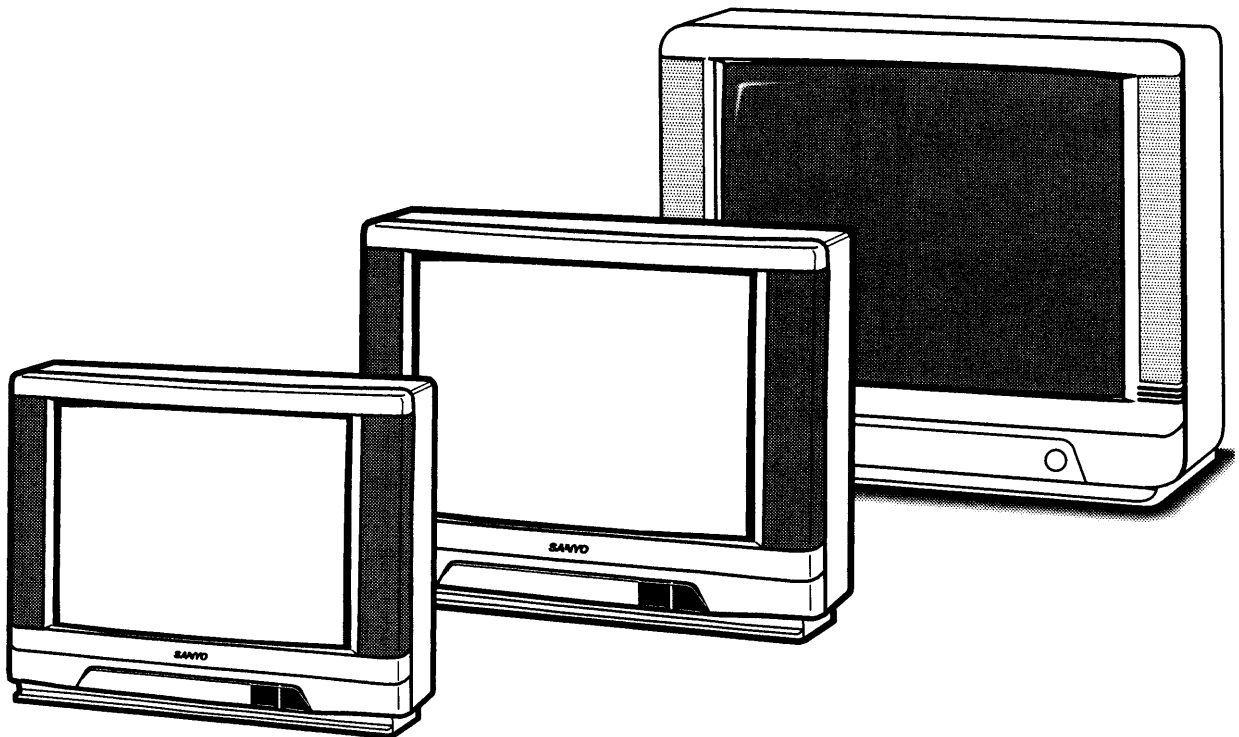
CE21BN2-B

CE25BN2-B

CE28BN2-B

Colour Television

NICAM



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

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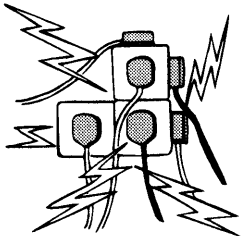
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WARRANTY TO CUSTOMER

SAFETY PRECAUTIONS

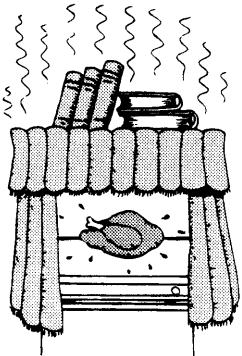
CAUTION: Please read and retain for your safety. This unit has been engineered and manufactured to assure your personal safety. But improper use can result in potential electric shock or fire hazards. In order not to defeat the safeguards incorporated in this receiver observe the following basic rules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

Installation



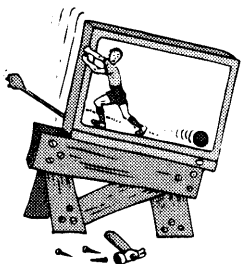
Do not allow anything to rest on the power cord. **Do not** locate this television receiver where the cord will be damaged by people walking on it.

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

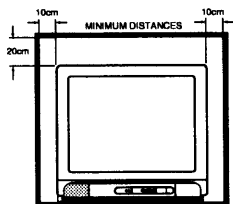


Slots and openings in the cabinet and in the back or bottom are provided for ventilation to ensure reliable operation and to protect it from overheating. These openings **must not** be blocked or covered. The opening **should never** be covered with a cloth or other material, and the bottom openings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

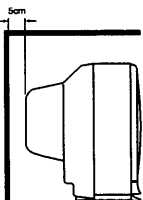
This television receiver **should not** be placed in a built-in installation such as a bookcase unless proper ventilation is provided.



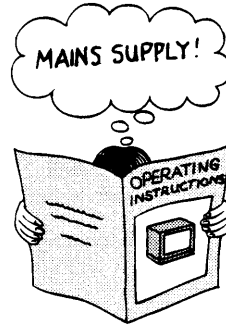
Do not place your television receiver on an unstable stand, shelf or table. Serious injury to an individual, and damage to the television may result if it should fall. Your sales person can recommend approved stands or shelf and wall mounting instructions.



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.



Use

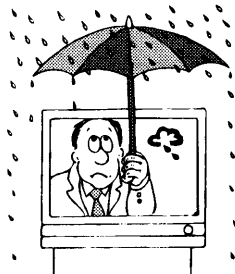


This television receiver should be operated only from the type of power source indicated on the television or as indicated in the Operating Instructions. If you are not sure of the type of power supply in your home, consult your sales person or your local power company.

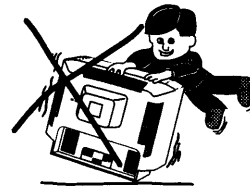


Never add accessories that have not been specifically designed for this television.

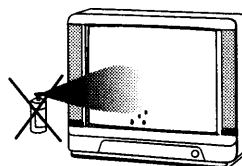
Do not drop or push objects into the television cabinet slots or openings. Some internal parts carry hazardous voltages and contact may result in an electric shock hazard. **Never** spill liquids of any kind on the television receiver.



