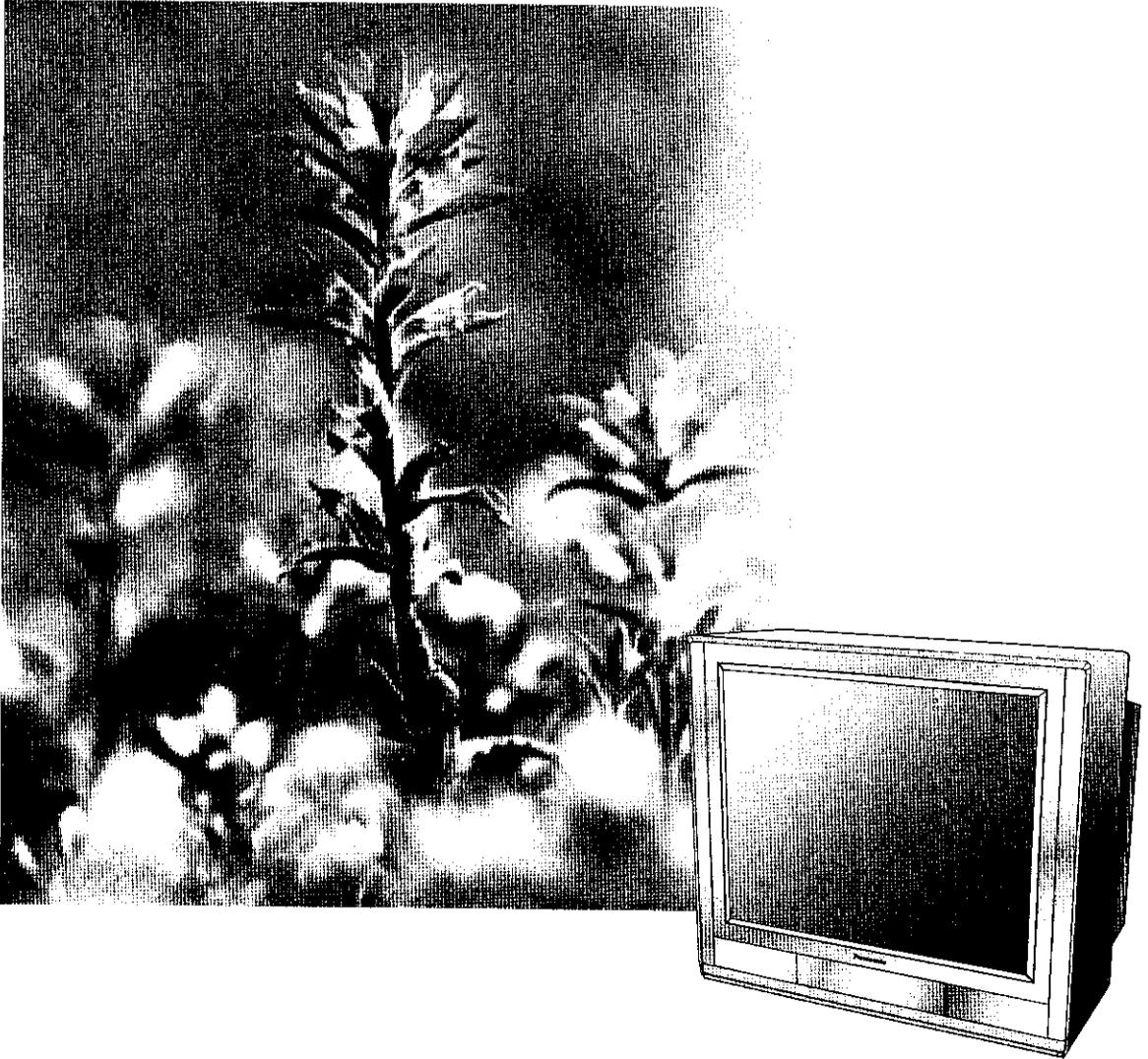


Panasonic

Operating Instruction

Colour Television

TX-60P82Z



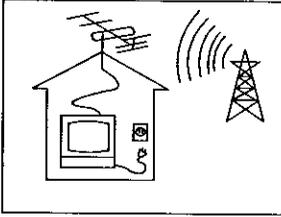
Please read the operating instructions completely before operating this set.

TQB4G0982

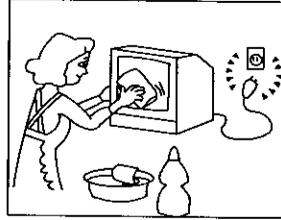
Dear Panasonic customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new colour television.

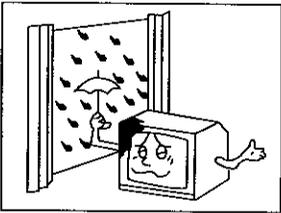
Safety Instructions



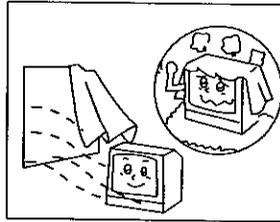
The TV set can be operated on AC SINGLE 230V, 50Hz.



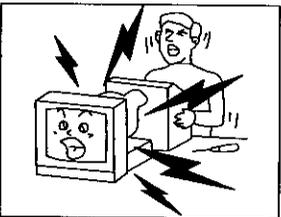
The cabinet and picture tube can be kept in good condition by simply wiping with a clean, soft cloth moistened with mild detergent and water. Do not use solutions containing benzol, petroleum or a chemical cloth. For safety, remove the plug from the wall outlet.



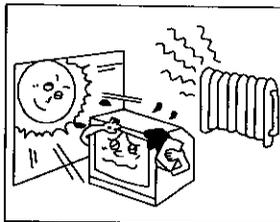
To prevent damage which may result in fire or electrical shock, do not expose the TV set to rain or excessive moisture.



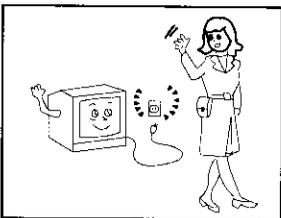
Adequate ventilation is essential to prevent failure of electrical components.



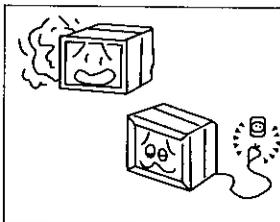
Do not remove the rear cover, as live parts are accessible when it is removed.



Avoid exposing the TV set to direct sunlight and other source of heat.



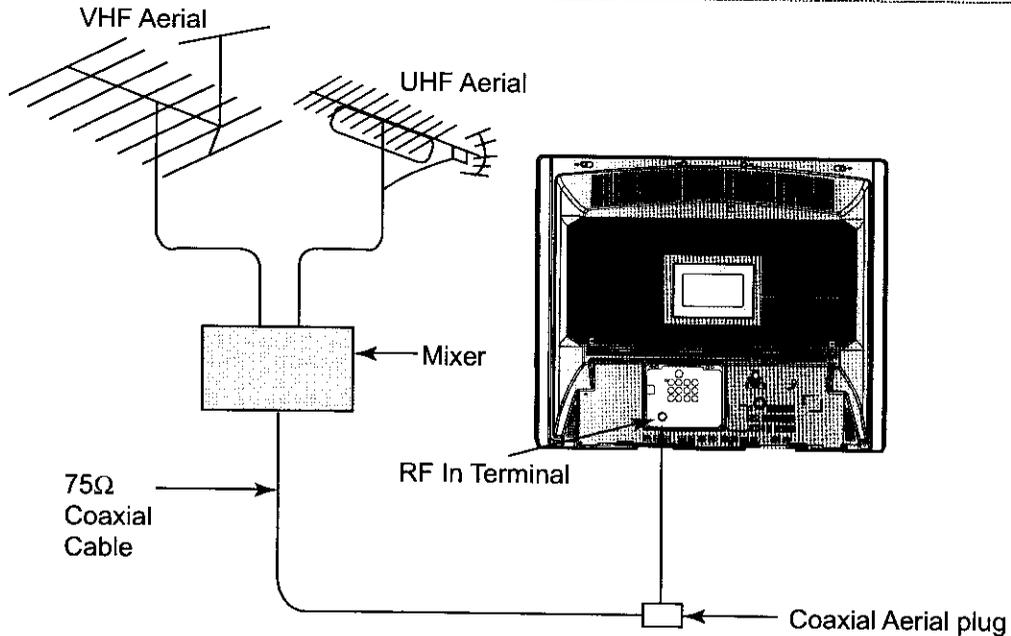
Remove the plug from the wall outlet (Power point) when the TV set is not used for a prolonged period of time.



Do not use this set if abnormal operation occurs. EX: smoke, odd sounds or smells, turn the power switch off and disconnect the AC power if you notice any unusual operation.

Before Operating This Set

Connect the Aerial Cable to the RF In Terminal



To obtain the best quality picture and sound, an external antenna, the correct cables (75 Ohm coaxial) and the correct terminating plug will be required.

