

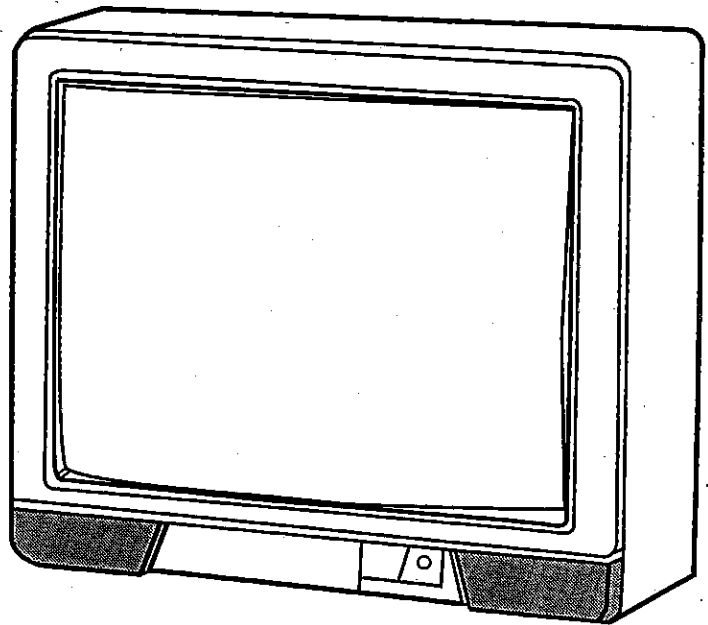
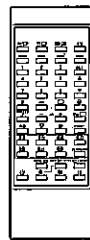
SANYO

**Instruction
Manual**

**Colour
Television**

Model CPP2186TX

**STEREO
TELETEXT
S-TERMINAL**



Electric Mains

The TV receiver is manufactured to utilize an AC VOLTAGE SOURCE of 240 Volts, 50Hz.

Safety Precaution

When the TV receiver is not to be used for an extended period of time, it is advisable to disconnect the AC power cord from the AC outlet.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

High voltages are used in the operation of this TV set.

Do not remove the back from your set. Refer servicing to qualified service personnel.

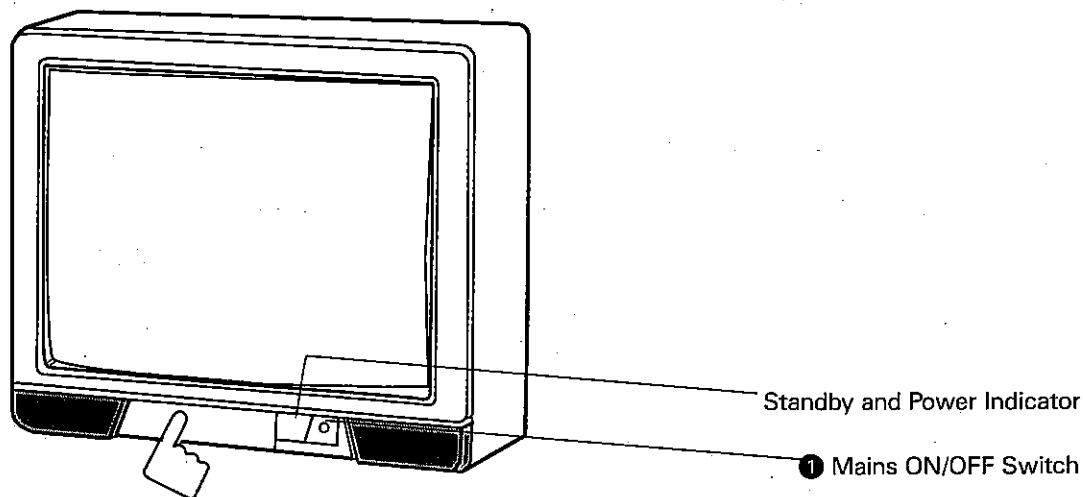
Aerial Connection

- Connect the cable with a plug from a UHF (or VHF) aerial to the 11 aerial socket on the cabinet back.
- For all aerial circuit problems please consult your local dealer.

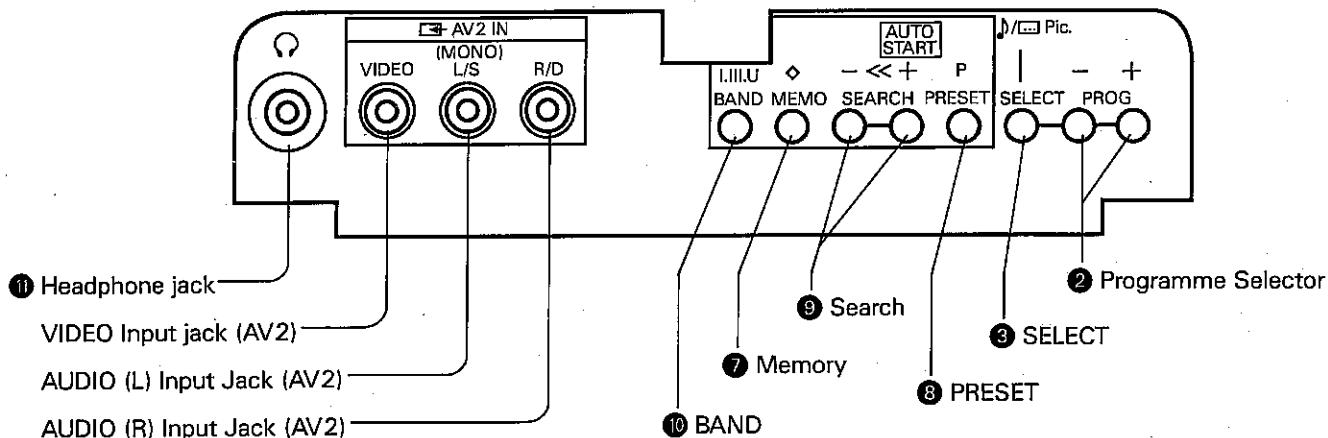
IMPORTANT NOTE:

To avoid damage by lightning, disconnect the mains and aerial plug from the TV set (concerns individual antenna installations).

Controls



To open the door, press and release the center of the top of edge.



Operation of the Receiver

Switching on/off

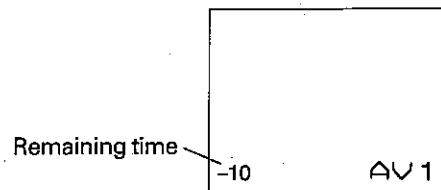
- **To turn on the TV:**
Press Mains ON/OFF switch 1.
- **To turn off the TV:**
Press the Power ON/OFF button 1-1 on the remote control transmitter, and the TV changes to the standby mode. During the standby mode, the standby and power indicator illuminates more brightly than during the power-ON mode. Press this button 1-1 to turn off the unit for short periods of the time.
- **To turn on the TV from the standby mode:**
Press one of these button.
 - Power ON/OFF 1-1 (Remote control transmitter)
 - Programme Selector 2-1 (Remote control transmitter)
 - Programme Selector 2
- **To cut off the mains power completely:**
Press the Mains ON/OFF switch 1.

