

# Panasonic

Operating Instruction

Colour Television  
TX-32F500A

Please read these operating instructions completely before operating this set and retain the booklet for future reference.

TQB4G2912

## ***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 set.*

*To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference. Retain your purchase receipt also, and note down the Model Number and Serial Number of your set in the space provided on the rear cover of these Instructions.*

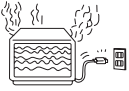




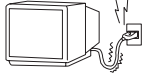


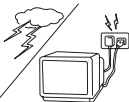
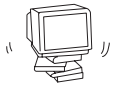
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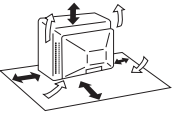





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## Warnings and Cautions

⚠ Warnings			
	Unplug the power cord in the event of any malfunction (screen goes blank, no sound, odd sounds, smoke or unusual odours coming from the unit). Unplug the power cord if foreign matter or water falls into the unit, or if the unit is dropped or the cabinet is damaged.		DO NOT use this unit near water. (near a bath tub, etc.)
	DO NOT place any of the following on the unit: Flower vases, flower pots, cups, small metal objects, or cosmetics containers, chemicals or water.		DO NOT use if the power cord or power plug is damaged, or if the plug does not fit tightly into the socket.
	DO NOT insert foreign objects (metal or easily flammable objects).		DO NOT use at a voltage other than indicated.
	TAKE CARE NOT to damage the power cord.		DO NOT remove the rear cover as live parts and High Voltage components are accessible when the rear cover is removed.
	DO NOT touch the aerial cable and this unit when there is lightning.		DO NOT place in an unstable location.

### Warnings and Cautions

⚠ Cautions			
	DO NOT place in humid or dusty location, or areas exposed to smoke or steam. DO NOT place in direct sunlight and other sources of direct heat.		DO NOT touch the power plug if your hands are wet.
	DO NOT stand, or place heavy objects on the unit. Particular care should be taken by families with small children.		Place in a safe location.
	Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 10 cm (↔) is left all around this unit even when it is placed inside a cabinet or between shelves.		Turn the power "Off" before connecting other electrical equipment.
	Before cleaning, unplug the power plug from the socket.		DO NOT jolt the unit.
	Unplug the power plug from the socket if you are not going to use the unit for an extended period.		Ask your sales outlet to install the aerial.

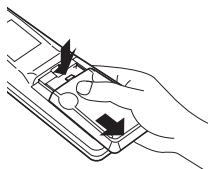
### Cleaning

	The unit contains many plastic parts. For this reason DO NOT use benzine, thinner or other chemicals to clean the unit.		Dust will accumulate on the picture screen. Please wipe with a soft cloth from time to time. If you use a chemically treated cloth, please be careful to follow the instructions that come with the cloth.
	DO NOT bring into contact with insecticide or other volatile substances. DO NOT allow the unit to come into contact for extended periods with rubber or vinyl products.		Remove dirt and soiling by wiping with a light cloth. Even if the unit is heavily soiled, do not apply cleaner directly to the unit. Soak a cloth in a solution of neutral cleanser thinned with water. Then wring out the cloth, wipe the unit clean, and finish by wiping with a dry cloth.

## Before Operating This Set

### ■ Battery Installation

1

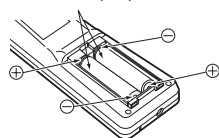


**Open the cover.**

Press bottom downward and pull out the cover.

2

Two "R6 (AA)" size

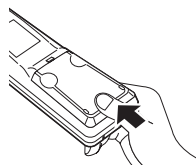


**Batteries: Use two "R6 (AA)" size batteries.**

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, and slide in reverse until the lock snaps.**

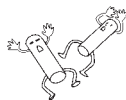
Do not use rechargeable (Ni-Cd) batteries.

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.



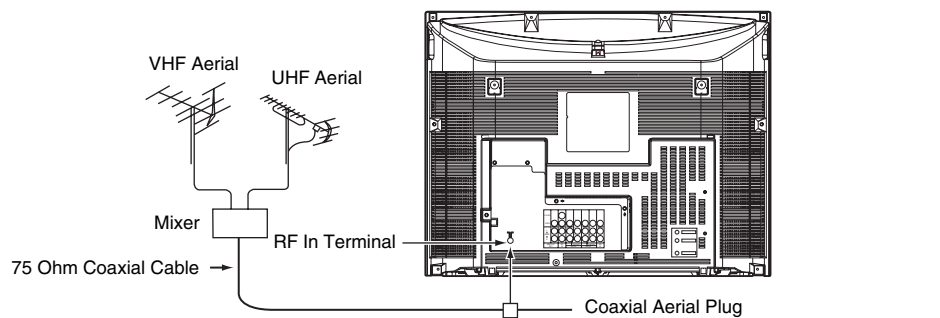
Don't mix battery types  
(alkaline with carbon, zinc etc.)