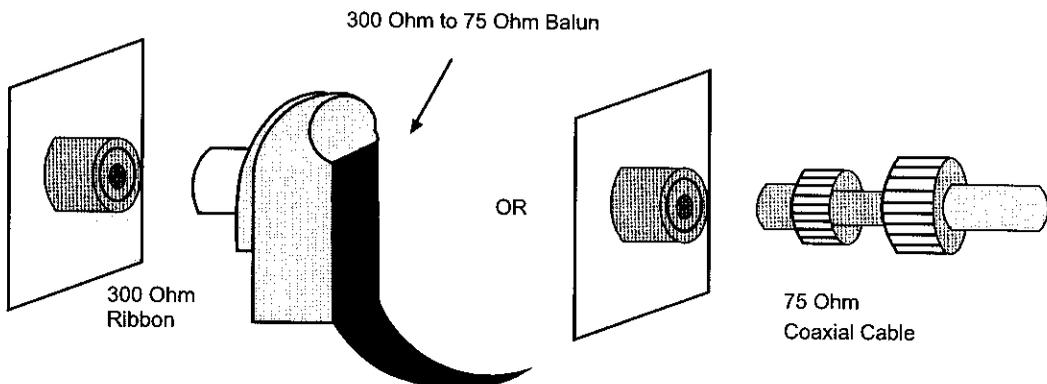
If a communal antenna system is used, you may require the correct connection cable and plugs between the wall antenna socket and your television receiver.

Your local Television Service Dealer may be able to assist you in obtaining the correct antenna system for your particular area and accessories required.

Any matters about antenna installation, upgrading of existing systems or accessories required, and the cost incurred, are the responsibility of the customer.

Note:

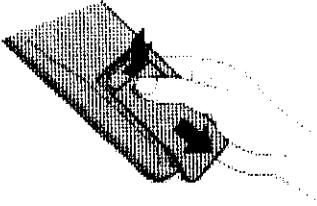
If your existing antenna system uses 300 Ohm to 75 Ohm Balun, see Below.



Before Operating This Set

Battery Installation

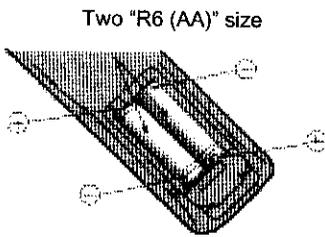
1.



Open the cover.

Apply slight downward pressure while pulling towards the bottom.

2.

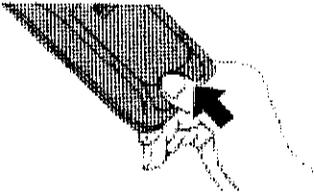


Batteries: Use two "R6 (AA)" size batteries.

Insert the batteries ensuring correct polarity.

This is identifiable by the "+" and "-" symbols on both the batteries and inside the battery compartment.

3.



Replace the cover.

Do not use rechargeable (Ni-Cd) batteries.

They are different in shape and performance and may fail to ensure correct operation.

⚠ Battery Cautions

The incorrect use of batteries can cause electrolyte leakage which will corrode the Remote Control or cause the batteries to burst.

Old Batteries



New Batteries



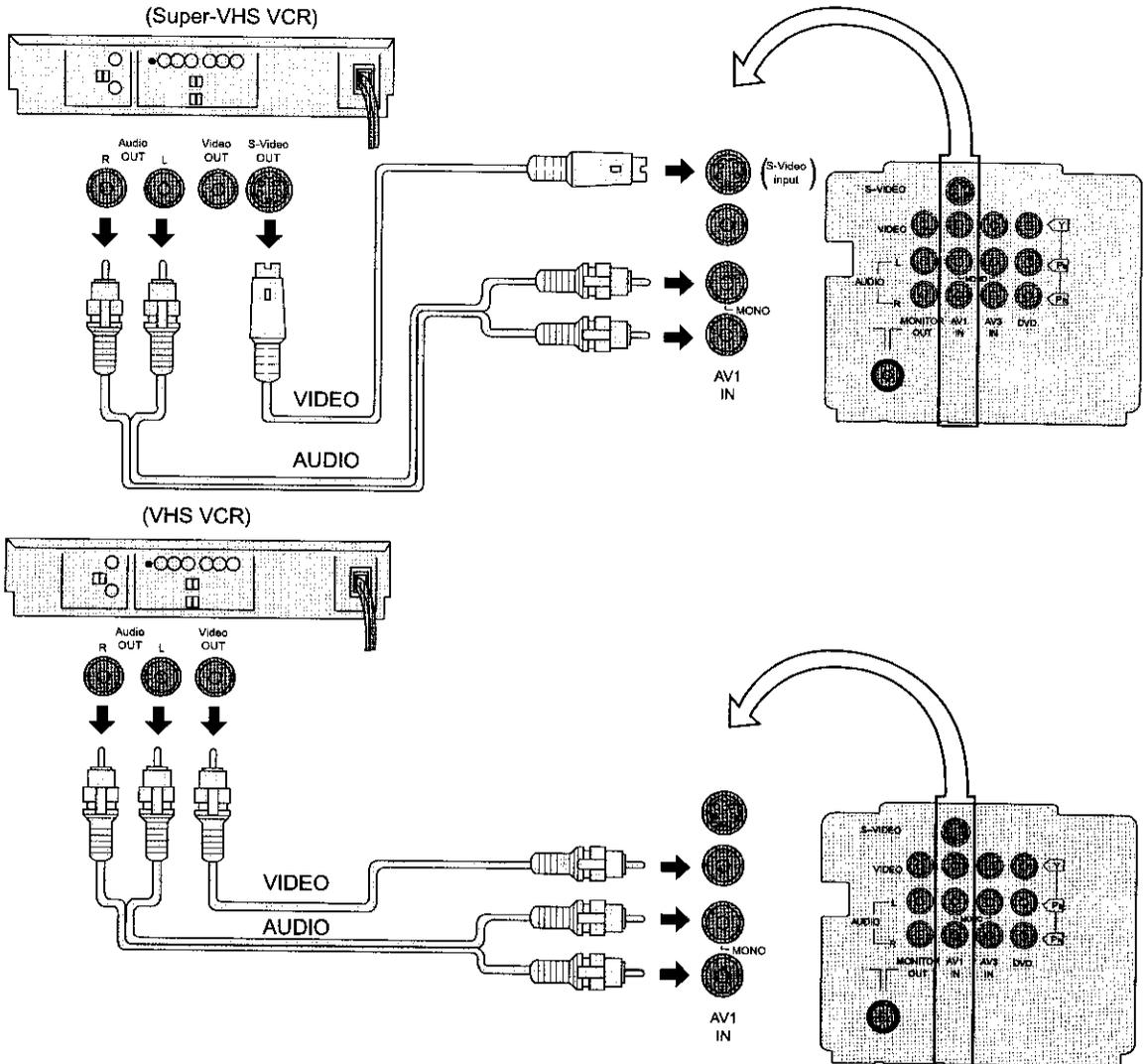
Replacement both batteries at the same time.

Don't mix battery types
(alkaline with carbon zinc, etc.)

Don't Recharge.

Connections

How to connect the "AV1, AV2 or AV3" Input Terminals

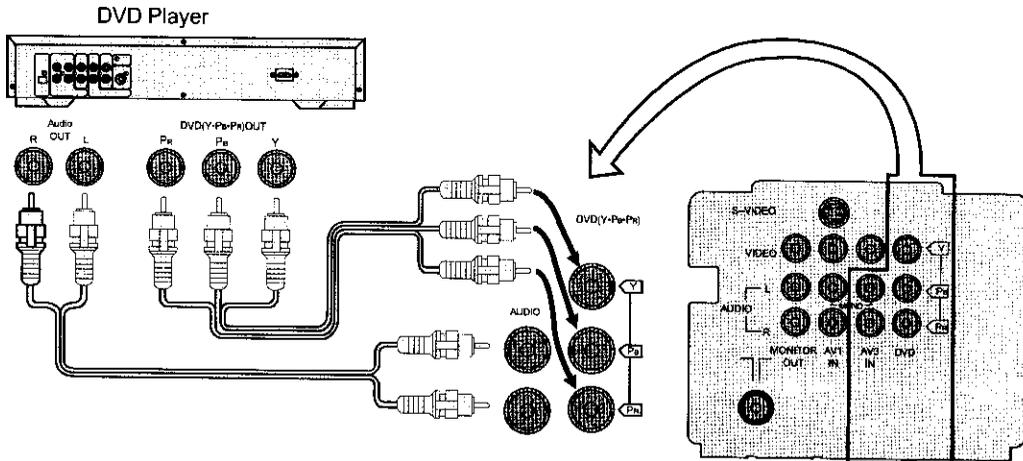


Note:

- (1) When AV1, AV2 or AV3 is selected, and that AV mode has no input picture signal, the background Colour of the TV screen will change (This only occur if the Blue-Back function is set to the ON condition).
- (2) When an S-Video cable is connected to the S-Video terminal, the Video input will be automatically switched off for the AV mode.
- (3) When a Monaural VCR is used, connect the Monaural Audio cable to the Audio "L" (Left) terminal.
- (4) Similar connections are available at the AV1, AV2 and AV3 input terminals. Select the desired AV input position by pressing the "TV/AV" button.
- (5) The AV3 audio input terminals serves as the audio input terminal for both the video input and for the DVD input.