Important! Be sure to set the Mains ON/OFF switch 1 to the off position, if the power failure occurs while viewing.

• AUTO SHUT OFF

This TV set incorporates the AUTO SHUT OFF function. Even if the TV is left on after you have gone to sleep, the TV set changes to the standby mode within 10 minutes after all broadcasts have ended.

Note: AUTO SHUT OFF also functions for the AV mode even when there is no signal being transmitted. The remaining time for AUTO SHUT OFF is displayed on the screen.



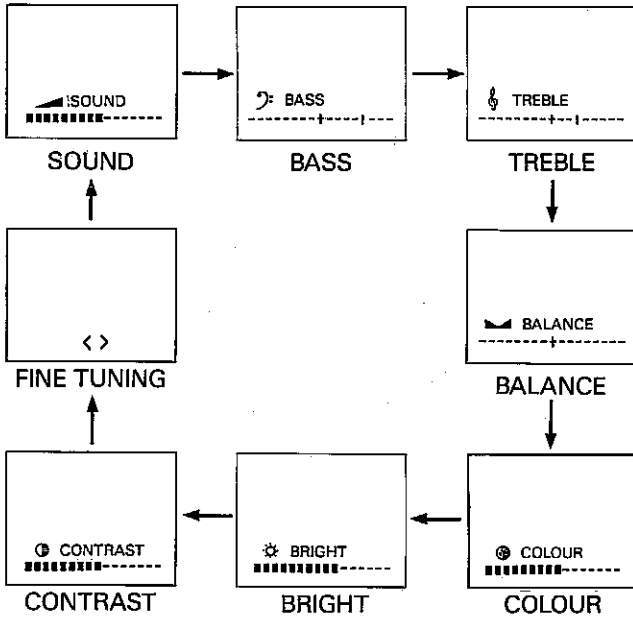
Programme selection

Press the right side (+) of the programme selector 2 of the TV set, and the TV set will step up to the next station, i.e; 1, 2, 3 ... 29, VCR1, VCR2, VCR3, 1, 2, 3 ... Press the left side (-), and the TV set will step down to the previous station.

(Operation of the Receiver)

Control Setting

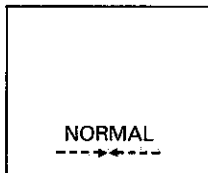
- 1 Select the control function (Sound volume, Bass, Treble, Balance, Colour, Bright, Contrast, Fine tuning) by pressing control selector button ③. Each time the control selector is pressed, The control function changes as follows.



- 2 Adjust the Sound volume, Bass, Treble, Balance, Colour, Bright, Contrast or Fine tuning to your desired level by pressing the programme selector button ② (Control setting button).

7.... Memory ◇

This function lets you store the settings (for colour, brightness, contrast, sound volume, bass, treble, and balance) in memory for both picture and the sound. Simply adjust the picture and sound as desired, then press the Memory ◇ ⑦ button. To recall these levels from memory, press the Normalization →•← ⑩ button on the remote control unit.



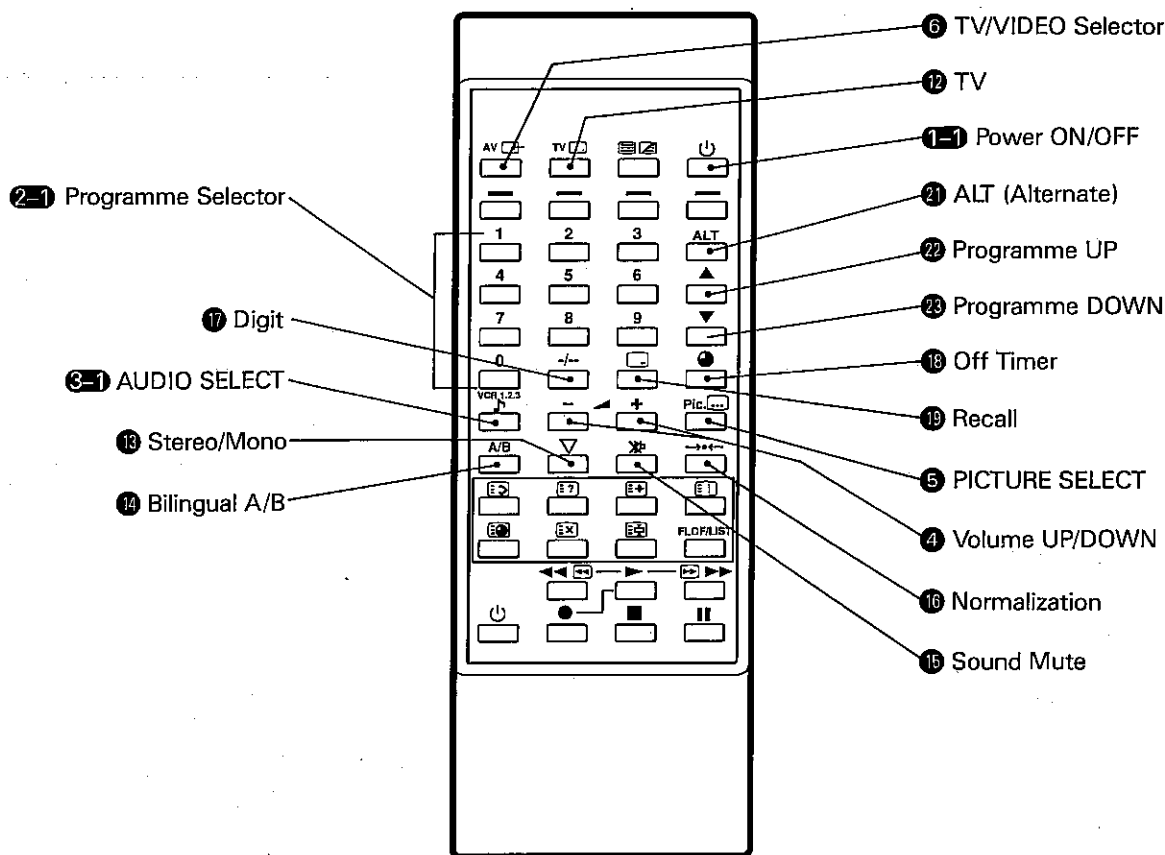
When Memory button is pressed, "NORMAL" is displayed.

11.... Headphone Jack 🎧

Insert the headphones plug into this jack to listen to either stereo or monaural sound via a headphones set.

Note: No sound will be heard from the speakers when the headphones plug is connected to this jack.

Remote Control Operation



Main ON/OFF switch of the TV set must be in "ON" position before remote control operation is possible.
Point transmitter towards the TV set, then press the appropriate function button for the following controls.