Don't recharge.

## Before Operating This Set

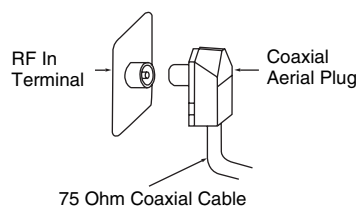
### ■ Connecting the Aerial Cable to the RF In Terminal



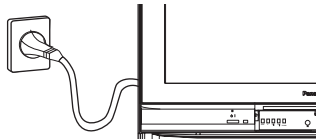
To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ohm coaxial) and the correct terminating plug are required. If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and your television receiver.

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

Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.



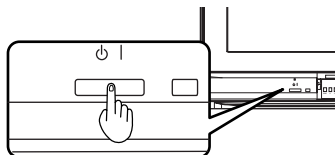
### ■ Connecting the Plug to the Wall Outlet



#### Note:

- The On/Off switch on this model does not full disconnect the TV from the mains supply.

### ■ How to Turn the Power On



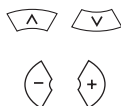
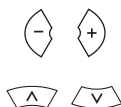
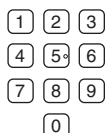
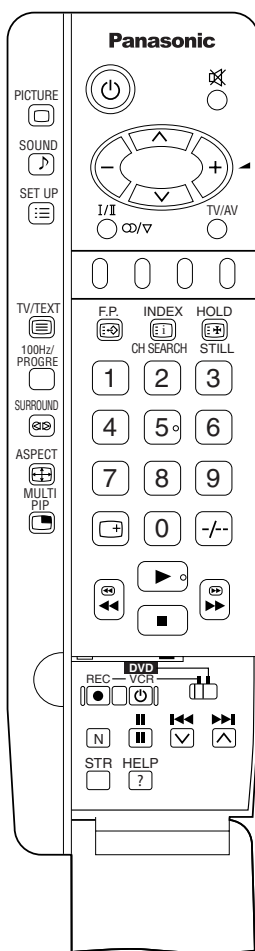
Press the Power switch on Television to turn the set on. (See page 13)

## Before Operating This Set

### ■ Owner ID



As an added feature, this TV has the option of entering a security code (Owner ID) and personal details into its memory, so that in the unfortunate event of theft it will help the police to trace the owner.



Enter required 4-digit Owner ID **PIN NUMBER** (using 0 to 9 on the Remote Control).

Press the **TV/AV** button at any time to exit the Owner ID feature without saving any information you may have entered.

Enter **NAME**, **HOUSE NUMBER** and **POSTCODE**

If a 4-digit **PIN NUMBER** was entered above, you will be taken automatically to the **NAME** line.

If not, move to the **NAME** line.

Change character.

Select character position.

Repeat above until **NAME**, **HOUSE NUMBER** and **POSTCODE** are entered.

Press **STR** to store the details.

Press **STR** again, when you are asked "Are you sure?"