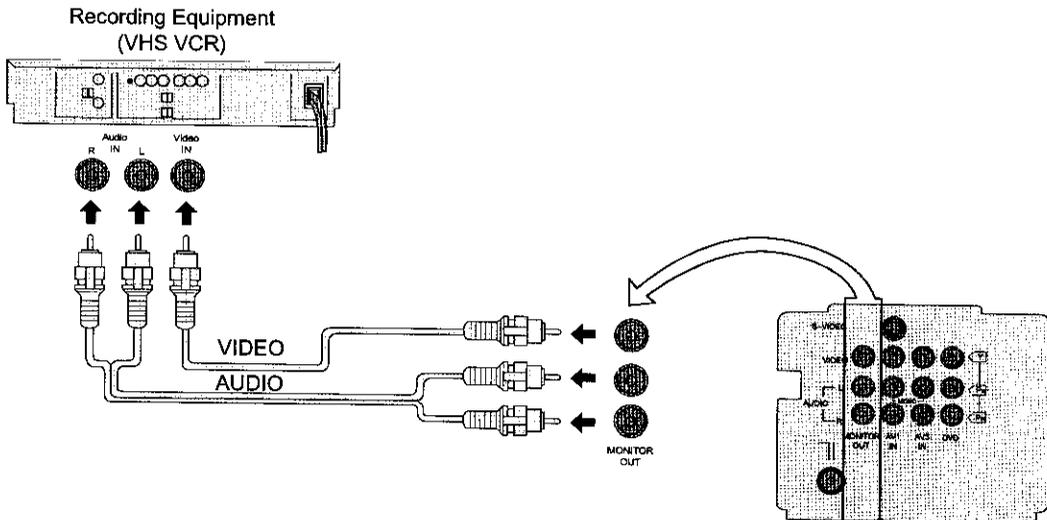
Connections

How to connect the DVD Input Terminals



How to connect the AV Monitor Output Terminals to other Equipment

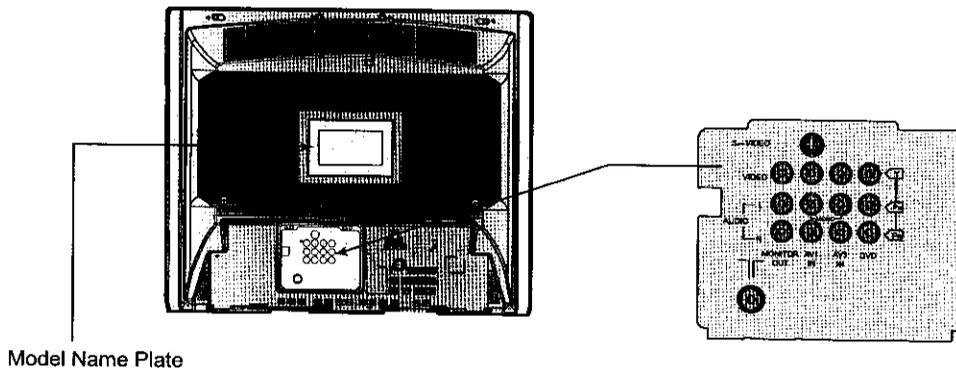
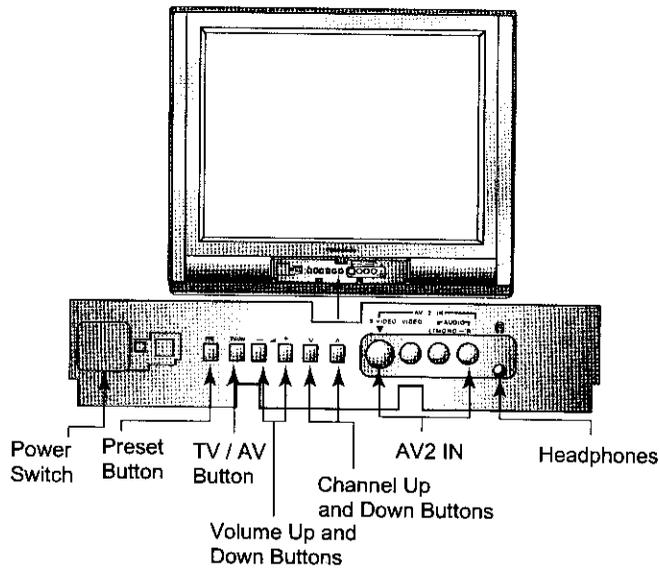
The "Monitor Out" terminal output the same signals as main picture on the TV screen and sound from the speaker at that time. e.g. TV programmes or signals from AV1, AV2 or AV3 input.



Note:

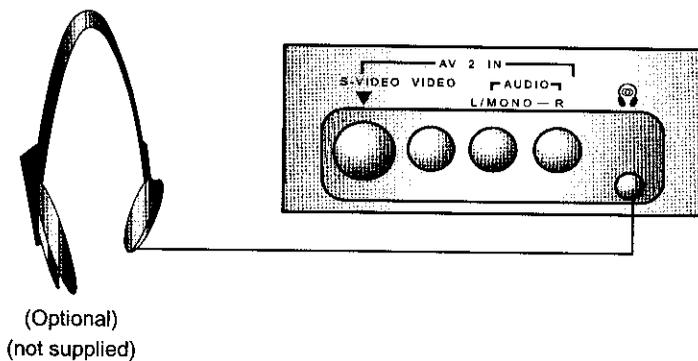
- (1) Never connect the same video recorder with both the VIDEO IN and MONITOR OUT terminals on this TV set, as this could cause incorrect operation.
- (2) The monitor output emits the main picture normal video and audio signals.
- (3) Teletext display on screen will not be output at the MONITOR OUT terminals.
- (4) The DVD signal (Y•Pb•Pr) is not output at the MONITOR OUT terminals.
- (5) The DVD signal input terminal takes priority over the AV3 video input terminal.

Location of Control (TV)

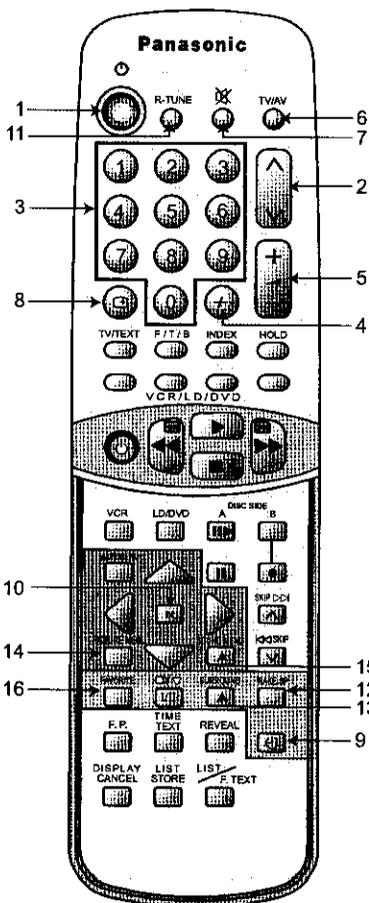
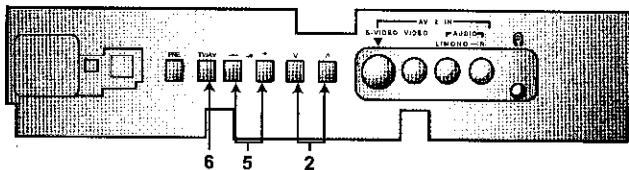


Connecting Headphones

When a headphones plug is inserted into the Headphones socket all speakers will be automatically disconnected; only the Headphones will function.



General Operation



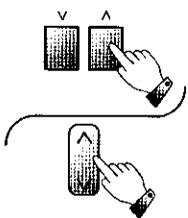
1.



To Switch Power on/off

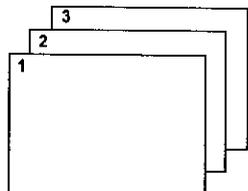
The TV set must be switched on at the wall outlet and at the Main power switch. Press this button to turn the TV set ON, from stand-by mode. Press it again to turn off.

2.



Programme Number Selection

Press the programme number Up "A" or down "V" button to select the next higher or lower programme number.



3.



Direct Programme Number Selection (0 - 9)

e.g. To select programme number "1", press the "1" button.



4.

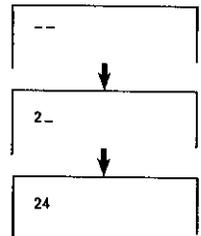


Two Digit Programme Number Selection

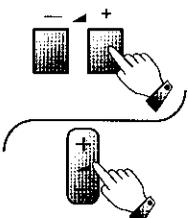
e.g. To select Programme Number "24".