1-1 Power ON/OFF

Press this button to switch TV set on.
To switch TV set off, press again.

2-1 Programme selection

- 17 Digit
- 22 Programme UP
- 23 Programme DOWN

For selection of programme position 0~9, press the corresponding button. If the required programme is more than 10, for example 23, first press Digit button 17 and enter 2, then 3. Press the UP button 22 once to increase the programme position.

Press the DOWN button 23 once to decrease the programme position.

■ You can select any desired programme number (0~9) directly from standby mode.

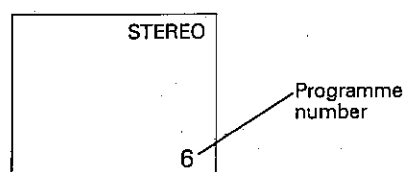
- e.g. To directly select programme number 2 from standby mode, press the "2" button. The set is then switched on, and the picture of programme number 2 appears.

21 ALT (Alternate)

Press the ALT (Alternate) button 21 and the TV set will alternately select the previous programme and the present channel. For example, now you are watching programme "4" but you watched programme "2" previously. If you press the ALT button, programme "2" immediately appears then programme "4" is stored in the memory.

19 Recall

To display the on-screen indications, press this button.
The display disappears after five seconds.

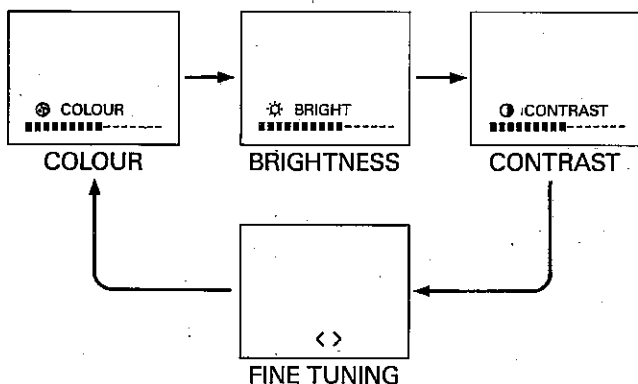


(Remote Control Operation)

Picture adjustments

1 Select the picture control function by pressing PICTURE SELECT 5 button.

- Each time PICTURE SELECT 5 button is pressed, the control function changes as follows:



2 Adjust the colour intensity, brightness, contrast or fine tuning by pressing Volume 4 button.

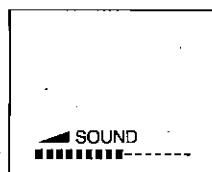
Note: Normally fine tuning is not required for this TV. However, in some case (such as radio interference) picture may become more clear by detuning from the best tuned frequency.

In such case, you can use this fine tuning to eliminate some interference beat pattern.

Sound adjustments

- To adjust the sound volume:

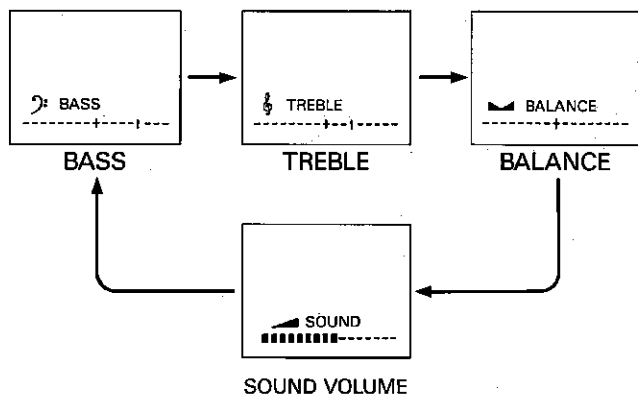
Press ▲ (up) or ▼ (down) volume 4 button.



- To adjust the bass, treble, or balance.

1 Select the control function by pressing AUDIO SELECT 3-1 button.

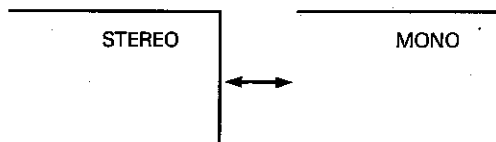
- Each time AUDIO SELECT 3-1 button is pressed, the control function changes as follows;



2 Adjust the bass, treble, or balance by pressing Volume 4 button.

13... Stereo/Mono ▽

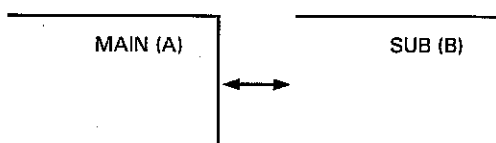
- When receiving the stereo broadcast, "STEREO" is displayed. If the sound of a stereo broadcast is not clear due to interference or poor reception, select the MONO position by pressing this button.



14... Bilingual A/B

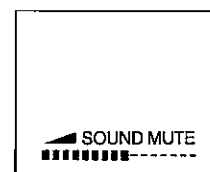
When receiving the bilingual broadcast, "MAIN (A)" is displayed.

You can select the main or sub language with this button.



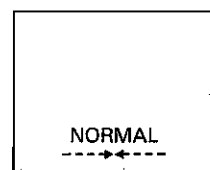
15... Sound mute ✕

Should you wish to mute the sound (e.g. While talking on the telephone), press this button once. To switch the sound back on, press it again.



16... Normalization →•←

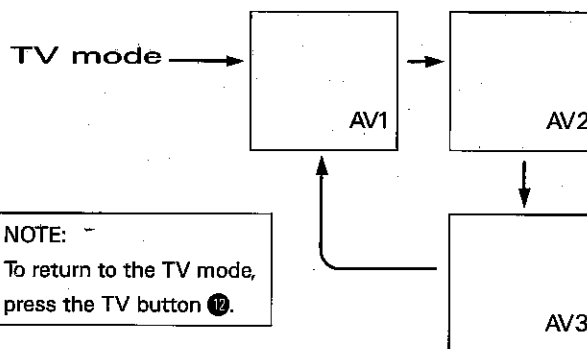
Press this button to recall the picture and sound settings which you stored using the Memory 7 button.



6... TV/VIDEO Selector

To watch the television programmes leave this switch in the TV mode. When this switch is set to the VIDEO mode you can enjoy the playback from the VCR or other AV equipment connected to the AV input terminals.

Each time the TV/VIDEO Selector 6 is pressed, the AV position changes as follows:



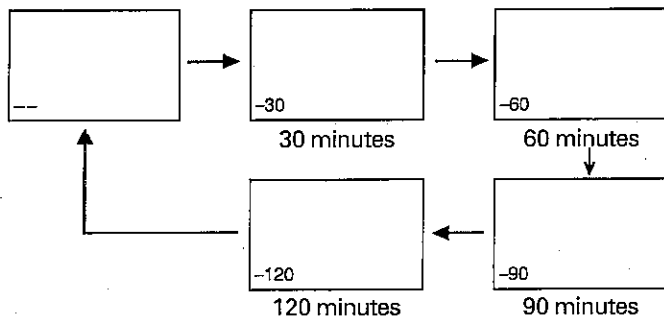
NOTE: To return to the TV mode, press the TV button 12.