Do not 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 suddenly the television or its stand. You should pay special attention to children. Serious injury may result if it should fall.

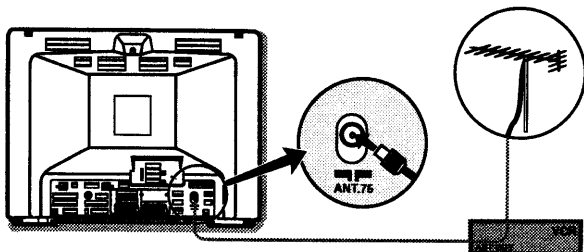


Do not apply liquid cleaners or aerosol cleaners directly onto the television receiver. Use a damp cloth for cleaning.

INSTALLATION

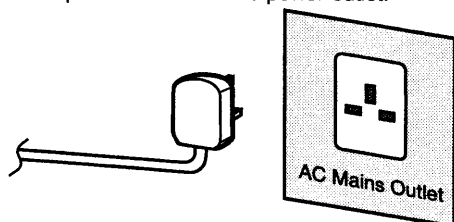
Aerial Connection

- For the best signal quality, the use of a well shielded aerial cable is recommended.
- If you tune your set to a station with a weak colour signal, the TV set automatically changes to black/white picture.
- For all aerial problems please consult your local dealer.
- For the connection to the peripheral AV equipment, refer to section "Connection of AV equipment" on page 7 & 8.



Mains Supply

The TV set is prepared for a mains voltage AC220-240V, 50Hz. Connect the power cord of the TV set to a wall outlet. 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.



WARNING!

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

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 5 Amp A.S.T.A. or BSI approved type.
3. Refit the fuse cover.

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. 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 13 Amp socket elsewhere.

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

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

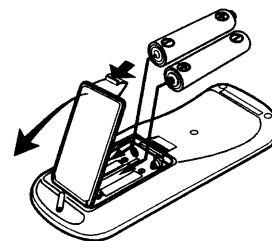
1. The Blue wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
2. The Brown wire must be connected to the terminal with the letter "L" or coloured RED.
3. **Do not** connect either wire to the earth terminal in the plug which is marked with the letter "E" or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

Battery Installation

1. Remove the battery cover by sliding it in direction of the arrow.


2. Install two "AA" 1.5 volt batteries so that the "+" and "-" marks on the batteries match the "+" and "-" marks inside the unit.




3. Close the battery cover.

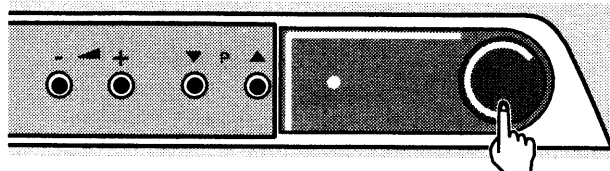
NOTE: Replace the batteries when the TV set is showing the following symptoms: Operation is unsteady or erratic, sometimes the TV does not work with the transmitter. Discharged batteries may leak and damage the unit. The normal life of batteries should be from nine to ten months.


Mains On/Off

- To turn the TV set ON, press the Mains ON/OFF  switch on the front of the TV.


The power indicator illuminates red to show the power is on.


- To turn the TV set OFF, press the Mains ON/OFF  switch again.



If no picture appears but the power indicator is on, press the , P▲, P▼, or 0-9 button as the TV set is in the standby mode.

Standby

- To turn the TV set into standby mode, press the  button. The 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.

In the Standby mode the TV set is still partially powered, this is denoted by the red Standby/Power indicator illuminating more brightly than in Power mode.

The Mains ON/OFF switch must be in the ON position before the using remote control transmitter.

NOTE: It is not possible to turn on with the Mains ON/OFF switch from the standby mode.

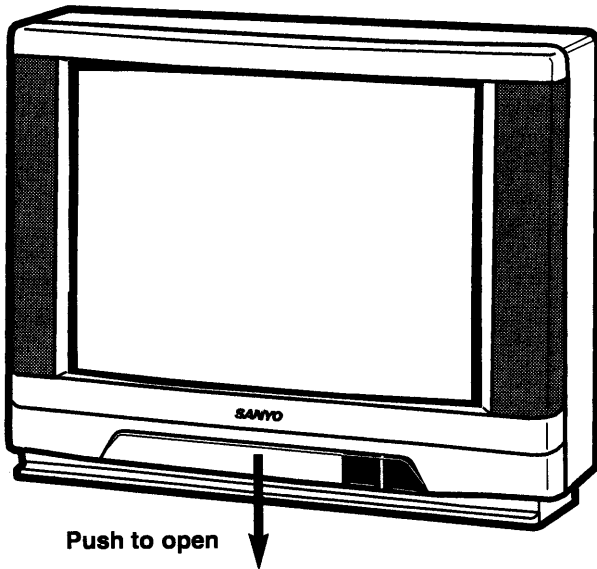


Be sure to set the Mains ON/OFF switch to the off position, if a power failure occurs while viewing.

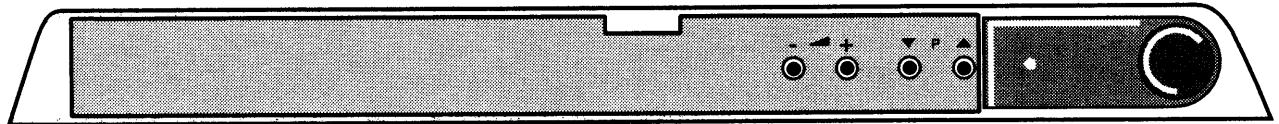


If you found a power indicator flashing, please turn the TV set off completely with the Mains ON/OFF switch and contact our Service desk. This warning is a sign to let you know that the power protection function of this TV set is now operating.