- Press the button.
- Press the button.
- Press the button.

Setting range 0 ~ 99

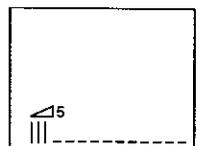


5.



Volume Adjustment

Press the Volume Up or Down button to increase or decrease the sound volume level.

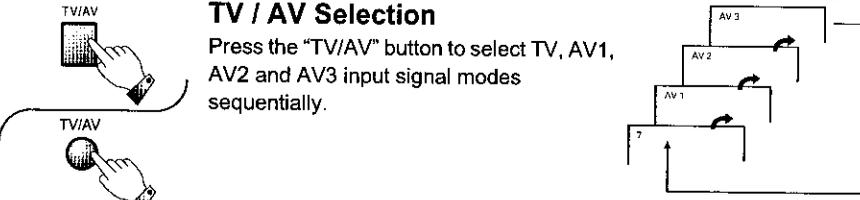


Note:

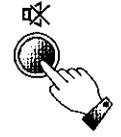
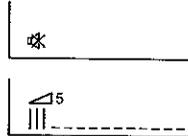
The on screen display will indicate both numerically and graphically the volume level. Numeric levels start at "0" for zero or no sound, and will increase up to 63 which is the maximum sound level.

General Operation

6. TV / AV Selection
 Press the "TV/AV" button to select TV, AV1, AV2 and AV3 input signal modes sequentially.



7. Sound Mute Button
 Press this button to mute the Sound completely.
 Press the button once again to restore the previous sound level, and cancel the mute.

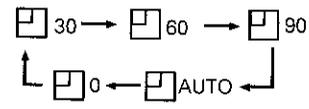
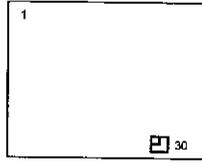
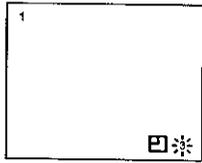



The "Mute" symbol will appear.
 (Colour changes to Red)

8. Recall Button
 Press the RECALL button to display the current system status. Press this button until display is cancelled.



9. Off-Timer Button
 The TV set may be preset to switch to stand-by after a fixed period.
 By pressing "Off-Timer" button, you can select the preset time either 30, 60, or 90 minutes.

When the off-timer reaches its last 3 minutes, it starts blinking before going to stand-by condition.

Note:
 Setting Off-Timer to AUTO mode. If the set is not switched off, when the TV station ends broadcasting, it will automatically go to the stand-by condition after 5 minutes. This AUTO mode will not operate when the TV receiver is in AV mode.

How to cancel the OFF-Timer setting:
 1. Set the preset time condition to "0" mode by pressing the Off-Timer button.
 2. Turning the TV set off.

10. Normal (N) Button
 By pressing the Normal "N" button on the Remote Control while Picture or Sound Control Function is displayed, the selected function will be changed to the Normal Mode. Normalization will not occur if the function is not displayed when the "N" button is pressed. The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".



11. Rapid Tune Button
 Press the button to access previously viewed channel.



PRESENT CHANNEL BEING VIEWED



LAST VIEWED CHANNEL



Two horizontal arrows point from the TV icon to the globe icon and from the globe icon to the TV icon.

General Operation

12.



Wake Up Timer Button

1. Press the "WAKE UP TIMER" button.
2. Press the position left or right button to select the wake up timer. (Wake up timer will increase or decrease by 10 minutes when left or right button is pressed.)

Note:

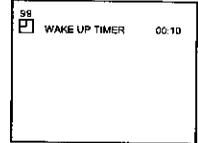
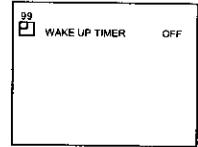
Wake up time can be set up to 12 hours.

3. After setting the wake up timer, switch the TV set to stand-by mode. (LED light will blink ON and OFF during stand-by mode)
4. When the time Wake Up timer has elapsed in the set will automatically switch on. (Press any button to cancel the Wake Up timer on screen display.)

Note:

- i) After the Wake Up time is set and the TV mode is still not switched off, the Wake Up timer will continue to count down until the timer is off.
- ii) When Wake Up timer switch ON the TV set, the off timer is set to 90 minutes mode automatically. Press any button to cancel the off-timer. If no button is pressed, the TV set will switch off automatically after 90 minutes.

5. To cancel the Wake Up timer. You can choose any of the following:
 - i) Switch off the main power.
 - ii) Press the position left or right button, until OFF is reached.
 - iii) Press the Normalize button when Wake Up timer OSD is displayed.



13.



Surround Sound Operation

The benefit of surround sound are enormous. With additional speakers you can be completely enveloped in sound; just as if you were at a concert hall or cinema.

The surround effect does operate without external surround speakers, but is enhanced when they are connected. Such near surround speakers should not be sited in direct proximity to the listeners.

On-screen display during surround mode.

	Type of broadcast	ON-Screen display
TV mode	MONO	MONO SURROUND ↕ SURROUND OFF
	STEREO	STEREO SURROUND ↕ SURROUND OFF
AV mode	Select AV mode	STEREO SURROUND ↓ MONO SURROUND ↓ SURROUND OFF

General Operation

14.

PICTURE MENU



Picture Menu Operation

By pressing the PICTURE MENU button, you can sequentially select the Picture menus as shown below:

On-screen	Function
DYNAMIC	For watching in brighter environments. This menu selects a higher than normal level of contrast.
STANDARD	For watching in normal (evening) environments. This menu selects normal level of contrast.
SOFT	For watching in dark environments. This menu selects reduced level of contrast.

15.

SOUND MENU



Sound Menu Operation

By pressing the SOUND MENU button, you can sequentially select the Sound menus as shown below:

On-screen	Function
MUSIC	For music programme for example.
SPEECH	For News programme for example.
MOVIE	For movie programme for example.

16.

FAVORITE

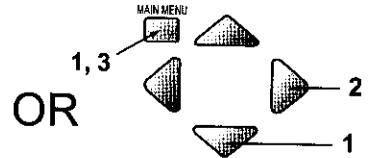
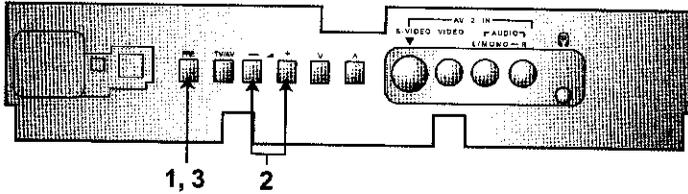


Favorite Channel

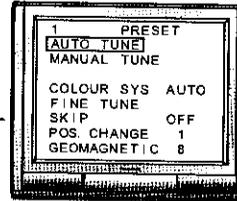
Refer to page 22.

Tuning Procedure

Automatic Tune

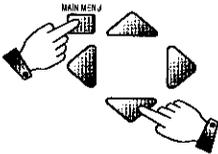


1. Press the "PRE." (PRESET) button, until "AUTO TUNE" function is selected.

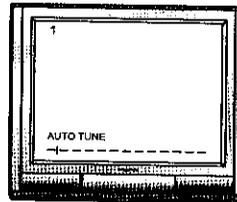
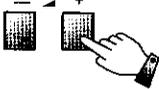


Channel Number Automatic Tune condition.

Press the "MAIN MENU" and "Position" buttons, until "AUTO TUNE" function is selected.

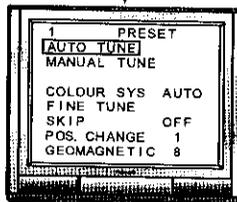
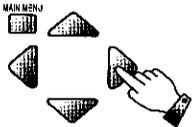


2. Press the Volume Up "+" button.



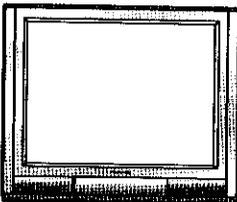
Search start.

Press the Position Right button.



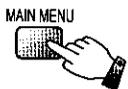
The best tuning position is automatically memorized.

3. Press the "PRE." (PRESET) button 7 times.



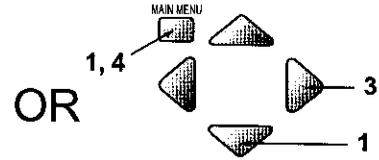
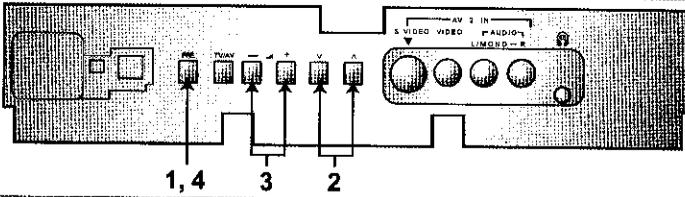
This returns the set to the normal viewing condition.

After all stations are tuned, press the "MAIN MENU" button twice.