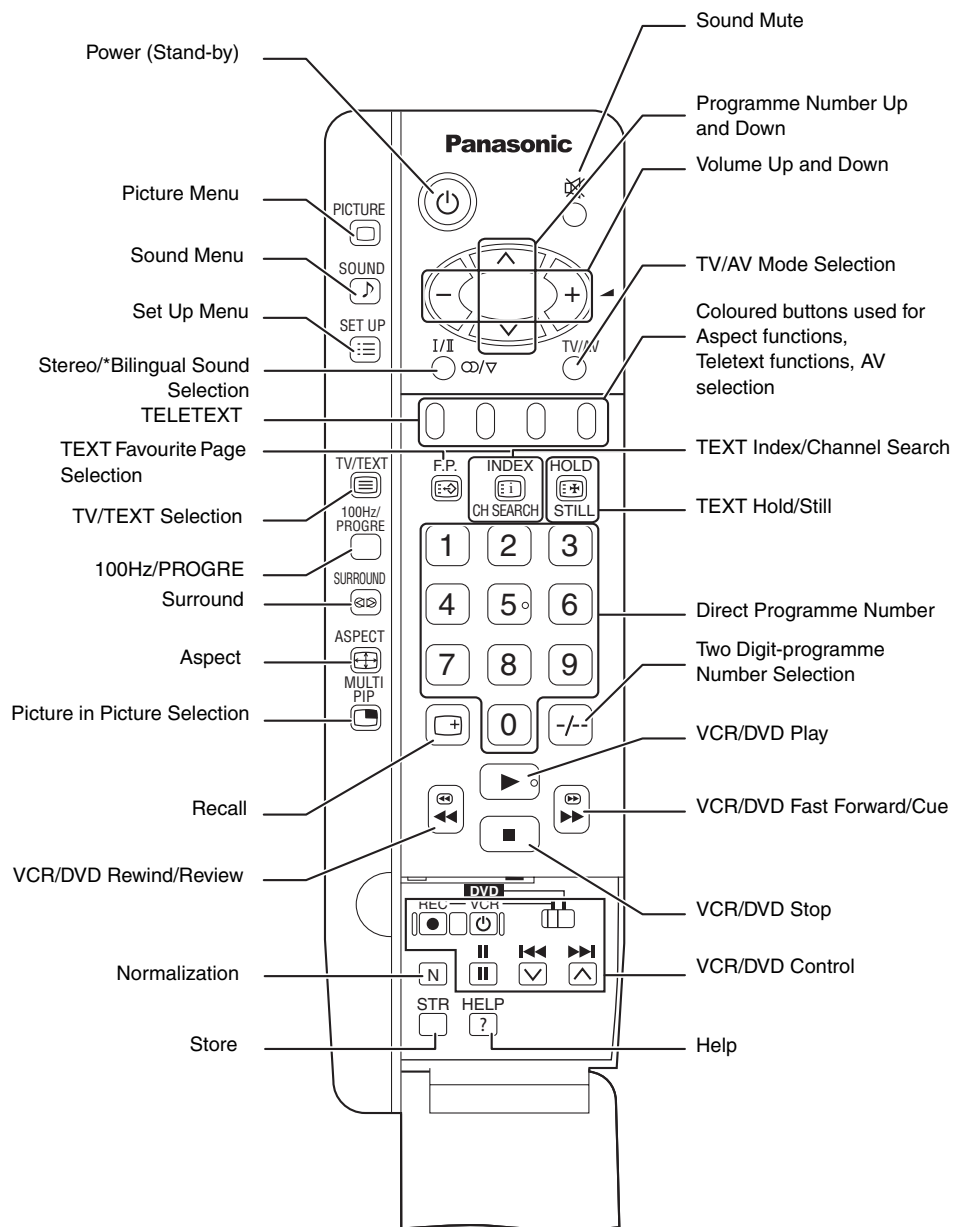
For further information on Owner ID, including how to view the details you have stored, see page 22. A space is provided on page 22 to write down your **PIN NUMBER** for future reference.

We recommend that as soon as you have stored **Owner ID** details (or have exited the feature), the picture controls are reset to normal viewing levels. To do this, press the "N" button, found under the Remote Control's pull down flap.