GENERAL OPERATION



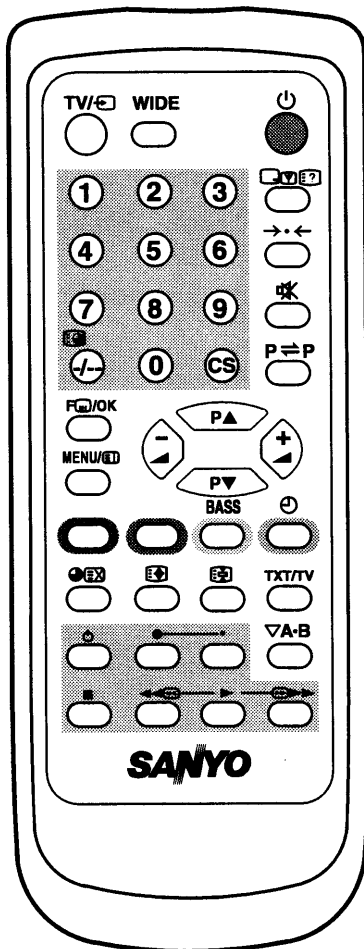
Push to open



Controls on TV Set

Symbol	Function
⓪	Mains on/off
▼ P ▲	Programme up/down
- ▲ +	Level up/down

Controls on Remote Control Handset



Symbol	Function
⓪	Power on/Standby
P▲ P▼	Programme up/down
0-9	0-9 Numeric buttons
-/	Digit
F/OK	Function or OK
▲ - ▲ +	Level down/up
🔇	Sound mute
P⇌P	Programme alternation
TV/AV	TV/AV switch
↔	Normalisation
⓪	Time call
☐	Recall
▽A•B	Mono/A.B Selection
BASS	Bass expander
🕒	Timer Setting

All other buttons on this remote control are not operative.

GENERAL OPERATION

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.
- When the TV set is switched on by using the On-timer function with no signal being received, the auto-shut off function will be ignored.

Programme Selection

■ Direct Programme Selection

For selection of programme position 0 to 9, press the corresponding **numeric button**. If the required programme is equal or more than 10, for example 23, first press the **-/-** button and enter 2 then 3.

■ Up/Down Programme Selection

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

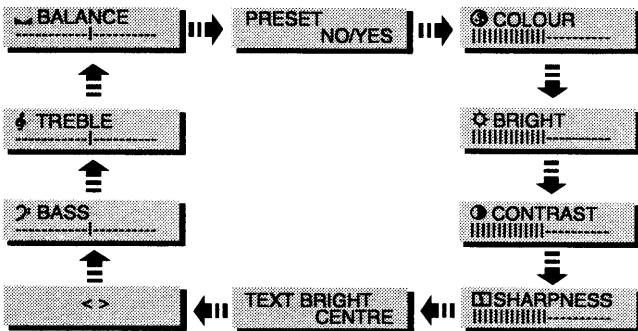
Sound & Picture Settings

To adjust the sound volume, press the **▲ + / ▼ -** button.



Press the **F** button repeatedly to select your desired control and then press the **▲ +** or **▼ -** button.

- ⊕ **COLOUR** : To adjust the picture colour.
- ⊙ **BRIGHT** : To adjust the picture brightness.
- ⊙ **CONTRAST** : To adjust the picture contrast.
- ▣ **SHARPNESS** : To adjust the picture sharpness.
- TEXT BRIGHT** : To select the teletext brightness level of the teletext mode (see page 12).
- < >** **Fine tuning** : To make fine adjustments to tuning.
- B** **BASS** : To adjust low frequency sounds.
- T** **TREBLE** : To adjust high frequency sounds.
- ▲ ▼** **BALANCE**: To equalise the output from the left and right speakers.
- AV MODE** : To select the input mode of AV mode, VIDEO/S-VIDEO (see page 7).
- PRESET NO/YES** : To enter the presetting mode. (see page 10-11)



- ⊕ The following functions do not appear whilst in AV mode, Fine tuning, PRESET NO/YES.
- ⊕ The function AV MODE only appears when in AV mode.

Sound Mute

Press the **MUTE** button to switch off the sound from the speakers.
Press the **MUTE** button again to switch the sound back on.

⊕ When the **▲ + / ▼ -** buttons are pressed, the sound muting will also be cancelled.

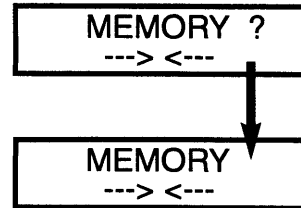


Memory

This TV can store and recall your desired picture and sound control levels into and from the memory.

■ Storing settings into the Memory

Press the **P=P** button while the control display is still on the screen, (approx 5 seconds), followed by the **→←** button. This completes the memorisation.



Normalisation

■ Normalisation to your saved settings

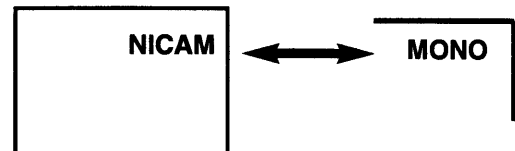
Press the **→←** button to recall the picture and sound control settings stored in the memory.



Stereo Bilingual Reception

■ Stereo/Monaural

Press the **VA/B** button to switch between NICAM/Stereo and Mono on a NICAM or Stereo broadcast.

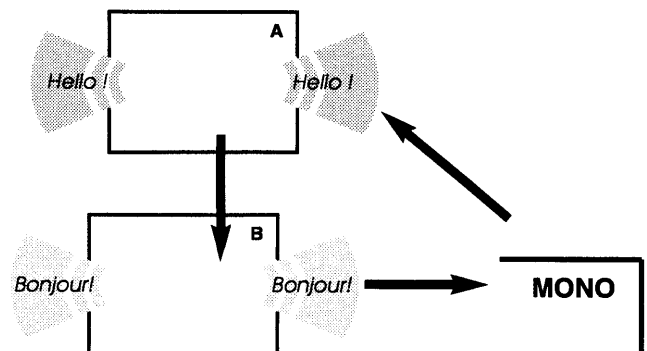


■ Bilingual reception

Press the **VA/B** button to switch between Main sound (A), Sub sound (B) and Mono on a Bilingual NICAM broadcast or between main sound (A) and sub sound (B) on Bilingual broadcast.

Sometimes the transmission is in two languages one on A and one on B you can make your own selection, if not display is Nicam or Mono.

The display appears on the screen for about 5 seconds.



GENERAL OPERATION & CONNECTION OF AV EQUIPMENT

Time Display

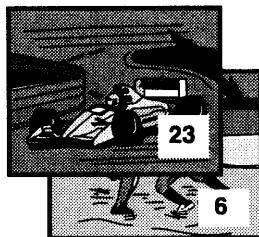
In the TV mode, if the receiving programme has a teletext service when the **⊖** button is pressed, the present time will be displayed on the screen for 5 seconds.

Recall

Press the **□** button to display the programme information for about 5 seconds.

Alternative Programme

Press the **P=P** button and the TV set will alternately select the current programme position and the previous programme position viewed.