Tuning Procedure

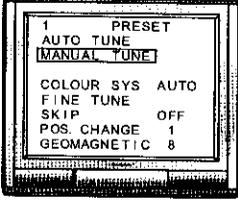
Manual Tune

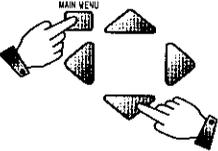


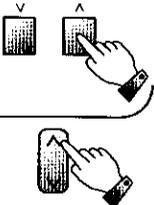
- 1.** Press the "PRE." (PRESET) button twice, setting the Manual Tune mode.



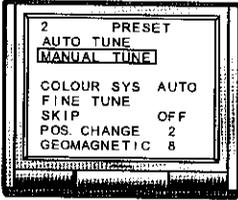
Channel Number Manual Tune condition.

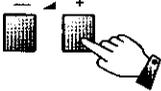

- Press the "MAIN MENU" and "Position" buttons, until "MANUAL TUNE" function is selected.


- 2.** Press either the Channel Up or Down button.

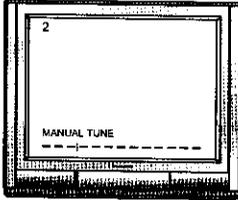


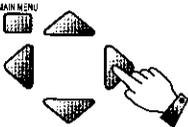
Select the desired Channel Number.


- 3.** Press the Volume Up "+" or Down "-" button.
Volume "+": Next higher Channel.
Volume "-": Next lower Channel.

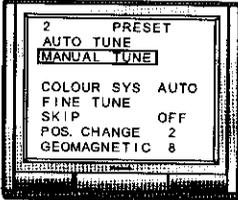


Search start.


- Press the Position Left or Right button.
Position left: Next lower Channel.
Position right: Next higher Channel.

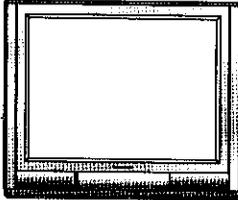


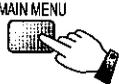
The best tuning position is automatically memorized.


- 4.** Press the "PRE." (PRESET) button 6 times.



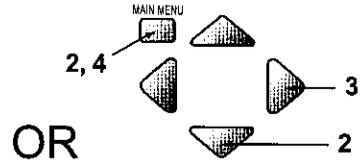
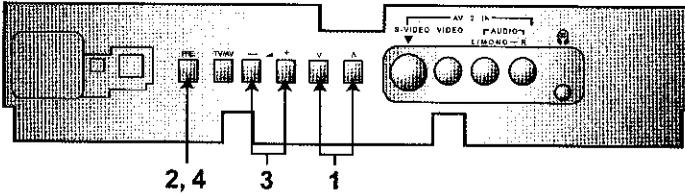
This returns the set to the normal viewing condition.


- Press the "MAIN MENU" button twice.



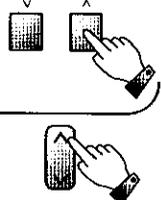
Tuning Procedure

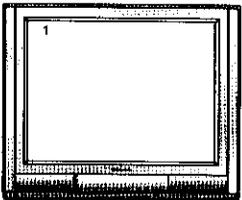
Fine Tune

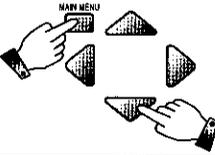
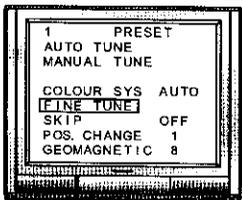
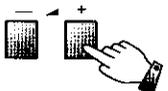


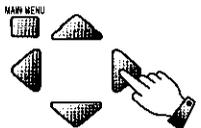
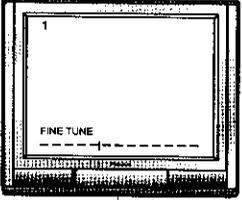
OR

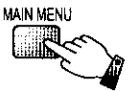
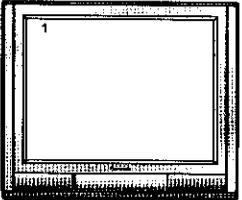
Under normal reception condition, this function is not used. However, in areas of poor reception or constant interference, a slight adjustment on the fine tuning can improve the picture and sound quality.

- 1.**  Select the channel which you want to try to improve, using the Channel Up or Down button.

 Select the desired Channel Number.
- 2.**  Press the "PRE." (PRESET) button 4 times, setting the Preset Menu to "Fine Tune".

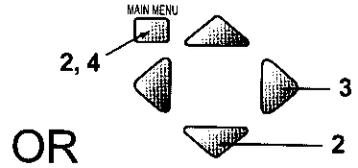
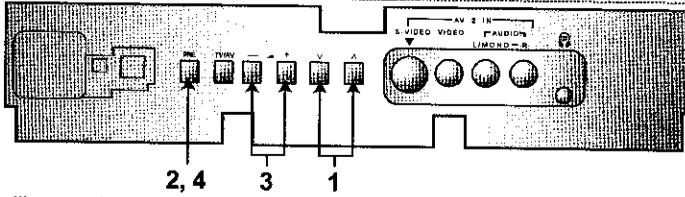
 Press the "MAIN MENU" and "Position" buttons, until "FINE TUNE" is selected.
 Fine Tune condition.
- 3.**  Press the Volume Up "+" or Down "-" button until the clear picture is received.

 Press the Position Left or Right button until the clear picture is received.
 Fine Tune Start.
- 4.**  Press the "PRE." (PRESET) button 4 times.

 After all stations are tuned, press the "MAIN MENU" button twice.
 This returns the set to the normal viewing condition.

Tuning Procedure

How to cancel the Fine Tuning



Cancelling previously adjusted (manually) fine tuning, means reactivating the AFC (Automatic Frequency Control) Function, also known as AFT (Automatic Frequency Tuning). Reactivating the Automatic Frequency Tuning means allowing the set to automatically tune optimum tuning position, for that Channel Number.

- 1.** Select the "AFC OFF" Channel Number which you want to return to Automatic Frequency Control (Cancel the manual fine tuning).

"AFC OFF" Channel Numbers are indicated to you by the "■" symbol to the left of the Channel Number.
- 2.** Press the "PRE." (PRESET) button twice, setting the Preset Menu to "MANUAL TUNE" mode.

Manual Tune condition.

Press the "MAIN MENU" and "Position" buttons, until "MANUAL TUNE" function is selected.
- 3.** Press the Volume Up "+" or Down "-" button briefly.

The best tuning position is automatically memorized.

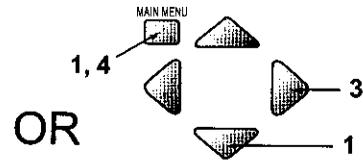
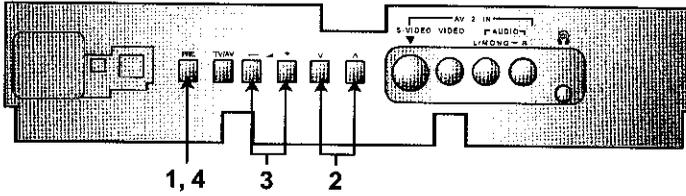
Press the Position Left or Right button briefly.
- 4.** Press the "PRE." (PRESET) button 6 times.

Press the "MAIN MENU" button twice.

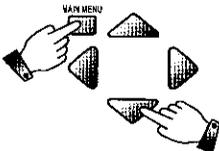
This returns the set to the normal viewing condition.

Tuning Procedure

How to Skip Programme Number

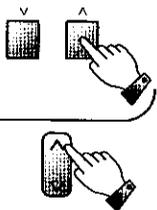


1.  Press the "PRE." (PRESET) button 5 times, setting the Preset Menu to "SKIP".

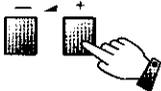
 Press the "MAIN MENU" and "Position" buttons, until the Preset Menu to "SKIP".

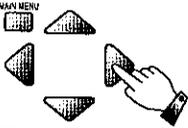
1 PRESET
 AUTO TUNE
 MANUAL TUNE
 COLOUR SYS AUTO
 FINE TUNE
 SKIP OFF
 POS. CHANGE 1
 GEOMAGNETIC 8

Channel Skip condition.

2.  Select a Programme Number you want to skip, by pressing the Channel number Up or Down buttons.

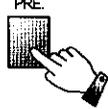
2 PRESET
 AUTO TUNE
 MANUAL TUNE
 COLOUR SYS AUTO
 FINE TUNE
 SKIP OFF
 POS. CHANGE 2
 GEOMAGNETIC 8

3.  Press the Volume Up "+" or Down "-" button.

 Press the Position Left or Right button.

2 PRESET
 AUTO TUNE
 MANUAL TUNE
 COLOUR SYS AUTO
 FINE TUNE
 SKIP ON
 POS. CHANGE 2
 GEOMAGNETIC 8

The displayed "OFF" condition changes to "ON".