## Location of Controls

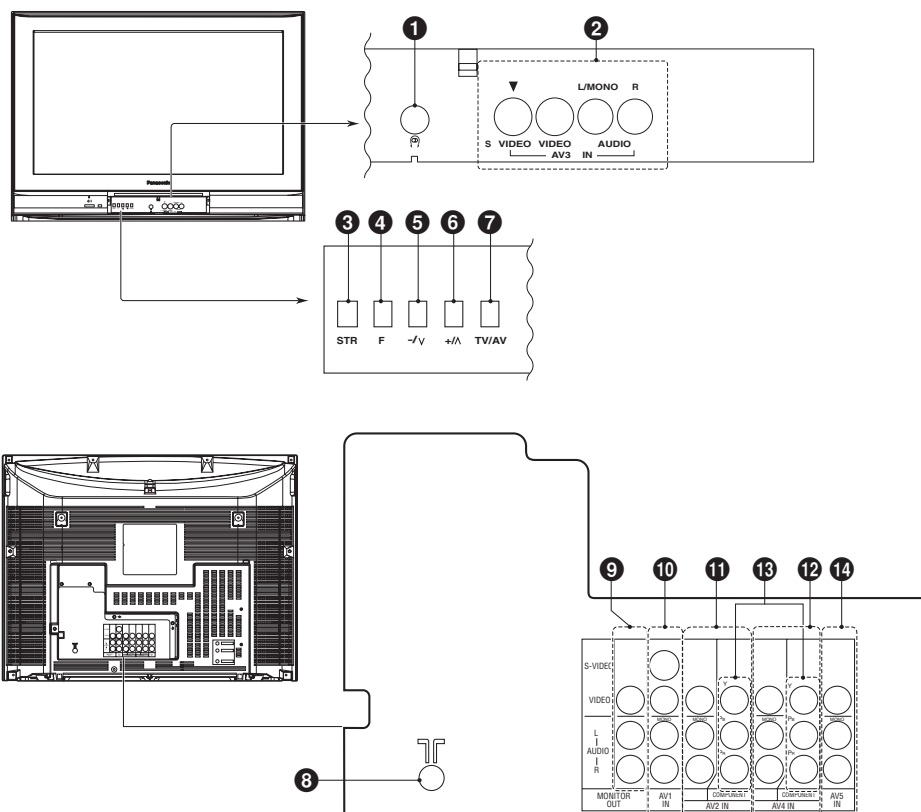
### ■ Remote Control



\* Bilingual broadcasting is not currently available in Australia or New Zealand.

## Location of Controls

### Controls and Terminals on the TV

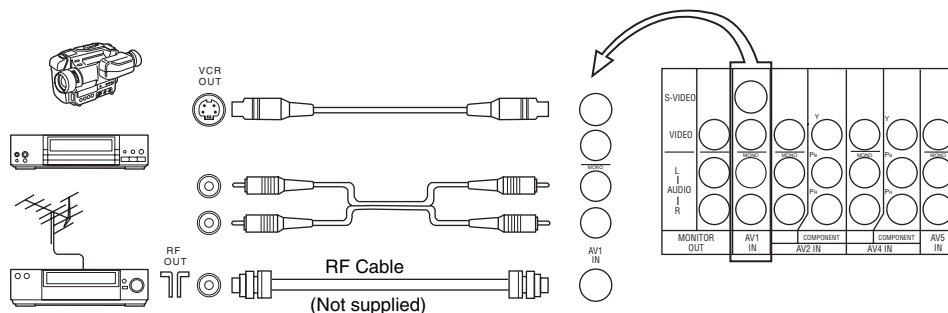


Item No.	Function	Reference Page	Item No.	Function	Reference Page
1	Headphone Jack	12	8	Aerial Terminal (RF In Terminal)	7
2	AV3 Input Terminals	11	9	Monitor Output Terminals	12
3	STR	14	10	AV1 Input Terminals	11
4	Function	14	11	AV2 Input Terminals	11
5	Volume Down (-)/ Program Number Down (v)	13	12	AV4 Input Terminals	12
6	Volume Up (+)/ Program Number Up (^)	13	13	DVD (Y•P•B•P•R) Input Terminals	12
7	TV/AV Selection	14	14	AV5 Input Terminals	11

## Connections

### ■ Connecting S-Video Equipment to the AV Input

S-Video equipment uses a 4Pin Mini Din (Male) plug for the video and RCA plugs for the audio.

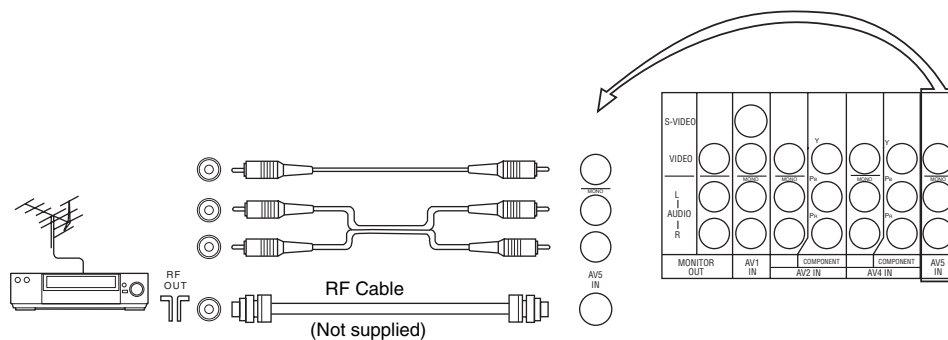


#### Notes:

- When an S-Video cable is connected to an S-Video input terminal, the RCV video terminal for that AV position will be disconnected.
- Input 3 is located on the front of the unit.

### ■ Connecting a Standard VCR to the AV Input

Most standard Video Cassette Recorders use RCA type video and audio connectors. If your VCR has different type connectors please refer to the VCR instruction book for details. VCRs can be connected to any of the AV inputs but we recommended that you use AV5 leaving the other inputs free for S-VHS, DVD or set-top box connections. If you only have one VCR, we recommend that you use AV1.



#### Note:

- A mono VCR can be connected to this television. Connect the VCR Audio out to the Left Audio Input on the television, the sound will automatically be directed to both speakers.