(Remote Control Operation)

18 Off timer

After a set time has elapsed, the power of the TV receiver is switched off automatically.

- Each time Off timer button 18 is pressed, the set time changes as follows:



With the off timer being set and the channel display reset, the remaining time is displayed by pressing the off timer button again.

When the button is pressed again within three seconds after the button was first pressed in above manner, the time is set to an upper time which is most close to the remaining time.

- Just one minute before switching off, "-01" and programme number you are watching are displayed on the screen.
- The timer setting will be cancelled if the power is switched off.

Battery Installation (Remote Control Transmitter)

- 1 Remove the battery cover by sliding.
- 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.

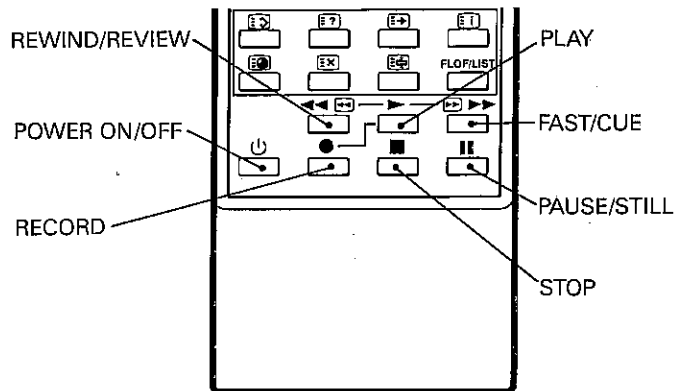
Note: Replace the batteries when the TV set is showing the following symptoms:

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

VCR USE

Note: This remote control transmitter has been designed especially 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 with SANYO VCR's to ensure compatibility.



POWER ON/OFF BUTTON

Use to turn VCR power on and off.

PLAY BUTTON

Use to playback the tape.

STOP BUTTON

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.

PAUSE/STILL

Use to temporarily stop (Pause) the tape when recording, or in order to see a still image during playback.

RECORD

Use to record on the tape.

Press and hold down the RECORD button, then press the PLAY button.

Pre-Setting of Stations

Up to 32 broadcast stations in your reception area can be stored in the electronic memory.

There are two ways of presetting as follows:

Automatic presetting — the basic way

All receivable channels are automatically tuned in and memorized in consecutive program positions.

Note: Programme position 1 to 29 can be automatically preset. VCR1, VCR2 and VCR3 positions cannot be automatically preset.

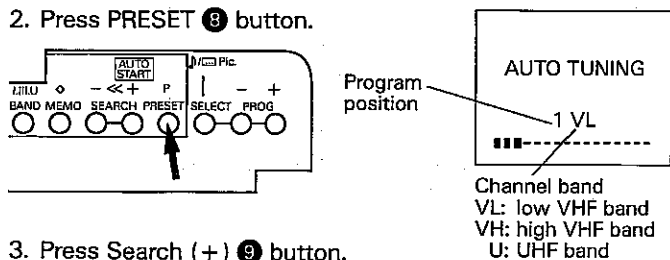
Manual presetting

Use to preset a receivable channel in any desired program position, e.g. the position with the same number as the channel.

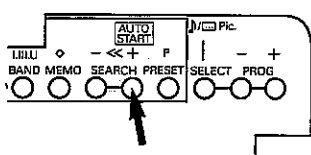
Automatic presetting

1. Select any programme position from 1 to 29.
(Automatic presetting is not possible from the VCR1, VCR2, or VCR3 position.)

2. Press PRESET **8** button.



3. Press Search (+) **9** button.



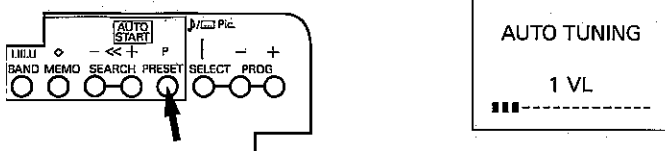
The channels are preset in consecutive positions beginning from the program position "1".

After all available channels (position 1 to 29) have been preset, the unit returns to the position "1".

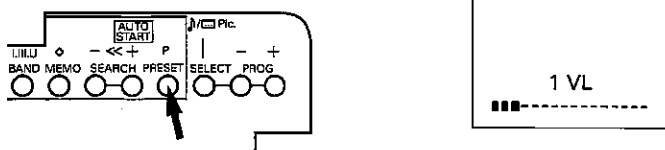
Note: To cancel automatic presetting midway, press the PRESET **8** button again.

Manual presetting

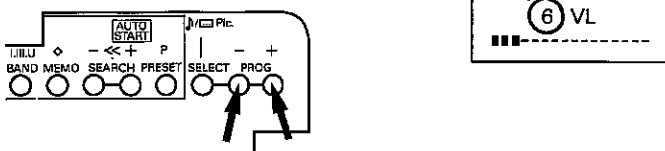
1. Press PRESET **8** button.



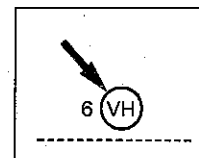
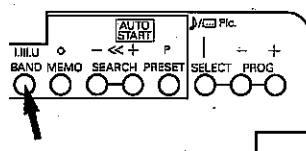
2. Press PRESET **8** button again.



3. Press the programme selector **2** or **2-1** to select the desired programme position.



4. Press BAND selector **10** to select the channel band.

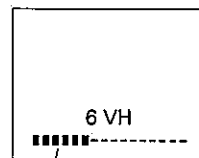
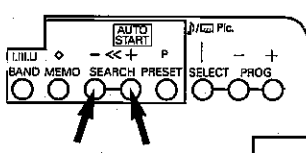


When BAND selector is pressed, the frequency will be set to the lowest frequency in the set band.

- Channels band VL, VH and U are for the following channel groups.

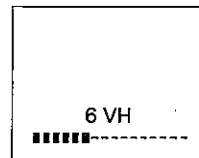
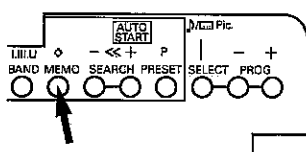
Band I	VHF Low Channels	0, 1, 2, 3, 4, 5
Band III	VHF High Channels	5A, 6, 7, 8, 9, 10, 11
Band U	UHF Channels	28 to 69

5. Press and hold Search **9** (+) or (-) button until the desired station appears.



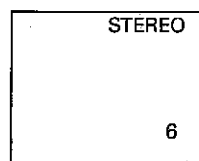
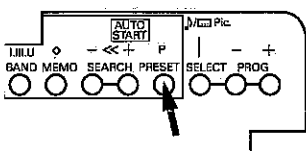
The number of upright segments increases for a higher-frequency channel.