4.  Press the "PRE." (PRESET) button 3 times.

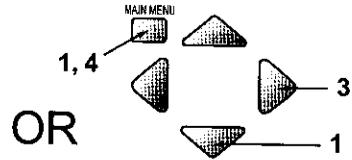
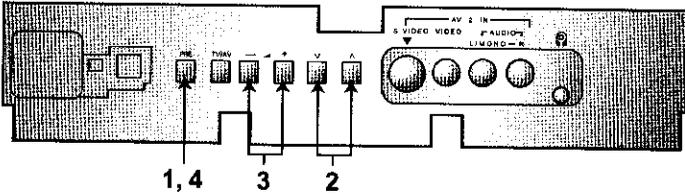
 Press the "MAIN MENU" button twice.

Normal viewing condition screen.

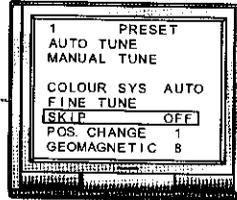
This returns the set to the normal viewing condition.

Tuning Procedure

How to Cancel the Skip Function

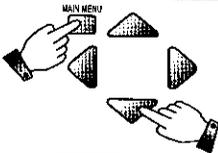


1. Press the "PRE." (PRESET) button 5 times, setting the Preset Menu to "SKIP".

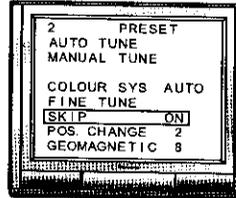
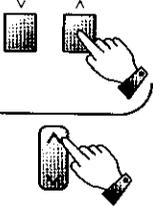


Channel Skip condition.

Press the "MAIN MENU" and "Position" buttons, until "SKIP" is selected.

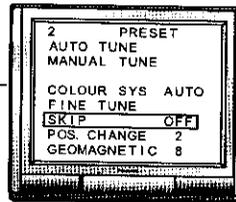
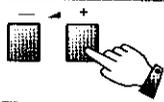


2. Select the skipped Programme Number, by pressing the Channel Number Up or Down buttons.



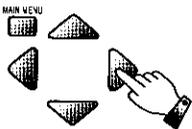
The displayed "ON" condition changes to "OFF".

3. Press the Volume Up "+" or Down "-" button.

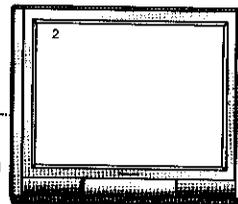


Press the Position Left or Right button.

Repeat step 2 and 3, if you wish to cancel the Skip function on any other programme number.

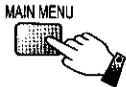


4. After the Skip Cancel operation is completed, press the "PRE." (PRESET) button 3 times.



This returns the set to the normal viewing condition.

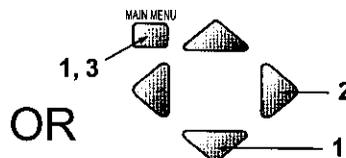
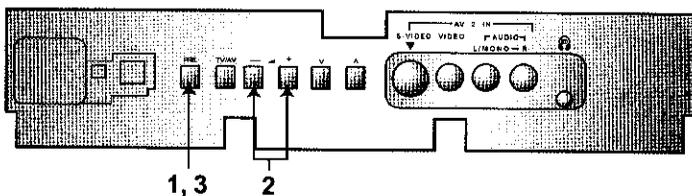
After the Skip Cancel Operation is completed, press the "MAIN MENU" button twice.



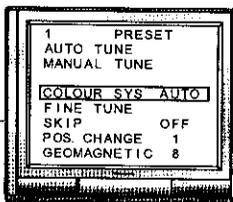
Tuning Procedure

Colour System Selection

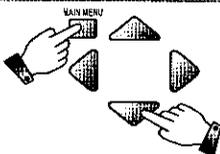
Use this function if a clear picture with weak colour is obtained when a Broadcast or AV signal is received.



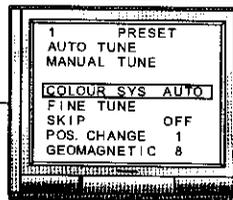
1. Press the "PRE." (PRESET) button 3 times. Colour System condition.



Press the "MAIN MENU" and "Position" buttons, until "COLOUR SYS" is selected.



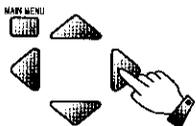
2. Press the Volume Up "+" or Down "-" button repeatedly until the optimum image is produced.



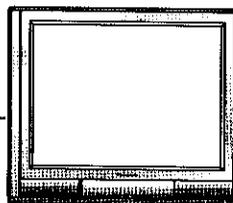
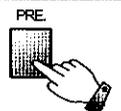
The Colour system will change as shown:

AUTO ↔ PAL
 ↓ ↑
 NTSC 3.58 ↔ NTSC 4.43

Press the Position Left or Right button repeatedly until the optimum image is obtained.



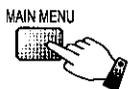
3. Press the "PRE." (PRESET) button 5 times.



This returns the set to the normal viewing condition.

This selected Colour System is automatically memorized.

Press the "MAIN MENU" button twice.



Tuning Procedure

Pos. Change

This feature will enable the user to swap (Exchange) channel memory of 2 selected channels. The position change function allows one to shift from the present channel to any programme number without any tuning process.

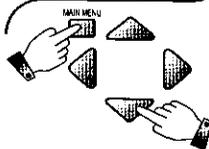
1. Press the "PRE." (PRESET) button 6 times.

PRE

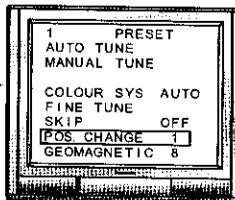


Press the "MAIN MENU" and "Position" buttons, until "POS. CHANGE" is selected.

MAIN MENU



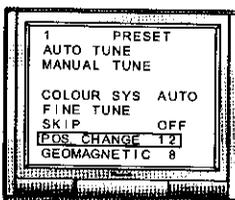
Press the "MAIN MENU" and "Position" buttons, until "POS. CHANGE" is selected.



2. Select a Programme number you want to change by pressing either Channel Up or Down button, two digit programme selection or Direct Programme number selection on the remote control. (Position change will only exist in preset mode).



Select a Programme number you want to change by pressing either Channel Up or Down button, two digit programme selection or Direct Programme number selection on the remote control. (Position change will only exist in preset mode).



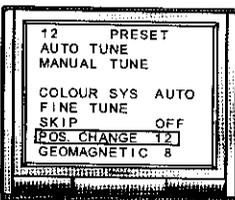
Note: Position change also can operated using panel key. Use PRESET key to enter POSITION CHANGE, then, use volume up/down to change the channel to be swapped to. Use TV/AV to confirm.

3. Press the "TV/AV" button to confirm.

TV/AV

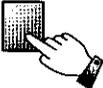


Press the "TV/AV" button to confirm.

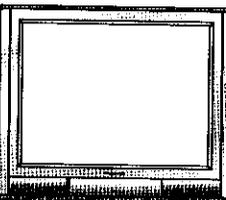


4. Press the "PRE." (PRESET) button twice.

PRE



Press the "PRE." (PRESET) button twice.



This returns the set to the normal viewing condition.

MAIN MENU



Press the "MAIN MENU" button twice.

Advanced Remote Control Transmitter Operation

Picture Menu Operation

Picture Menu

Press	Item	Effect	Indicator
Select	COLOUR	Less More	
Select	NTSC-TINT	Reddish Greenish	
Select	BRIGHTNESS	Darker Brighter	
Select	CONTRAST	Less More	
Select	SHARPNESS	Less More	
Select	COLOUR TEMP.		COLOUR TEMP.