## Connections

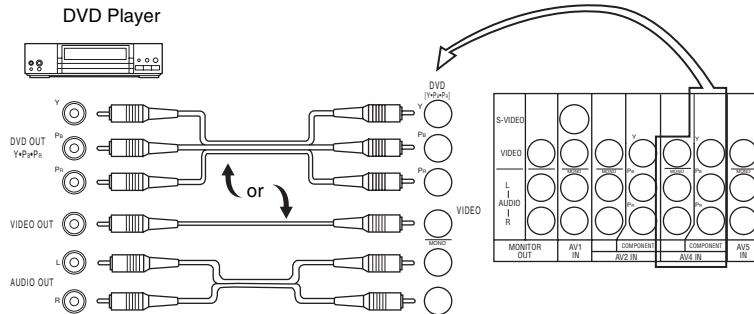
### ■ Connecting a DVD player or Set-top Box to the AV input

The audio and video inputs on the television are RCA type connectors.

Connect the Y, P<sub>B</sub> and P<sub>R</sub> outputs from the DVD to the AV1 DVD Inputs on the television, as shown below.

Connect the "AUDIO OUT" to the AV1 IN AUDIO terminals on the television.

You can also use the AV4 IN for DVD or Set-Top Box connections.



#### Note:

- Some DVD players and set-top boxes only have an RCA "VIDEO OUT" terminal. This can be connected to any of the VIDEO Inputs on the television. Connect the "AUDIO OUT" to the corresponding AUDIO terminals on the television.

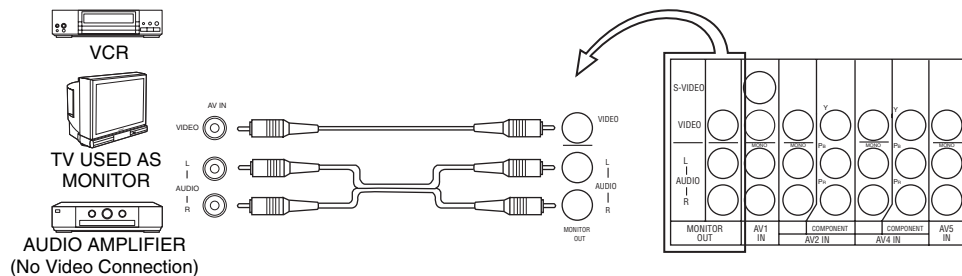
### ■ How to connect the AV Monitor Output Terminal to other Equipment

The Monitor Out terminals reproduce the signals currently on the television screen. The on-screen signals could be a television programme or signals connected to one of the AV inputs.

The Monitor Out facility can be used to allow one video source (videotape, video disc etc.) to be connected to more than one television. Connect the Monitor out from this television to the AV Input of the second television.

If a video recorder is connected to the Monitor Out and video sources (VCR, video disc, camera etc.) are connected to one of the AV Inputs, the television becomes a visual display for editing copying.

The Monitor Out Audio can also be connected to a stereo amplifier or other hi-fi equipment.

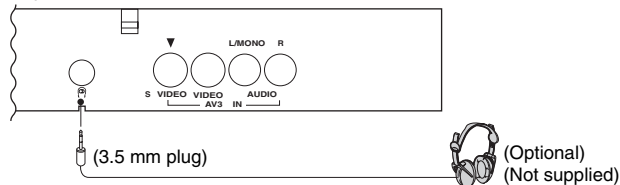


#### Note:

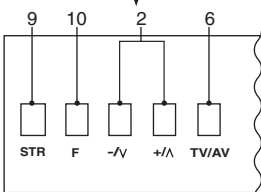
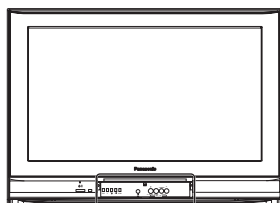
- Never connect the same video recorder or other device to both the VIDEO IN and MONITOR OUT terminals of this television as this could cause incorrect operation.

### ■ Connecting the Headphone

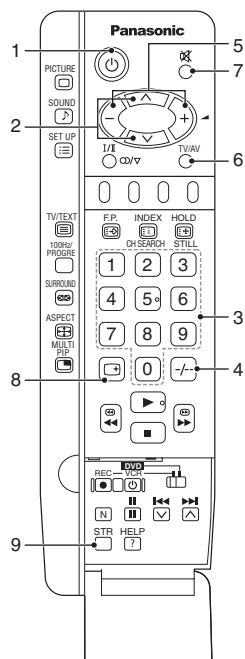
Connect the headphone as follows.