6. Press \diamond (Memory) button **7**.



7. Repeat steps 3 to 6 for other desired channels.

8. Press PRESET **8** button.
This completes the presetting.



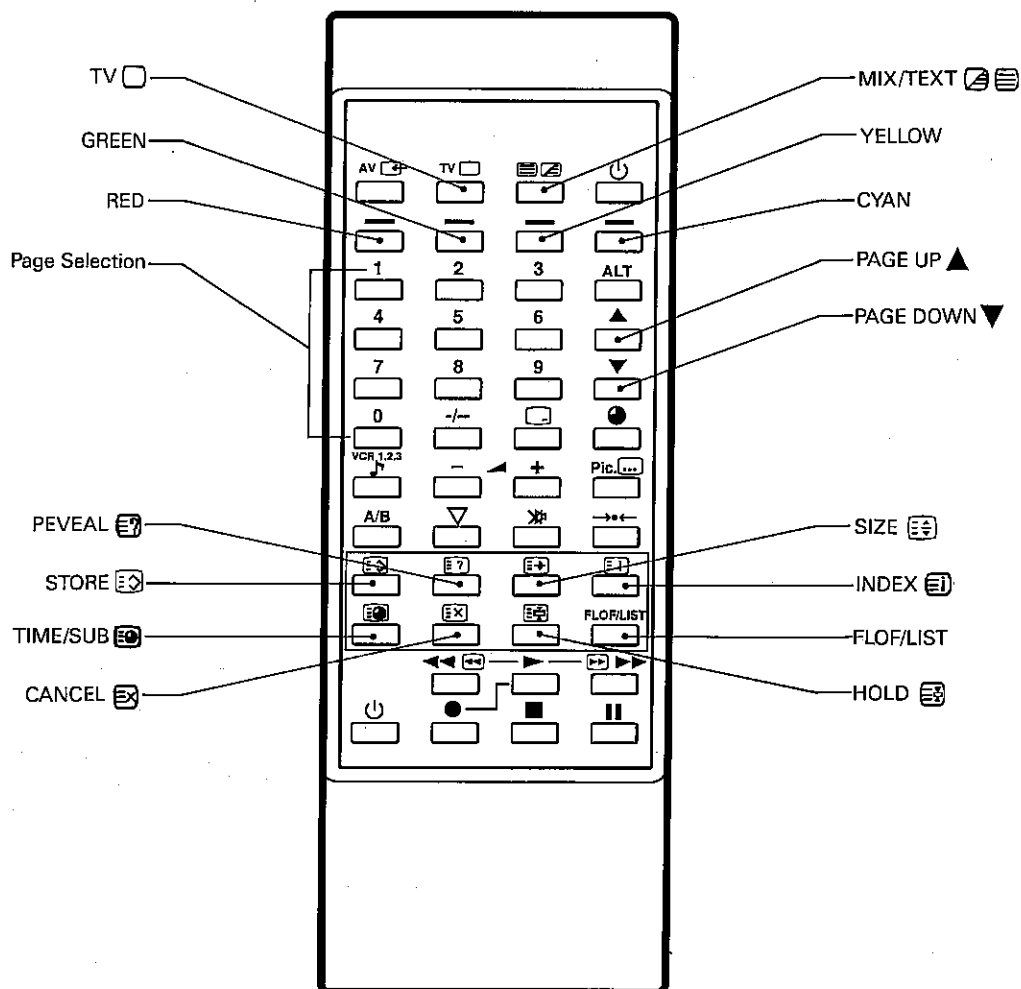
Memory Copy

This TV tuning system has another advanced feature called "memory copy".

For example, if you wish to copy the TV channel in the programme position "2" into the programme position "6":

1. Select the programme position "2".
2. Press PRESET **8** button.
3. Press PRESET **8** button once again.
4. Press "6" button of the programme selector **2-1**.
5. Press \diamond (Memory) button **7**.
6. Press PRESET **8** button.

TELETEXT USE



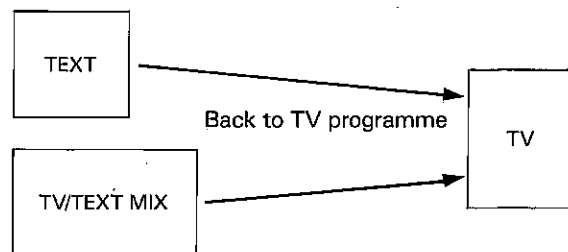
■ Switching to the Teletext mode

Press the MIX/TEXT button, then the screen changes as follows:



■ Switching to the TV mode

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



■ Page Selection

DIRECT PAGE ACCESS

A page can be selected with the 0~9 buttons. For example, to display page 120 press buttons 1, 2 and 0. The selected page number will appear on the screen.

UP-DOWN PAGE ACCESS

If a page is displayed on the screen and you want to read the following page, you can press the UP button instead of selecting the page number. To bring back the previous page press the Down button. If you keep the UP or DOWN button pressed the page numbers will run up or down until you release the button.

The page number will change as follows by pressing the UP-DOWN button.

(▲) P200 — P201 — P202 — — P299 — P200 — P201

(▼) P200 — P299 — P298 — — P201 — P200 — P299

Note: In the FLOF/LIST mode, you can access the pages directly.

(TELETEXT USE)

■ Sub-coded page access

For Teletext information which is longer than one page it may take some time for the automatic changing of sub pages to reach the sub page you require. It is possible, however, to enter the sub-page you require and then continue watching the normal television picture until the correct sub-page is reached.

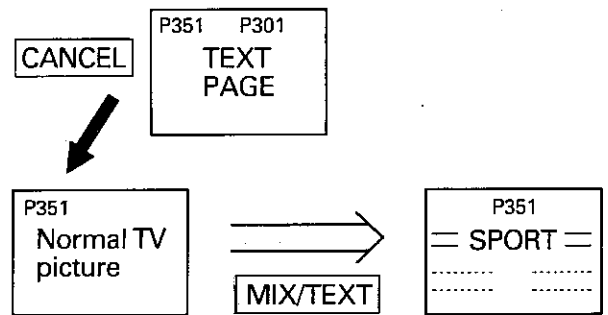
- A. Select the required page using the page selection button.
- B. Press the TIME/SUB button. The character "S" and sub code digits "*****" will be displayed in the top left of the screen.
- C. Enter the desired sub-page number before figure "S*****" disappears. For example, if you select sub-page 10 you must press 0, 0, 1 and 0 button.
Then the character "+" is displayed following the page number.
- D. Press the CANCEL to return to normal television programme. When the correct sub-page is reached the page number will appear on the normal television picture.
- E. Press the MIX/TEXT button to display the stored page.
- F. To clear the sub-coded page you must enter a new page number.