Bass Expander

To get an emphasis bass sound, press the **BASS** button. The word "BASS" appears on the sound display.



Using AV Equipment

You can connect a VCR, S-VHS VCR, Satellite Tuner, PAY TV Decoder or Camcorder, as this TV has two Scart terminal on the rear panel.

■ Selection of AV mode

Most AV equipment when connected using a scart socket, will automatically switch into the AV mode (because of the 8 pin function signal in the scart terminal) by pressing the **PLAY** button on your AV equipment. If not, press the **TV/□** button to select the desired AV mode manually.

■ Setting of AV2 input mode

Press the **TV/□** button repeatedly to select the AV2 mode.

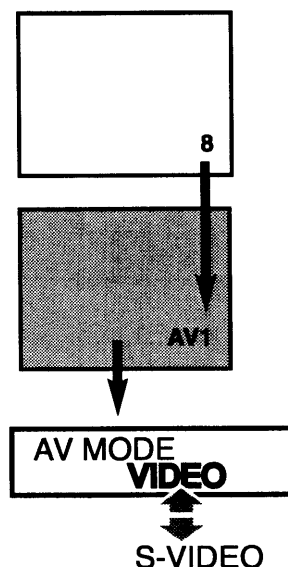
■ Setting of input mode

To obtain the best performance of the equipment connected to the AV1 terminal, you are required to set the correct input mode.

SETTING PROCEDURE

1. Select the AV1 mode by pressing the **TV/□** button.
2. Press the **F** button repeatedly until the word "AV1 MODE" appears on the screen.
3. Select the correct input mode by pressing the **◀ + / ▶ -** buttons.

AV1 MODE VIDEO: Video input mode, for a normal VCR.
AV1 MODE S-VIDEO: S-Video input mode, for a S-VHS VCR



■ Selection of the sound track from the equipment

By pressing the **∇A•B** button repeatedly, you can select the sound track L (left), R (right) or L/R from the equipment connected to the scart terminals or the front AV terminal.

VCR Use

This remote control transmitter has been designed to be used in conjunction with selected **SANYO VCR's**. Some SANYO VCR's may have their own functions, so please refer to the individual instruction booklet when using this remote control to ensure compatibility.

⏻ POWER On/Off :

Use to turn VCR power on and off.

▶ PLAY :

Use to playback the tape.

■ STOP :

Use to stop the movement of the tape.

▶▶ FAST/CUE :

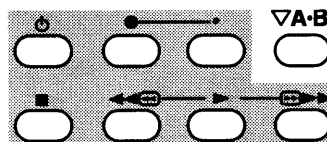
Use to advance the tape at fast speed, or in order to playback the tape at fast speed.

◀◀ REWIND/REVIEW :

Use to rewind the tape or in order to playback the tape in reverse at fast speed.

●—● RECORD :

Use to record on the tape. Press both of the buttons at the same time.



CONNECTION OF AV EQUIPMENT

The following are our recommended standard connections for AV equipment. There are various types of connections depending on the equipment which you have or its use. For further information please consult your local dealer.

If you have a S-VHS type VCR, to obtain the best performance it should be connected to the AV1 terminal which has been specially designed for S-VHS).

Use of a VCR

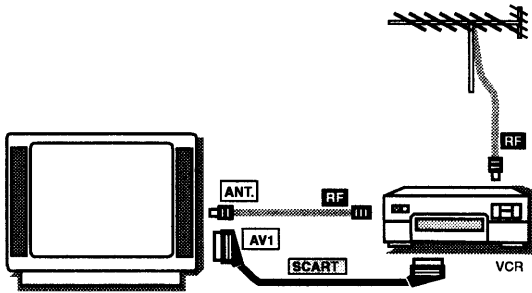
CONNECTION

- ✓ Connect RF cables. Roof aerial to VCR & VCR to TV.
- ✓ Better picture quality can be obtained if you also connect a Scart cable.

ABILITY

- ✓ Watch TV programmes.
- ✓ Watch the playback from the VCR on position 0 or when using a Scart cable, it is on AV mode.
- ✓ Record TV programmes.

☞ When you connect the VCR to the aerial terminal on the TV using an RF cable, it is advisable to tune the VCR channel to the programme position 0, this is useful position for VCR use.



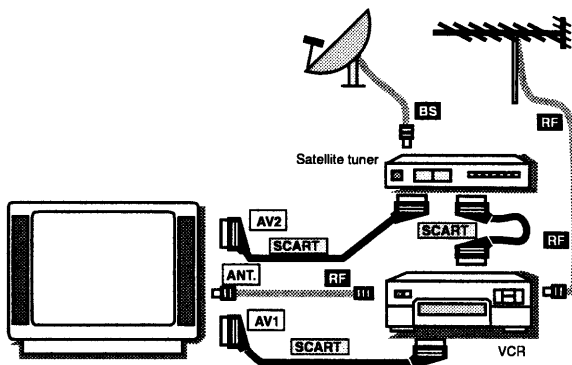
Use of a VCR and Satellite Tuner

CONNECTION

- ✓ Connect RF cables. Roof aerial to VCR & VCR to TV, Dish aerial to satellite tuner.
- ✓ Connect Scart cables. AV1 to VCR & AV2 to satellite tuner & VCR to satellite tuner.

ABILITY

- ✓ Watch TV programmes.
- ✓ Watch satellite programmes on AV2 mode.
- ✓ Watch the playback from the VCR on AV1 mode.
- ✓ Record TV and satellite programmes.



Use of Camcorder or Game Equipment

CONNECTION

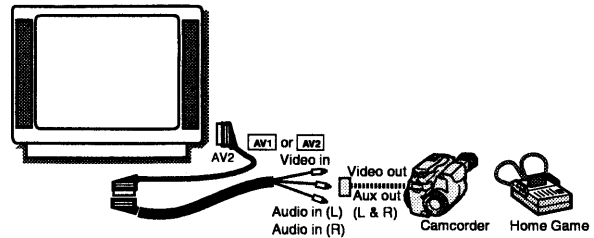
- ✓ Connect an RCA cable from the AV terminal(AV2) to a camcorder or to game equipment.

☞ For monaural units, connect the sound cable to the L-socket.

ABILITY

- ✓ Watch the playback from the camcorder or enjoy playing games on AV2 mode.

☞ You must select the AV2 mode manually.



OTHER FUNCTIONS

This TV has a timer function which will switch your TV on or off after a preset period of time.