## General Operation



(TV set)



1



### How to switch the power ON or OFF/STANDBY mode

The TV set must first be switched on at the wall outlet and at the Power Switch (refer to page 7). Press this button to turn the TV set ON, from STANDBY mode.

Press it again to turn the TV set OFF, STANDBY mode.

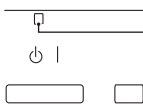
Power-Indicator

STANDBY – RED

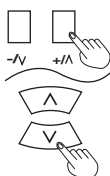
Power ON – No light up

#### Note:

It is also possible to turn the TV set on STANDBY by pressing the "Direct Programme Number Selection" buttons (0-9) and the "Programme Number Up or Down" button, either on the set or on the Remote Control.



2



### Programme Number Selection

Press the Programme Number Up "∧" or Down "∨" 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



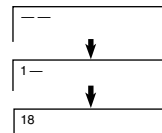
### Two Digit Programme Number Selection

e.g. To select Programme Number "18".

Press **-/-** button.

Press **1** button.

Press **8** button.



Setting range	0 ~ 99
---------------	--------

5



### Volume Adjustment

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

Volume 8

## General Operation

6



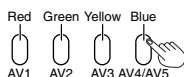
### TV/AV Mode Selection

Press the TV/AV button to select TV, AV1, AV2, AV3, AV4, AV5 input signal modes sequentially.



Remote control :

Press the TV/AV button to display AV1-AV5 at the bottom of the screen. Each coloured button corresponds with each input. For example, pressing the Red button selects AV1.



7



### Mute Button

Press this button to mute the sound completely. The "Mute" symbol will appear.

Press the button once again to restore the previous sound level, and cancel the mute.

8



### Recall Button

Press this button to display the current system status, such as Program number, Picture menu, Sound menu, Scan mode and Colour system.

9



### STR

Unit :

Used to store tuning and other function settings. Also used to start the menu demonstration.



Remote Control :

Stores some settings in TUNING menus.

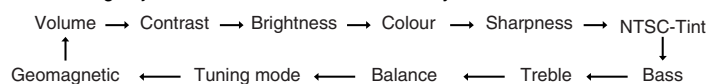
10



### Function Selection

Displays the on screen display functions, use repeatedly to select from the available functions.

The following adjustments can be accessed directly.



#### Notes:

- NTSC-Tint: Only in AV mode when receiving NTSC signals.
- Tuning mode: Not displayed during AV mode.

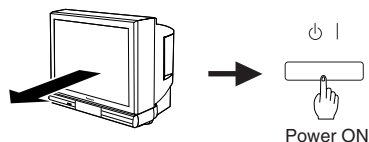
## Geomagnetic Correction

Slight tilting of the picture may be noticeable or coloured patches may sometimes appear at the corners of the screen (colour purity). The Geomagnetic Correction feature can be used to eliminate them, if necessary.

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

At this time please verify what direction the TV screen is to face (direction indicated by the arrow).

Press the main power switch.



Geomagnetic corrections can be made from the Remote Control or the TV set.

### Operation from Remote Control

**(Remote Control)**

1. Press the SET UP button.

2. Select the Geomagnetic correction menu by pressing .

3. Press or to access Geomagnetic adjust the picture tilt or coloured patches as necessary.

4. Press the TV/AV button to exit the Geomagnetic correction menu.

**Normal Viewing**

### Operation from the TV set

**(TV set)**

1. Press the F (FUNCTION) button to access the Geomagnetic correction menu.

2. Press or to adjust the picture tilt or coloured patches as necessary.

3. Press the F (FUNCTION) button to exit the Geomagnetic correction menu.

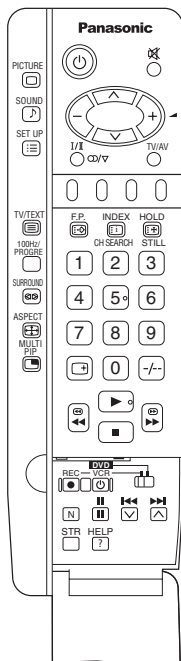
**Normal Viewing**

### 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 geomagnetism 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 buildings and other structures susceptible to geomagnetism. In these cases adjust by changing the installation location.

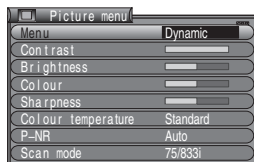
## Using the On Screen Displays

Many features available on this TV can be accessed via the On Screen Display menu system. Use the Remote Control as shown below to access and adjust features as desired.