Sound Menu Operation

Sound Menu

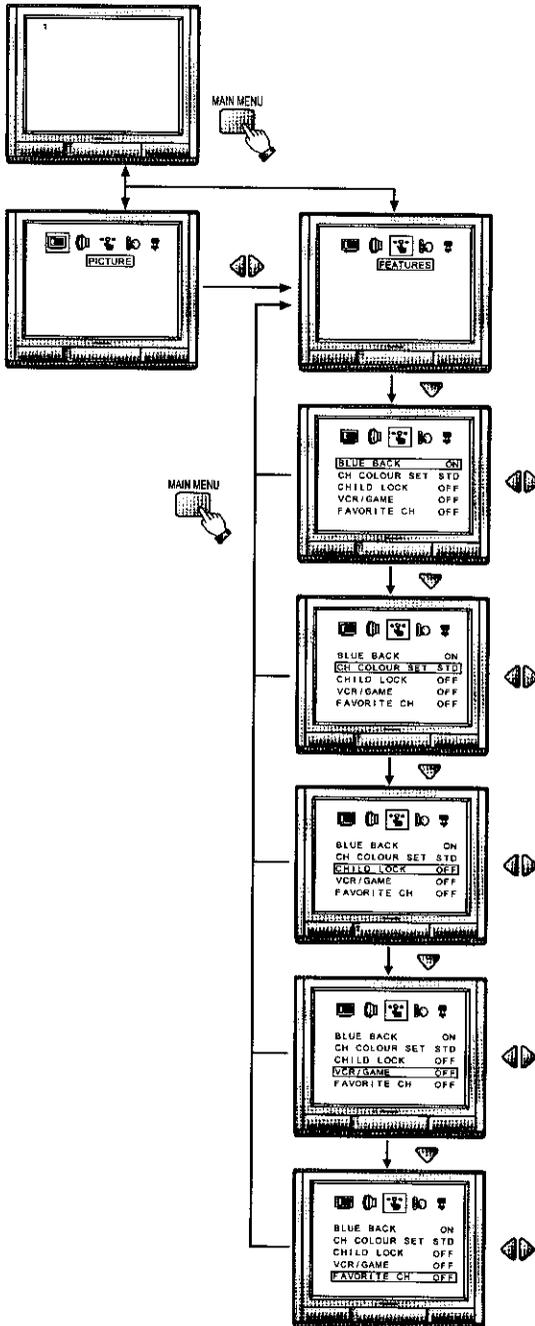
Press	Item	Effect	Indicator
Select	BASS	Less More	
Select	TREBLE	Less More	
Select	BALANCE	Left SP. Right SP.	
Select	BASS BOOST	ON ↔ OFF	BASS BOOST
Select	LOUDNESS	ON ↔ OFF	LOUDNESS
Select	AVL	ON ↔ OFF	AVL

AVL (Auto Volume Limiter)

The AVL function will limit the volume output for music, speech and movie at preset level when it is on.

Advanced Remote Control Transmitter Operation

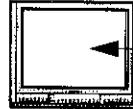
Features Menu Operation



BLUE BACK Mode

When no picture signal is received, or the signal is weak, the screen reverts to a blue background colour and the sound is muted.

Disable this features to continue watching very weak signals.



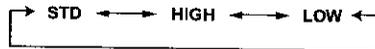
Blue background colour if no input picture signal or input signal is weak.

Note:

If BLUE BACK Mode is set on while a VCR signal is being viewed, selecting CUE or REVIEW may cause the screen to revert to the blue background colour. Disable this feature to view correctly.

CH (Channel) COLOUR SET mode

Colour density varying between broadcast channels can be adjusted to three levels for each reception channel as follows :



CHILD LOCK mode

To child lock any channel, press the position left or right button.

- 1) When channel is "LOCK", sound is muted and screen becomes blue colour.
- 2) If any of the channels is CHILD LOCK, then preset key at any panel will not work. If preset key (Panel) is pressed, message "CHILD LOCK ON" will appear.
- 3) Main power ON in child locked channel will display "CHILD LOCK ON" on screen to remind user that the Child lock is On and is in Child locked channel.
- 4) Each channel has its own memory for channels to be child locked.

VCR/Game mode

Reproduction of irregular signals, such as TV games and rental video tapes, may be improved.

The VCR/GAME mode will change as shown.

ON ↔ OFF

FAVORITE CH mode

After auto search, this feature allows to store programme in preferred channel position without re-searching again.

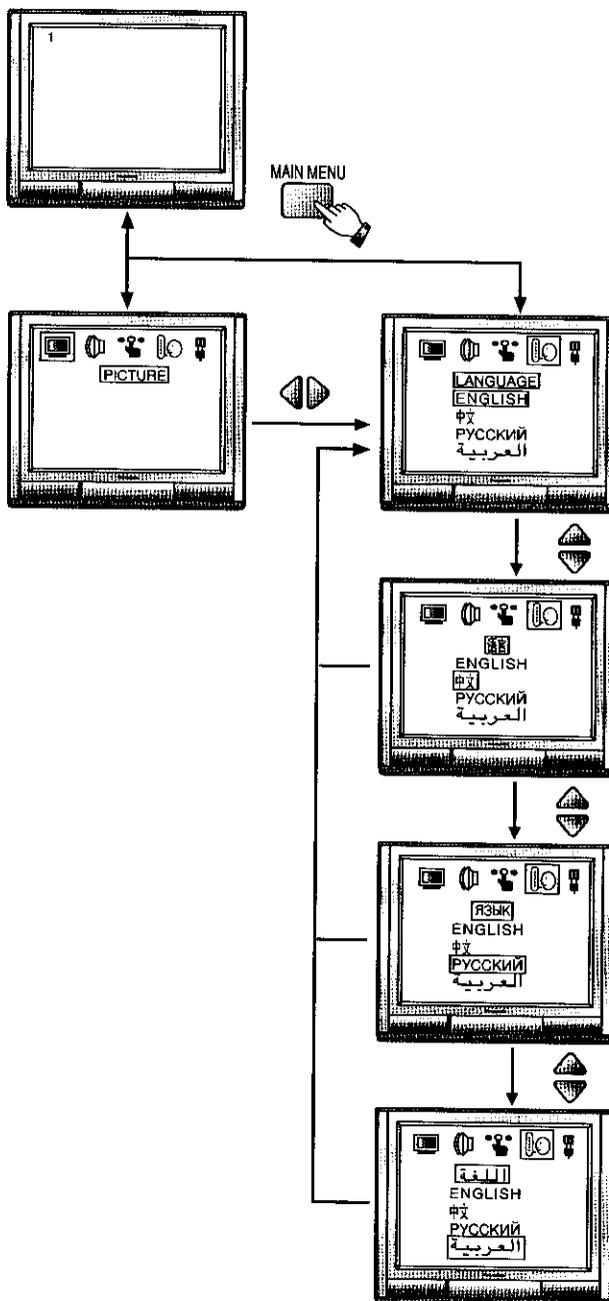
1. In feature mode, option off, option 1 or 2 can be selected.
2. If option 1 or 2 is selected, go to preset mode.
3. In preset mode, you can set favorite channel on/off. Then set the position you want in position change function mode.

Advanced Remote Control Transmitter Operation

Language Menu Operation

Language Menu

Press the "Position Up or Down" button. The on-screen language display will change as follows :



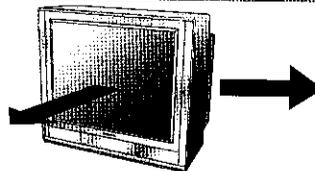
Advanced Remote Control Transmitter Operation

Preset Menu Operation

Geomagnetism Correction

Since a large picture tube has been used, blurring of colours and strange discolouration patches may occur depending on the direction the television faces. This is caused by a geomagnetic effect. For optimum viewing, it is necessary to adjust the TV placement.

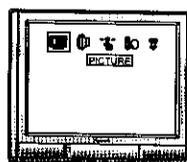
1. The Power should be off when determining the installation location and direction.



2. Press the "Main Power Switch".

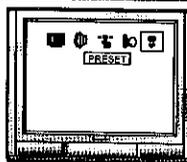
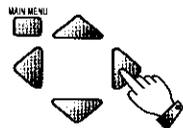


3. Press the "MAIN MENU" button.

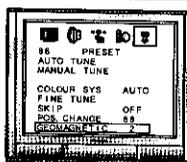
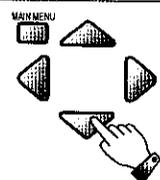


"Main Menu" condition.

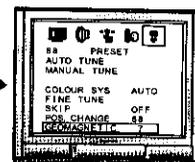
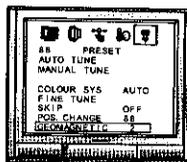
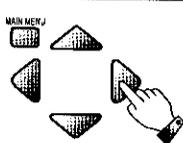
4. Select the Preset Menu by using the Position Left or Right button.



5. Select the Geomagnetic Mode by using the "Position" button.



6. Press the Position Left or Right button to adjust the Geomagnetic level so that the colour patches in the four corners of the screen do not appear.



Helpful Hint

- (1) If Geomagnetic changes still cause colour patches on the screen even after the TV is installed, turn the power off and turn back on again after about 30 minutes.
- (2) Adjustment for geomagnetic should be performed every time the location of the TV is changed.
- (3) In some cases colour patches will not be completely eliminated even after adjustment, particularly in ferro-concrete building and other structures susceptible to geomagnetic. In these cases adjust by changing the installation location.

Advanced Remote Control Transmitter Operation

Stereo Reception



Stereo/Bilingual Sound Selection Button

Sound output modes can be selected by pressing the "Sound Selection" Button.

STEREO, BILINGUAL (if transmitted) and MONO modes can be selected using this button.

	Types of Broadcast	On-screen Indication	Remarks
NICAM Digital Stereo	Regular Broadcast (Standard Audio)		Normal use
	Regular + NICAM MONO I [MAIN <I>]		You can select either the "MAIN <I>" or "MONO" audio signal
	NICAM STEREO		You select either the "STEREO" or "MONO" mode.
	NICAM DUAL MONO MAIN <I> / SUB <II>		You can select either the "MAIN <I>", "SUB <II>" or "MONO".
A2 (German) Stereo	Regular Broadcast (Standard Audio)		Normal use
	BILINGUAL or DUAL MONO MAIN <I> / SUB <II>		You can select either the "MAIN <I>" or "SUB <II>" audio signal.
	STEREO		You can select either the "STEREO" or "MONO" mode.