Select the following modes by pressing the **●** button repeatedly.

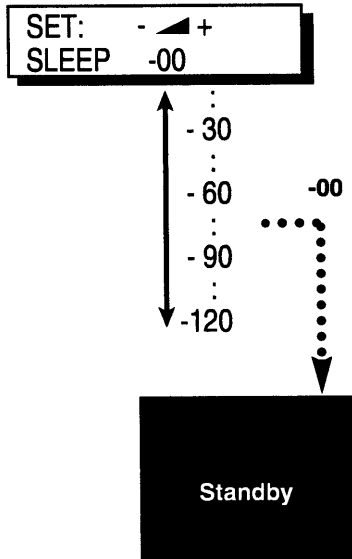
- **Sleep timer setting** You can select a time period from which the set will switch into the standby mode.
- **On-timer setting** You can set a time period from which the set will switch on from the standby mode.

Sleep Timer Setting

1. Press the **●** button once. The words "SET SLEEP" will appear on the screen.
2. Set the time period by pressing the **▲** + or **▼** button. The display changes in 30 minute steps.

If you have set a time, the one minute before the TV switches off the remaining minute automatically appears on the screen.

To cancel the sleep timer, select "-00" by using the above procedure.

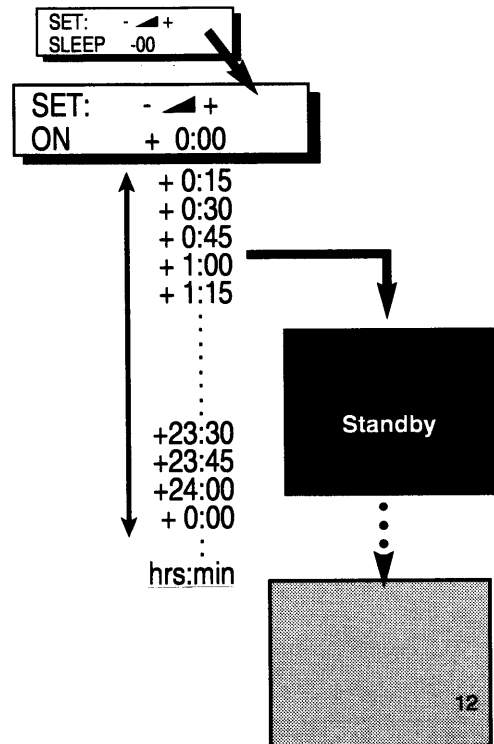


On-Timer Setting

1. Press the **●** button twice. The word "SET ON" will appear on the screen.
2. Set the time period by pressing the **▲** + or **▼** button.
 - ☞ If you press **▲** + or **▼** button, the time changes in 15 minute steps, If you hold down the button it changes more rapidly stepping up or down.
 - ☞ The maximum time delay for the TV to switch on, is 24 hours.
3. Press the **⏻** button to switch into the standby mode.

The TV set automatically switches on when after the time period has elapsed.

To cancel the on-timer, set to "+ 0:00" by pressing the **▲** + or **▼** button or the **↵** button in step 2.



- ☞ The on-screen display will disappear 10 seconds after the last button is pressed.
- ☞ The programme position at which the TV set will switch on by using on-timer function is the last watched position.
- ☞ When the TV set is switched on by using the on-timer function, the TV set will automatically switch into the standby mode after 2 hours if no key control is input.
- ☞ If the TV set is switched off by the **Mains Switch** **Ⓛ** or a power failure occurs while the on-timer or the sleep timer are operating, the timer settings will be cancelled.
- ☞ If you want to see the remaining time which you have set, select the sleep or on-timer mode by pressing the **●** button.

PRESETTING

Up to 100 broadcast channels in your reception area can be stored in the electronic memory.

There are three modes of pre-setting channels as follows:

■ Automatic tuning/sorting

All receivable channels are found and stored automatically, and the specified 6 major stations in the UK are sorted to programme positions 1 to 6.

■ Semi-automatic presetting

Used to preset a receivable channel in any desired programme position.

■ Manual presetting

Manually tune a channel if it cannot be automatically tuned, such as when the signal is poor.

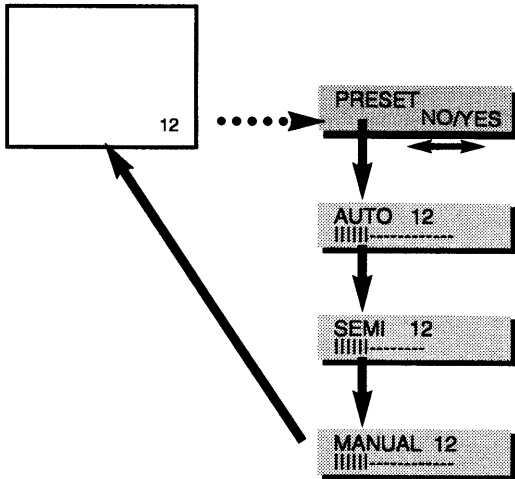
Selection of Presetting Mode

The presetting of this TV set can be performed by using the control buttons on the remote control handset.

To select the presetting mode, press the **F** button repeatedly until the word "PRESET NO/YES" appears on the screen, next select "YES" by pressing the **▲ +** button, and then press the **F** button. The presetting mode screen display appears.

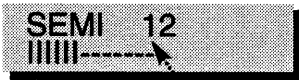
Each time the **F** button is pressed, the tuning mode will change as illustrated.

If you select "YES" but do not press the **F** button within 5 seconds, the mode automatically changes to the normal TV mode.



On-Screen Display in the Presetting mode

Presetting Mode: Auto Tuning/Sorting, SEMI, MANUAL



Programme position: 0-99

Tuning Bar

Automatic Tuning/Sorting

This function automatically finds and stores all the receivable stations. The programme positions 1 to 6 are especially prepared for the following major stations in the UK.

- Programme position 1 : BBC1
- Programme position 2 : BBC2
- Programme position 3 : ITV
- Programme position 4 : CH4
- Programme position 5 : CH5
- Programme position 6 : SKY

If any of these channels are not available in your reception area, then that programme position will be left empty. The remaining stations will be stored from programme position 7 in sequence as found.

1. Press the **F** button repeatedly until the word "PRESET NO/YES" appears on the screen.
2. Select "YES" by pressing the **▲ +** button.
3. Press the **F** button once to select the automatic presetting/sorting mode. The words "Auto Tuning/Sorting" appears on the screen.
4. Press the **▲ +** button to begin automatic presetting and sorting.