Note: It is not possible to select another television station during a sub-page access operation.

VIEWING TV WHILE SEARCHING FOR A PAGE

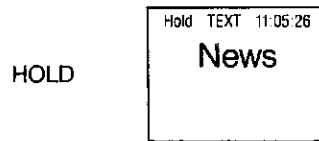
In some cases it can take some time to look for a page. In the interval you can view TV by pressing the CANCEL button. When the page arrives, the page number will appear on the normal TV picture. Press MIX/TEXT button to display the page.

Note: When you press the CANCEL button, the green ">" mark is displayed at the top right of the screen. Whilst this ">" mark is displayed you can not select another TV channel.



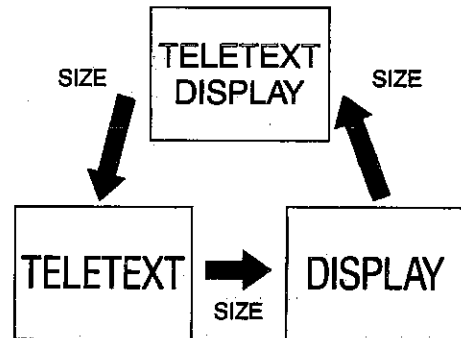
■ HOLD

If the teletext information is longer than one page, the pages are automatically changed. The automatic page changing can be cancelled by pressing the HOLD button. The word "HOLD" then appears on the top of the screen. Normal operation is restored by pressing the HOLD button again or entering a page number.



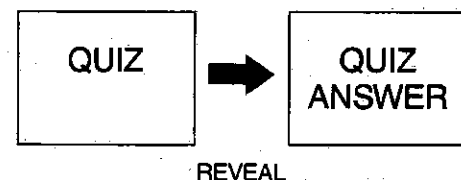
■ DOUBLE LETTER HEIGHT

Either the top or bottom half of the display can be expanded by pressing the SIZE button. When the SIZE button is pressed for the first time, the top half of the display is expanded. If it is pressed once again, the bottom half of the display is expanded. To return the display to normal-sized characters, this button should be pressed a third time.



■ DISPLAYING CONCEALED INFORMATION

In one of the lists of contents you may find the heading "QUIZ" (concealed information). If you have selected the relevant page number questions will appear on the screen. You can find out the correct answer to the questions by pressing the REVEAL button. Press the REVEAL button again to make the answers disappear.



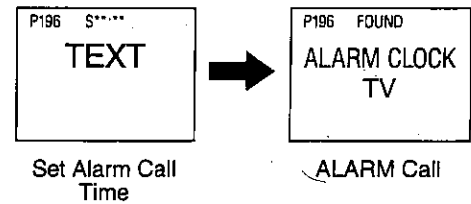
(TELETEXT USE)

■ ALARM CLOCK

The Alarm Clock Function can be set to operate at any requested time reminding viewers to carry out a specific task, i.e. making a phone call at a specified time.

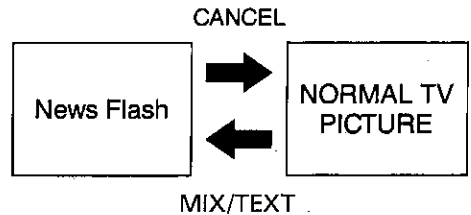
First select either page 196 (BBC1) or page 296 (BBC2), using the page selection buttons. Press the TIME/SUB button, S**** will appear on the top of the screen. Select the time at which you require the alarm call.

Example, for a call at 8.15 pm, press buttons 2015, watching that S**** changes to S20:15. Then press the CANCEL button to continue watching normal TV programmes. At 8:15 pm the words "ALARM CLOCK" in large letters will appear on the screen. Press the MIX/TEXT button to return to normal teletext operation. It is not possible to select another TV programme when in the CANCEL mode.



■ NEWS FLASH

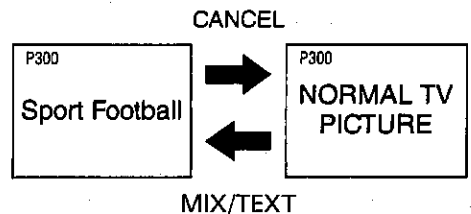
If you select the news flash page and view the TV programme by pressing the CANCEL button, the moment news comes in, the word "NEWS FLASH" and the news appears over the normal TV picture. If you want to make the news disappear press the CANCEL button again. To recall the news press the MIX/TEXT button.



Note: It is not possible to select another TV station during a NEWS FLASH. You should first switch back to TV reception by pressing the MIX/TEXT button. You can, however, change both the picture and sound settings.

■ UPDATED PAGES

There are pages which are updated as events progress, such as sports results, news reports and traffic information. If you have selected one of the above pages from the list of contents and you want to view television but still be kept informed about the other events, press the CANCEL button. The page will disappear and the TV station which will broadcast this will appear in the screen. As soon as this page is updated, the page number will appear on the normal TV picture. To display the updated page on the screen, press the MIX/TEXT button. The page will disappear when the CANCEL button is pressed again.



Note: It is not possible to select another TV station during an UPDATE. You should first switch back to TV reception by pressing the MIX/TEXT button. You can, however, change both the picture and sound settings.

■ FLOF AND LIST (FLOF: Full-level-one feature)

When a broadcasting station provides FLOF service, you can access the text pages you desire quickly and easily.

FLOF

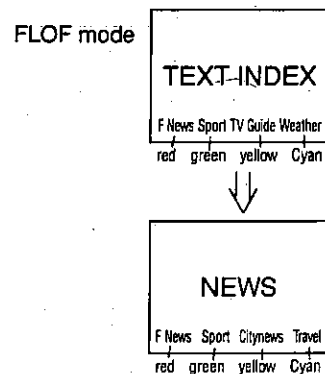
In the text mode, FLOF mode can be selected by pressing FLOF/LIST button.

Then the index page which the broadcasting station provides, appears on the screen. At the bottom of the screen, red, green, yellow and cyan letters and "F" letters are indicated.

You can select a programme out of four programmes, by pressing one of the coloured buttons on the R/C transmitter. (For example, when pressing red, the red colour programme is selected)

In the same way, you can select the programme which is indicated at the bottom of the screen by pressing the colour button.

To get back to the initial index page, press the "INDEX" button.



(TELETEXT USE)

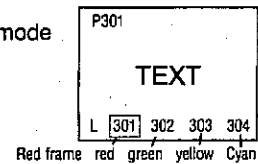
LIST

In the LIST mode, the four coloured page numbers and "L" letter are indicated on the bottom of the screen. The number on the left side is enclosed by a red frame. First, input the page number you desire, into each coloured position using the digit button, then press the "STORE" button for more than two seconds.

When the page number is memorized, the four coloured numbers change into white frame momentarily.

After you memorize the four page numbers, you can select the page you desire by pressing the red, green, yellow or cyan button. Even if you select another page by inputting a new page number, (See direct page selection), the memorized pages return after switching power off or changing the programme position or pressing the INDEX button.