PICTURE SOUND SET UP

The **PICTURE**, **SOUND** and **SET UP** buttons are used to open the main menus and also to return to the previous menu.



ex. AV mode : TUNING MENU  
is not displayed.



The UP and DOWN cursor buttons are used to move the cursor up and down the menus.



The LEFT and RIGHT cursor buttons are used to access menus, adjust levels or to select from a range of options.



The **STR** button is used with a number of features to store settings after adjustments have been made or options have been set.



The **TV/AV** button is used to exit the menu system and return to the normal viewing screen.



The **HELP** button runs a demonstration of on screen display menus available.  
Press the **HELP** button and select one of the options.

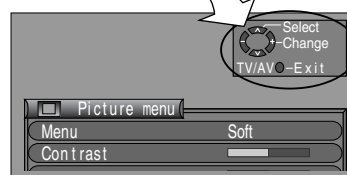


An On Screen Help box is displayed whenever a menu is displayed on the TV. This Help box indicates which keys on the Remote Control are used to navigate the menu shown, see above for descriptions of button functions.

### Note:

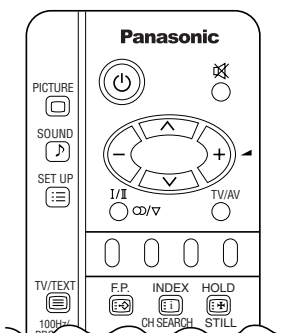
- The Help box is not shown in the menu pictures in this instruction book due to space limitations.






### ON SCREEN HELP 'Instruction' box






## Picture Menu



- 1 Press .
- 2 Move to chosen menu option by using  or .
- 3 Adjust chosen option or access chosen menu by using  or .

Press  at any time to go back to watching TV.

**MENU** You can change the level of each Function (Colour, NTSC-Tint, Brightness, Contrast, Sharpness) for each Picture Menu. Picture menu mode will be memorized for each TV, AV1, AV2, AV3, AV4 and AV5 mode.











Menu	Function
<b>Dynamic</b>	For viewing in brighter environments. This menu selects higher than normal levels of Brightness and Contrast.
<b>Standard</b>	For viewing in normal (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.
<b>Cinema</b>	For viewing in a dark room. This menu selects reduced levels of Brightness and Contrast.

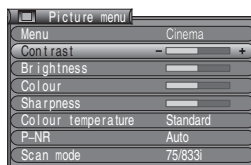


### Contrast, Brightness, Colour, Sharpness, NTSC-Tint

Increase or decrease the levels of Contrast, Brightness, Colour and Sharpness options according to your personal preference.

With an NTSC-Tint signal source connected to the TV, the picture hue can be adjusted to suit your taste.

Item	Effect	Function
<b>Contrast</b>	  Less More	Adjust for contrast.
<b>Brightness</b>	  Darker Brighter	Adjusts for easier viewing of dark pictures such as night scenes and hair.
<b>Colour</b>	  Less More	Adjusts slightly to a lighter colour.
<b>Sharpness</b>	  Less More	Displays a sharp image.
<b>NTSC-Tint</b>	  Reddish Greenish	Adjust for proper skin colour.



#### Notes:

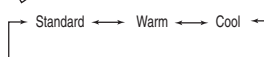
- The Multi PIP function will not operate when a Progressive Signal is used.
- NTSC-Tint only appears when the TV is receiving NTSC Signals and the Television is in the AV mode.
- Only Contrast will be displayed in Teletext mode.

## Picture Menu

### Colour temperature

Allows you to set the overall colour tone of the picture.

Press or to switch between modes

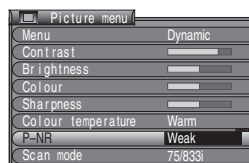
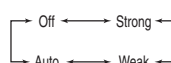


### P-NR

(Picture Noise Reduction)

Automatically reduces unwanted picture noise.

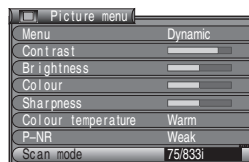
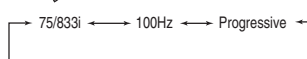
Press or to switch between modes



### Scan mode

Lets you choose the screen refresh method:

Press or to switch between modes



MODE	FUNCTION
<b>75/833i</b>	The 75/833i mode gives a faster refresh rate and more lines than a standard television.
<b>100Hz</b>	100Hz will give a steady picture for most signal transmission.
<b>Progressive</b>	Recommended when receiving NTSC signals.