After all receivable channels have been found and stored, the TV set automatically returns to programme position "1".

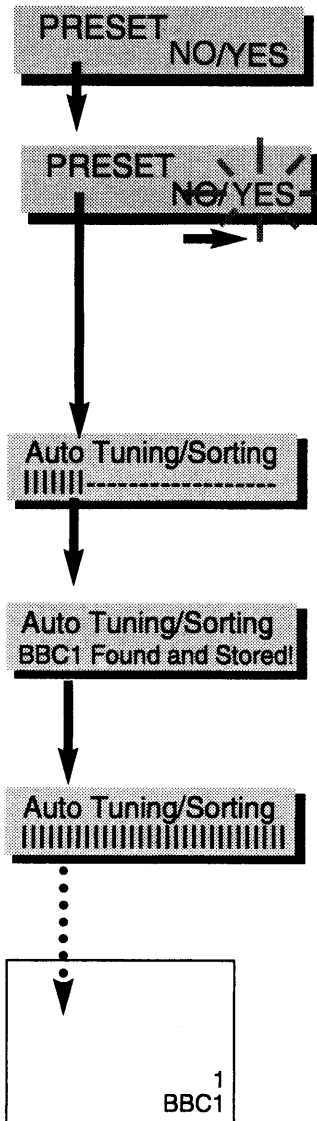
When one of the 6 major stations is selected, the programme ID (Identification) is displayed together with the programme number on the screen automatically for about 5 seconds.

The Programme ID display and the sorting function may not operate properly under the following conditions.

- The reception of a weak signal condition.
- The reception of a station which does not have a teletext service.

You can change the order of stored station, by using the channel swapping function, refer to page 11.

The automatic tuning/sorting operation can be cancelled at any time by pressing the **F** button.



This message will appear for 2 seconds when one of the specified 6 stations is found.

PRESETTING

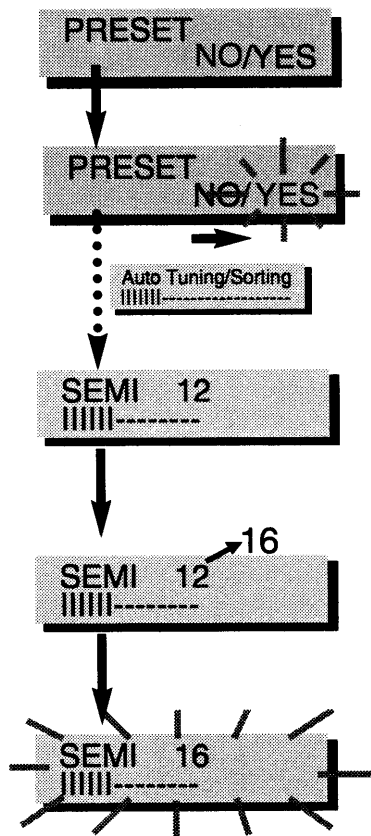
Semi-Automatic Presetting

1. Press the **F** button repeatedly until the word "PRESET NO/YES" appears on the screen.
2. Select "YES" by pressing the **▲ +** button.
3. Press the **F** button twice to select the Semi-automatic presetting mode. The word "SEMI" appears on the screen.
4. Press the **▲ + / ▼ -** buttons, to begin searching. When a station is found, searching automatically stops.
5. Select your desired programme position where you wish the station to be stored using the **P▲** or **P▼** buttons.
6. Press the **→•←** button to store in the memory.

Repeat steps 4 to 6 for other desired channels.

To return to the normal TV mode, press the **F** button twice.

This completes the semi-automatic presetting.



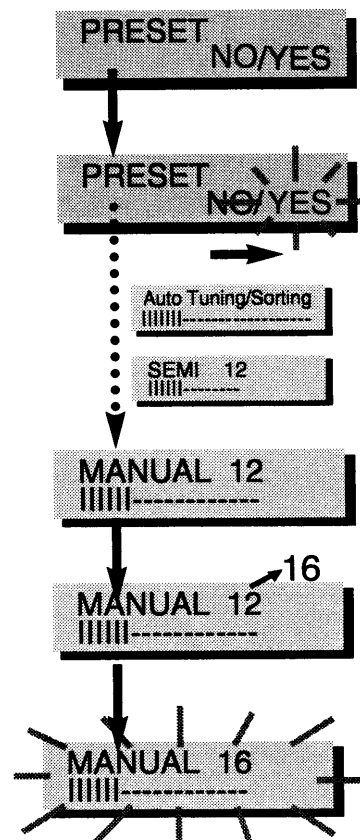
Manual Presetting

1. Press the **F** button repeatedly until the word "PRESET NO/YES" appears on the screen.
2. Select "YES" by pressing the **▲ +** button.
3. Press the **F** button three times to select the manual presetting mode. The word "MANUAL" appears on the screen.
4. Press and hold the **▲ + / ▼ -** buttons, to begin searching. Release the button when a station is found.
5. Select your desired programme position where you wish the station to be stored using the **P▲** or **P▼** buttons.
6. Press the **→•←** button to store in the memory.

Repeat steps 4 to 6 for other desired channels

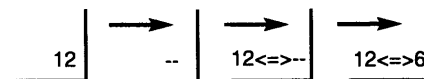
To return to the normal TV mode, press the **F** button once.

This completes the manual presetting.



Channel Swapping

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



1. Select one of TV channels you wish to swap by using the **P▲**, **P▼** or using the (0-9) numeric buttons.
2. Press the **-/-** button. "--" appears on the screen.
3. Press the **P=P** button. Channel swapping mode is displayed.
4. Enter the other programme number by using the (0-9) numeric buttons with two digit numbers.

For example, Selection of programme position 6, first enter 0 and then enter 6. Selection of programme position 12, first enter 1 and then enter 2.

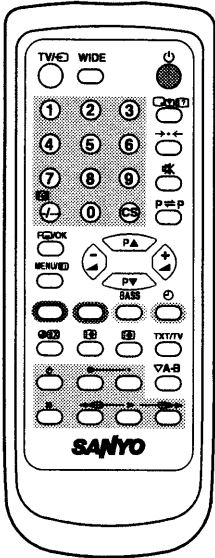
The two TV channels will now have changed places.

Repeat steps 1 to 4 for all the other TV channels you want to swap.

The above procedure must be done while the on-screen display is still on the screen.