LIST mode



NON FLOF SERVICE

When the station does not have FLOF service, and you press the FLOF/LIST button, the INDEX page (P100) is automatically displayed.

At the bottom of the screen, the four page numbers 100, 199, 101, 102, are also displayed.

Then, when you select a random page number out of the displayed four pages by pressing a colour button, the text of that page is displayed.

The selected page minus one, plus one, and plus two page numbers are displayed but their display order is at random. Of course at any time you can select new pages by inputting new page numbers.

■ MEMORY OF THE TEXT PAGES

When you assign a broadcasting station which is providing a TEXT service to some programme positions of your TV set, four pages of TEXT can be memorized on each programme position 1~16.

(To memorize the TEXT pages, see "LIST mode".) If it is required to have more than four instant text available from the same text service, tune the necessary number of programme positions to the same TV channel.

i.e. TV programme position 1 ... page, 300, 301, 302, 303
2 ... page, 304, 305, 306, 307
3 ... page, 308, 309, 310, 311
.
.
16 ... page, 411, 412, 413, 414

The memory capacity is 16 programme positions and four pages per each position.

Note:

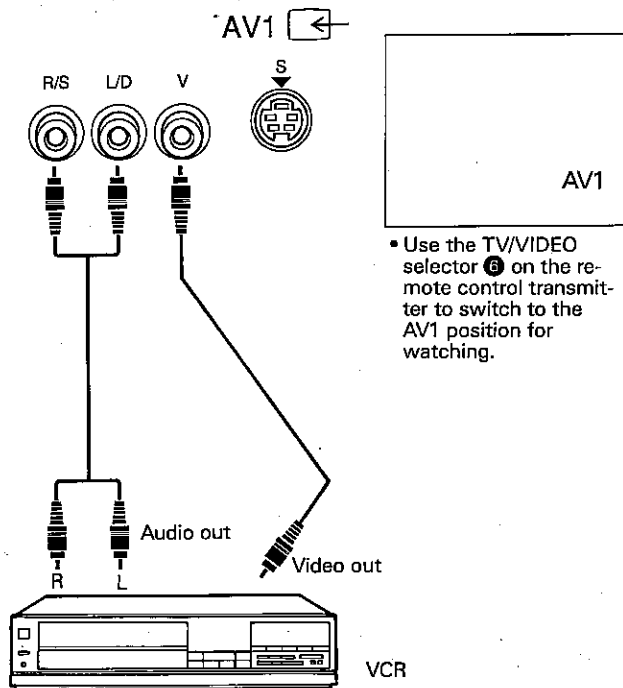
The producer and dealer does not take any responsibility for errors concerning teletext caused by wrong written teletext, wrong antenna installation or not sufficient power of transmitter (poor signal).

CONNECTING OTHER EQUIPMENT

■ Connecting to the AV1 Input Jack

Connect to the video and audio outputs of a VTR, video disc player, etc. Tapes and discs can be played back.

(REAR PANEL)



If the audio signal from the VCR is stereo, be sure to connect the right and left channels to the respective right and left Audio-in terminals.

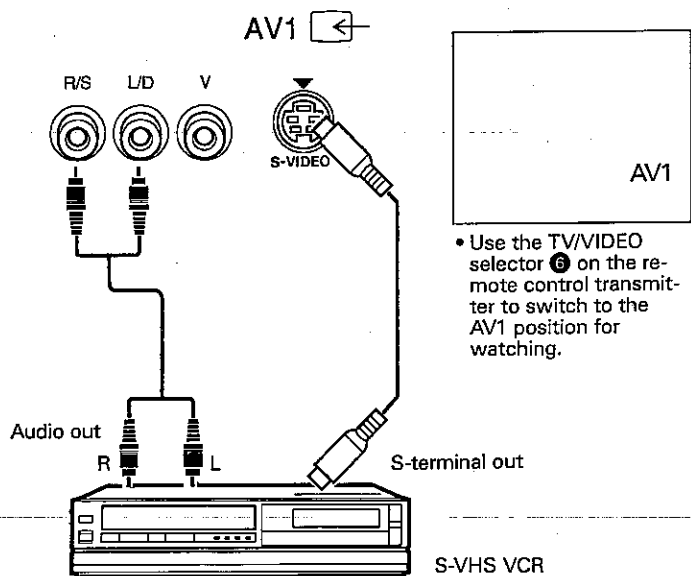
If the external audio signal is a monaural one, connect it to the left terminal of Audio-in.

■ S-VHS VCR Connections.

S-VHS VCR is designed with a highly advanced techniques. So the visual quality of S-VHS VCR is better than the other popular VHS VCR.

S-VHS VCR can be enjoyed by using S-terminal.

(REAR PANEL)

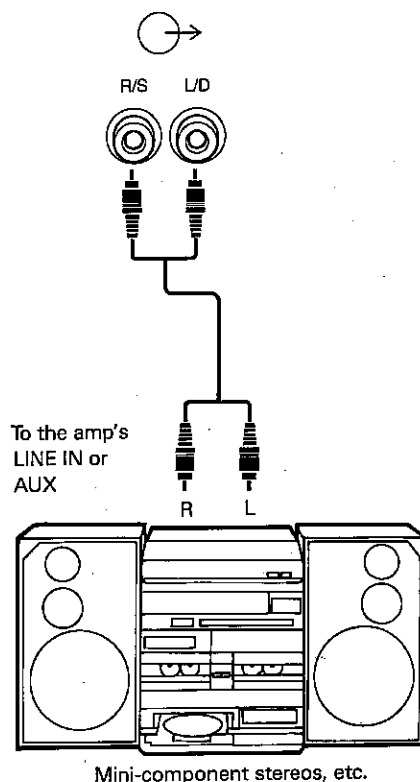


■ Audio Monitor Out Connection

More powerful sound can be enjoyed by using your audio apparatus.

Connect the audio signal source from audio-monitor-out terminal to the line-in or aux terminal of the audio apparatus.

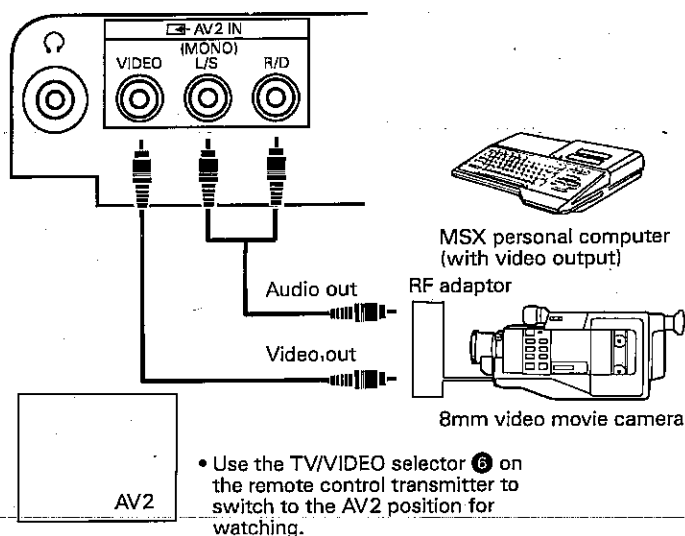
(REAR PANEL)



■ Connecting to the Front Panel AV2 Input Jack

It is convenient to use the AV2 input jack on the front panel for equipment that is often connected and disconnected.