Teletext Operation

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- When in teletext mode, the volume may still be altered to the desired listening level.

What is LIST mode?

In LIST mode, four different coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

What is FASTEXT?

In FASTEXT mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information of the subjects shown.

What is the advantages?

- Page selection at the touch of a Colour-coded Button.
- Easy to use step-by-step selection of the topics subject.
- Reduction of waiting time.
- Page status line at bottom of screen so you always know which button will take you to the desired information.

1. TV/TEXT
TV/Teletext mode
 By pressing the TV/TEXT button, to change the TV/Teletext mode as follows:

2. Page Selection
 Page can be selected in two ways:
 a) Press the Up/Down Buttons to increase or decrease the page number by one.
 b) By entering the page number, using 0 ~ 9 on the remote control.

3. F/T/B
Full/Top/Bottom
 Press to expand the Top of the page.
 Press again to expand the Bottom half.
 Press again to return to normal (Full) size.

4. HOLD
Hold
 Press to hold the current page.
 Press again to cancel the hold.

5. REVEAL
Reveal
 Press to reveal hidden words.
 e.g. quiz page answer.
 Press again to hide.

6. Colour-coded buttons
Colour-coded buttons
 In Fastext mode these correspond to the differently coloured subjects.

7. INDEX
Index
 Press INDEX to return to the main index page

Teletext Operation

8.

DISPLAY
CANCEL



Display Cancel

Press the "DISPLAY CANCEL" button to view the normal TV programme. When the desired sub-page is received, the "TEXT" message appears at the top left of the screen.

9.

LIST
STORE



List Store

In LIST mode, the four page numbers can be altered for channel position. To do this, press one of the colour-coded buttons and enter the new page number. Press and hold list store, the page number will change colour.

10.

F.P.



Favourite Page (F.P.)

Stores a favourite page in memory for instant recall. To store such a page, the TV must be in LIST mode, press the Light Blue button, select the page number, then press List Store. The page number is now stored. Press F.P. button to recall this page.

Sub Coded Page Access

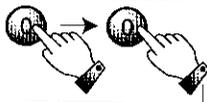
The TEXT Menu will be displayed in TEXT mode. When teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. It is possible to enter your required sub page and continue watching the normal programme until the correct sub page is found. Select the required page number using buttons 0-9.

11.

TIME
TEXT

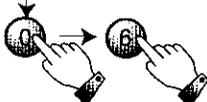


Press the TIME TEXT button.



Enter desired sub page number.

To select page 6 enter 0, 0, 0 and 6.



DISPLAY
CANCEL



Press the DISPLAY CANCEL button to view a normal TV programme.

TV/TEXT



When the page is available, press the TV/TEXT button twice to view the sub page.

12.

LIST
F. TEXT



List/F.Text

Press to change from FASTEXT mode to LIST mode and vice versa. In FASTEXT mode four differently coloured subjects are displayed at the bottom of the page.

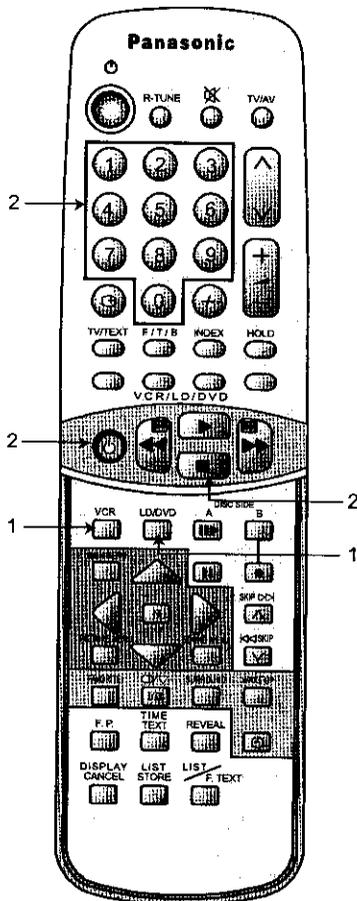
Press the appropriate coloured button to access more information about one of these subjects.

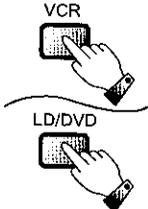
Operation of the VCR/LD/DVD

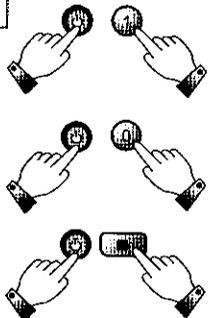
Manufacturer setting

Remote Control Operation is possible for the VCR's, LD's and DVD's of the various manufacturers.

After completion of setting, execute the various operations after pressing the VCR or the LD/DVD button.



1.  Press the button of the unit to be set (VCR or LD/DVD).

2.  While pressing the VCR/LD/DVD Power button, press the manufacturer code setting (enter the two digit code), and press the VCR/LD/DVD Stop button.

VCR

Manufacturer	Code	Manufacturer	Code
Panasonic/ National	10,11,12,13	NEC	40, 41, 42, 43
AIWA	15, 16	ORION	45, 46
FUJITSU	20	PHILIPS	50
HITACHI	25, 26, 27	SANYO	55, 56, 57, 58
JVC	30, 31, 32	SHARP	60, 61
mitsubishi	35, 36	SONY	65, 66, 67
		TOSHIBA	70, 71

LD

Manufacturer	Code	Manufacturer	Code
Panasonic	10, 11, 12, 13	SAMSUNG	30
KENWOOD	15, 16	SHARP	35
PHILIPS	20	SONY	40, 41, 42, 43
PIONEER	25		

DVD

Manufacturer	Code
Panasonic	70

Note:
After setting, execute operation confirmation.
If there is no operation, set a different code.

Helpful Hint

- (1) The respective VCR/LD/DVD manufacturer code is cancelled when battery has been exchanged. Please set it again.
- (2) Depending on the model, operation of VCR's, LD's or DVD's of the manufacturers listed above may not be possible.
- (3) In some cases, new products may not be operative.
- (4) It will not operate with other than the above manufactures.

Troubleshooting

Before calling for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Checks
Picture	Sound	
 Snowy Picture	 Noisy Sound	Aerial location, direction connection
 Multiple Image	 Normal Sound	Aerial location, direction connection
 Interference	 Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lamps
 Normal Picture	 No Sound	Volume (Check whether the mute function has been activated on the Remote Control.)
 No Picture	 No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness / Volume Setting (Check by pressing the Power Switch or Stand-by Button on the Remote Control.)
 No Colour	 Normal Sound	Colour control
 Scrambled	 Weak Sound	Re-tune channels
 Colour Patches	 Normal Sound	Magnetic interference from unshielded equipment. Receiver moved while "ON"
 No Colour	 Noisy Sound	System Button

Specifications

Power Source : AC SINGLE 230V, 50Hz

Power Consumption : 138 W

Receiving System : 4 SYSTEMS

	SYSTEMS	FUNCTION
1.	PAL B, G	Reception of broadcast transmissions and playback from video cassette tape recorders.
2. 3.	NTSC 4.43 NTSC 3.58	Playback from special VCR only.
4.	PAL 60Hz	Playback from special Disc player and VCR only.

Receiving Channels :

VHF BAND	UHF BAND	CATV
0 – 12 PAL 0-12 PAL B (AUST.)	21 – 69 PAL G 28 – 69 PAL B (AUST.)	S21 – S41 (HYPER)

Tuning System : Frequency synthesizer Auto search tuning: 100 position.

Picture Tube : 60 cm, measured diagonally, 104° deflection.

Audio Output : 8 W × 2 (Speaker)

Aerial Impedance : 75 Ω Unbalanced coaxial.

Video/audio terminal :			
AV 1,2	S-Video In	Y: 1 Vp-p, 75 Ω	
		C: 0.3 Vp-p, 75 Ω	
DVD	Y	1.0 Vp-p, 75 Ω	
	P _B	0.7 Vp-p, 75 Ω	
	P _R	0.7 Vp-p, 75 Ω	
AV 1,2,3	Video In	1 Vp-p, 75 Ω	
	Audio In	Approx. 0.5V, 47 kΩ	
Monitor Out	Video Out	1 Vp-p, 75 Ω	
	Audio Out	Approx. 0.5V, 1 kΩ	

Remote Control Transmitter : EUR511044

Battery : R6 (AA) × 2

Dimension (W × D × H) : 634 × 456 × 537.2 mm

Weight (Net) : 37 kg

Note :

Design and Specifications are subject to change without notice.

Customer's Record

The model number and serial number of this product can be found on its cover. You should note this serial number in the space provided below and retain this book plus your purchase receipt as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number

Serial Number

Matsushita Electric Industrial Co., Ltd

Central P.O. Box 288, Osaka 530-8692, Japan