TELETEXT

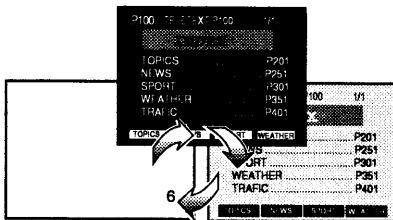
Teletext Controls



Symbol	Function
TXT/TV	Teletext/Mix/TV mode switch
0-9	0-9 numeric buttons
P▼ P▲	Page down/up
P⇐P	Previous viewed page selection
[I]	Index page selection
[H]	Hold
[S]	Size
[X]	Cancel
[E]	Sub code entry mode
[R]	Reveal
[Red]	Red
[Green]	Green
[Yellow]	Yellow
[Blue]	Blue

Switching to the Teletext mode

Press the **TXT/TV** button, and the screen changes as illustrated.



Picture & Sound in teletext mode

Picture and Text brightness controls in the teletext mode.
You can not adjust the picture or teletext brightness in the teletext mode. You must first switch back to the TV mode and then adjust the picture control or set the teletext brightness level.

How to set the teletext brightness level

1. Press the **F** button repeatedly in the TV mode until the word "TEXT BRIGHT" appears on the screen.



2. Press the **+ / -** button to select one of the 3 teletext brightness levels either MAXIMUM, CENTRE or MINIMUM.
3. Confirm the selected teletext brightness level by switching to the teletext mode by pressing the **TXT/TV** button.

Sound control in the teletext mode.
Only sound volume and muting can be controlled in the teletext mode.

Page Selection

Direct page access

A page can be selected with the **0-9** Numeric buttons. eg. To display page 301, press buttons 3, 0 and then 1. The selected page number will appear on the screen.

Up/down page access

When a page is displayed on the screen and you want to read the following page number, press the up (**P▲**) button instead of selecting the new page number. To read the previous page, press the (**P▼**) button.

P▲ : P301 → P302 → P303 P399 → P400 ...
P▼ : P301 → P300 → P299 → P298 P201 ...

Hold the button for rapid page change.

Coloured Page Access

Press one of the **4 coloured buttons** to select the topics shown at the bottom of the text screen.

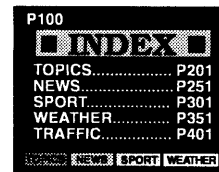
For example the Red topic can be selected using the **Red button**, the Blue topic by the **Blue button**, and so forth with the other colours.

You can select the previous viewed pages up to 4 pages, by pressing the **P⇐P** button repeatedly.



Index Page Selection

Press the **[I]** button to select one of the teletext index pages.



Hold

Press the **[H]** button to stop sub pages changing.

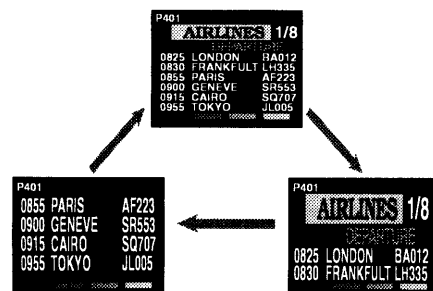
The word "HOLD" will appear instead of the page number.

Some teletext pages are made up of several sub pages. These sub pages are automatically changed. Sub page is shown as P4/8 (sub page 4 of 8 pages) the location on the text page depends on the text service.



Double Letter Height

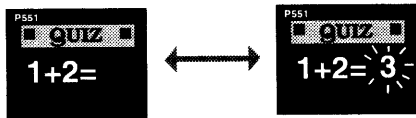
Either the top half or the bottom half of the page can be expanded to fill the whole screen by pressing the **[E]** button. Each time the button is pressed, the display changes as illustrated.



TELETEXT

Displaying Concealed Information

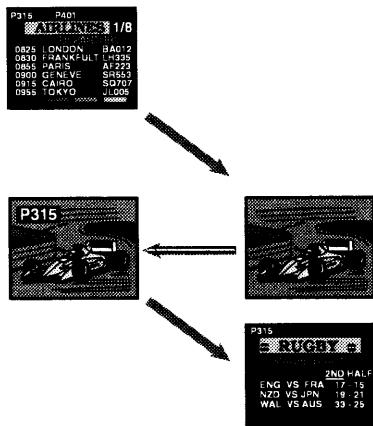
Press the **[EX]** button to reveal hidden items on the text page. Some pages such as quiz pages have the answers hidden. The button may have to be held to keep the answer on the screen, or pressed again to remove the answers.



Viewing TV while searching for a page

Sometimes the page access can take some time. While waiting you can view the TV picture by pressing the **[EX]** button.

1. Enter the new page number. Press the **[EX]** button.
2. When the page is found, the page number will appear over the TV picture.
3. Press the **TXT/TV** button to view the teletext page.



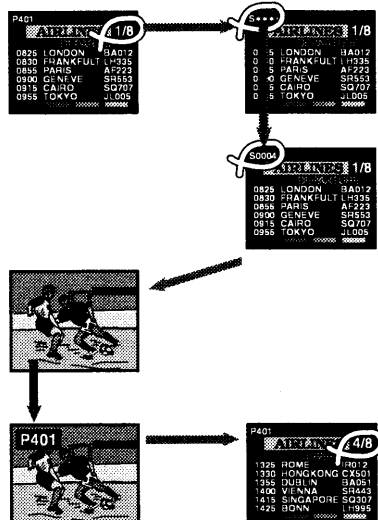
Sub Page Access

With a text page selected which has sub pages, you may wish to read a known sub page number.

1. Press the **[EX]** button. "S****" will be displayed instead of the page number.
 2. Enter the sub page number by using the (0-9) buttons.
- For example, to enter the sub page 4, press buttons 0, 0, 0 and 4.
3. Press the **[EX]** button to return the normal TV picture.

Immediately the requested sub-coded page is found, the page number will appear over the TV picture.

4. Press the **TXT/TV** button to view the sub-coded page.



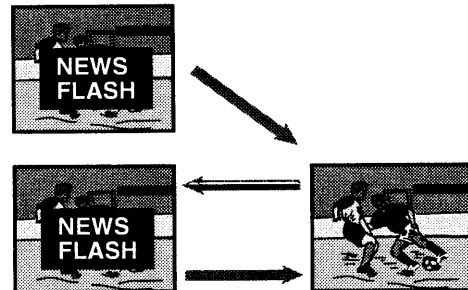
News Flash

Select the news flash page.