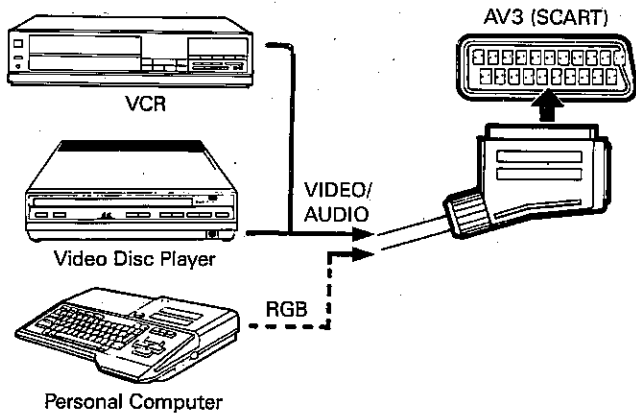
(TV front panel terminals)



(CONNECTING OTHER EQUIPMENT)

■ Use of the 21-pin Terminal

A personal computer, VCR, Video disc player or other AV apparatus can be connected to the 21-pin socket on the rear panel of the TV set.



- When the 21-pin terminal is used for connection of video equipment, audio equipment or a personal computer, note the following points.

A Use of video equipment

For playback of VCR tapes or video discs, use equipment which has an 8-pin input function signal. When equipment which does not have this function signal is used, press TV/VIDEO Selector **6** to select "AV3" mode.

When equipment which has this function signal is used, the TV set is automatically switched to "AV3" mode.

NOTE:

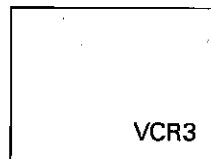
To return to the TV mode, press the TV button **12**.

B Use of personal computer

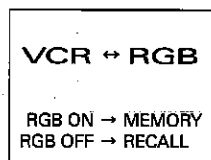
The personal computer must be the type which has an 8-pin function signal and a 16-pin fast signal (TV/RGB switching). When using the RGB input signal from a personal computer etc., which is not equipped with the control signals (pin-8 and pin-16), as described below, you must set and select the RGB position for personal computer use.

Setting the RGB Position

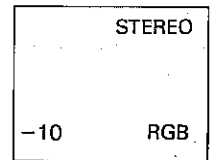
1. Select "VCR3" position.



2. Press and hold Recall **19** button for more than 2 seconds.



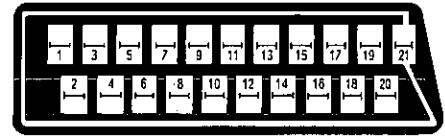
3. Press Memory **7** button of the TV set.



Cancelling the RGB Position

1. Select "RGB" position.
2. Press and hold Recall **19** button for more than 2 seconds.
3. Press Recall **19** button once again.

The specification of the 21-pin connector is as follows:

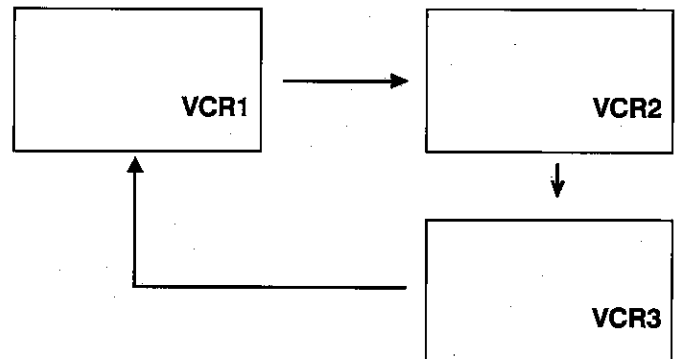


Pin No.	Signal	
1	Audio output (right channel)	0.5 Vrms/upper 1 kohm
2	Audio input (right channel)	0.5 Vrms/upper 10 kohm
3	Audio output (left channel)	0.5 Vrms/under 1 kohm
4	Earth (audio)	
5	Earth (blue)	
6	Audio input (left channel)	0.5 Vrms/upper 10 kohm
7	Blue (B) input	0.7 Vp-p/75 ohm
8	Function switching (video in/ext.)	L: 0 - 2V, H: 10 - 12V
9	Earth (green)	
10		
11	Green (G) input	0.7 Vp-p/75 ohm
12		
13	Earth (red)	
14	Earth	
15	Red (R) input	0.7 Vp-p/75 ohm
16	Fast blanking	L: 0 - 0.4V, H: 1 - 3V
17	Earth (video)	
18	Earth	
19	Video/sync output	1 Vp-p/75 ohm
20	Video/sync input	1 Vp-p/75 ohm
21	Earth (case)	

■ AV Connection to the Aerial Socket

- The A.V. apparatus can also be connected to the aerial socket of your TV receiver. In this case, it is advisable to select the "VCR1", "VCR2" or "VCR3" position for the best picture by pressing "0" key of the programme selector.

Each time "0" key is pressed, VCR Position changes as follows:



Note: VCR Position is specially designed for the playback of the AV equipments. The picture of the VCR play-backing may be distorted in other position.

- For further details concerning this connection and adjustment, refer to the operating instructions for the AV equipment.

Specifications

Power source	AC 240 Volts, 50 Hz.
Television system	B/G
Colour system	PAL
Channel coverage	VHF: 0-11, 5A UHF: 28-69
Aerial input impedance	75 ohms
Picture Tube	51cm diagonal (useful screen) 90 degree deflection
Audio output (Peak music power output)	7 W+7 W
Ext: terminals	Video input: <ul style="list-style-type: none">• Phono jack × 2 (1.0 Vp-p, 75 ohm)• S-terminal × 1 (DIN 4-pin, separate Y/C signal input) Audio input: <ul style="list-style-type: none">• Phono jack (R/L) × 2 (436 mVrms, more than 40K ohm) Audio output (Audio Monitor Out): <ul style="list-style-type: none">• Phono jack (R/L) × 1 (436 mVrms, less than 600 ohm) RGB terminals <ul style="list-style-type: none">• CENELEC standard 21-pin terminal
Power consumption	81 W
Dimensions	506(W) × 488(H) × 465(D) mm
Weight	22 kg

Specifications subject to change without notice.

Part No. 4AA6P100684-- E5AW (A5-A)

SANYO

SANYO Electric Co., Ltd.