1. Press the **[EX]** button to return to the normal TV picture.

Immediately the news comes in, the word eg "News Flash" and the news will appear over the normal TV picture.

2. If you want to make the news disappear, press the **[EX]** button.



Updated Pages

Some text pages are updated such as latest sports scores or traffic news.

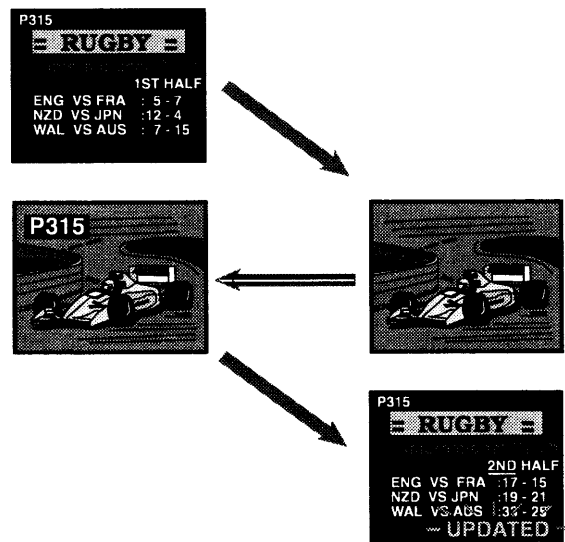
Select a latest page.

1. Press the **[EX]** button to view the TV picture.

When the page is updated the page number will appear over the normal TV picture.

2. Press the **TXT/TV** button to view the updated page.

If the page has sub pages the number will appear when the sub page is changed.



Cancel

When you press the **[EX]** button, the TV picture appears on the screen. Whilst in this mode you can not select another TV programme. You should first switch back to TV reception by pressing the **TXT/TV** button if required.

Teletext reception

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

SPECIFICATIONS

Scart Specifications

TV Specifications

The specification of the Scart sockets are as follows.

AV1 Terminal

Pin 1	Audio output (right channel)	0.5V/ 1 K ohm
Pin 2	Audio Input (right channel)	0.5V/10 K ohm
Pin 3	Audio output (left channel)	0.5V/ 1 K ohm
Pin 4	Audio earth	
Pin 5	Earth (blue)	
Pin 6	Audio Input (left channel)	0.5V/10 K ohm
Pin 7	Blue (B) input	0.7Vpp/75 ohm
Pin 8	Remote switch input	L:0-2V H:10-12V
Pin 9	Earth (green)	
Pin 10		
Pin 11	Green (G) input	0.7Vpp/75 ohm
Pin 12		
Pin 13	Earth (red)	
Pin 14	Earth	
Pin 15	Red (R) or chrominance input	0.7Vpp/75 ohm
Pin 16	Fast blanking	L:0-0.4V H:1-3V
Pin 17	Earth(video)	
Pin 18	Earth	
Pin 19	Video output	1 Vpp/75 ohm
Pin 20	Video/sync. or luminance input	1 Vpp/75 ohm
Pin 21	Connector shield	

AV2 Terminal

Pin 1	Audio output (right channel)	0.5V/ 1 K ohm
Pin 2	Audio Input (right channel)	0.5V/10 K ohm
Pin 3	Audio output (left channel)	0.5V/ 1 K ohm
Pin 4	Audio earth	
Pin 5		
Pin 6	Audio Input (left channel)	0.5V/10 K ohm
Pin 7		
Pin 8	Remote switch input	L:0-2V H:10-12V
Pin 9		
Pin 10		
Pin 11		
Pin 12		
Pin 13		
Pin 14	Earth	
Pin 15		
Pin 16		
Pin 17	Earth(video)	
Pin 18	Earth	
Pin 19	Video output (Monitor out)	1 Vpp/75 ohm
Pin 20	Video input	1 Vpp/75 ohm
Pin 21	Connector shield	

Common Specification

Power source	AC 220~240V 50Hz
Television system	System I
Colour system	PAL
Receiving channel	UHF: 21-69
Aerial input impedance	75ohm
Rear AV terminal 21-Pin Terminal	AV1: CENELEC Standard (S-Video input) AV2: CENELEC Standard
Sound output (Cont.)	5 watts x 2
Picture tube (Diagonal) (cm)	59cm (CE21BN2-B) 63cm (CE25BN2-B) 70cm (CE28BN2-B)
(Visible picture diagonal)(cm)	55cm (CE21BN2-B) 59cm (CE25BN2-B) 66cm (CE28BN2-B)
Dimensions (W x H x D mm)	596 x 465.5 x 483 (CE21BN2-B) 680 x 535.5 x 449.5 (CE25BN2-B) 740 x 585 x 494 (CE28BN2-B)
Weight (kg)	21.5 kg (CE21BN2-B) 25.5 kg (CE21BN2-B) 31.6 kg (CE21BN2-B)

SERVICING & HELPFUL HINTS

Servicing

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

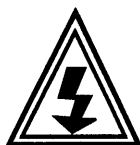
Removal of the cabinet cover may expose you to dangerous voltages. Refer all servicing to qualified service personnel.

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.

When replacement parts are required, have the service technician verify that the replacements he uses have the same safety characteristics as the original parts. Use of manufacturers specified replacements can prevent fire, shock or other hazards.



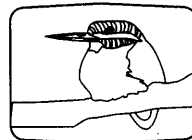
Helpful Hints



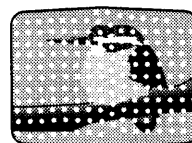
- **NO PICTURE, NO SOUND**
 - Check if TV is plugged in.
 - Try a different channel, if OK, probably station trouble.



- **POOR PICTURE, SOUND OK**
 - Adjust BRIGHTNESS control.
 - Adjust FINE TUNING control.
 - Check aerial connections.

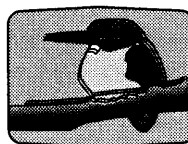


- **NO COLOUR, PICTURE OK**
 - Adjust COLOUR control.
 - Adjust FINE TUNING control.
 - Is the programme in colour?



- **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.

WARRANTY TO CUSTOMER

Sanyo U.K. Sales 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 or 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 your 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 inguarantee 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 UK Sales,
(A Division of SANYO Europe Ltd.),
Sanyo House,
Otterspool Way,
Watford, Hertfordshire, WD2 8JX.
Tel: 01923 246363