Switching is also possible using on the Remote Control to change the Picture refresh setting between 75/833i, 100Hz and Progressive (for PAL signal).

#### Note:

- When viewing a PAL transmission (other than PAL 60) with **Scan mode** set to **Progressive**, the screen will flicker, this is not a fault.



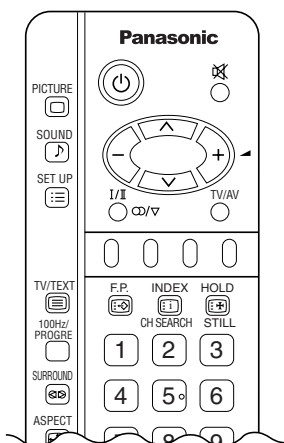
#### Helpful Hint ( Normalization)

By pressing the Normal "N" button on the Remote Control while the Picture menu is displayed, the selected menu will be changed to the Normal Mode.

Normalization will not occur if the menu 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".

## Sound Menu



- 1 Press **SOUND**.
- 2 Move to chosen menu option by using **▲** or **▼**.
- 3 Adjust chosen option or access chosen menu by using **◀** or **▶**.

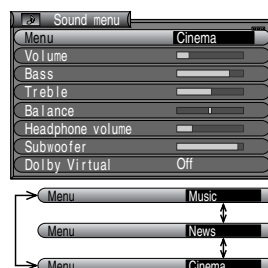
Press **TV/AV** at any time to go back to watching TV.

Some features are only available with the Surround feature switched off.

Press **SURROUND** to switch between On and Off.

**MENU** You can change the level of each Function (Bass, Treble) for each Sound Menu.  
Sound menu mode will be memorized for each TV, AV1, AV2, AV3, AV4 and AV5 mode.

Sound Menu	Function
<b>Music</b>	Amplifies the Low frequencies and outputs optimum sound. For music programmes for example.
<b>News</b>	Human voices (middle pitch sounds) will sound more clear.
<b>Cinema</b>	For movie and drama programmes.



### Volume, Bass, Treble, Balance, Headphone volume, Subwoofer

Item	Effect	Function
<b>Volume</b>	<b>Less</b> <b>More</b>	Adjusts output volume.
<b>Bass</b>	<b>Less</b> <b>More</b>	Adjusts low sounds.
<b>Treble</b>	<b>Less</b> <b>More</b>	Adjusts high sounds.
<b>Balance</b>	<b>Left SP.</b> <b>Right SP.</b>	Adjust left and right volumes.
<b>Headphone volume</b>	<b>Less</b> <b>More</b>	Adjust Headphone volume.
<b>Subwoofer</b>	<b>Less</b> <b>More</b>	Adjust Subwoofer volume.


## Sound Menu

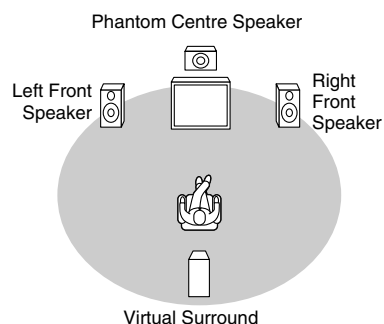
### Dolby Virtual

A Virtual Dolby Surround System attempts to create the same surround effect produced by a multi-channel system using only the left and right speakers.

The general conceptual model of a Virtual Dolby Surround System divides the centre signal equally between the left and right speakers to achieve a Phantom Centre Image. It also processes the Virtual surround signal before sending it to the left and right speakers, creating a virtual image around the listener.

The virtual effect is stronger with Dolby Surround encoded movies. Switching the Dolby virtual to OFF gives you normal television sound.

Dolby, and the  symbol are trademarks of Dolby Laboratories.



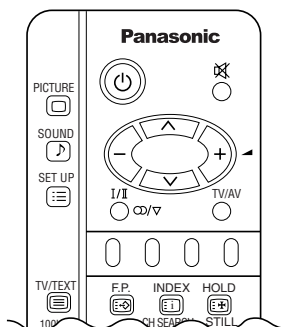
### Helpful Hint ( Normalization )

By pressing the Normal "N" Button on the Remote Control while the Sound menu is displayed, the selected menu will be changed to the Normal Mode.

Normalization will not occur if the menu 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".

## Setup Menu



- 1 Press **SET UP**.
- 2 Move to chosen menu option by using **▲** or **▼**.
- 3 Adjust chosen option or access chosen menu by using **◀** or **▶**.

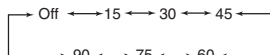
Press **TV/AV** at any time to go back to watching TV.

**Teletext** Allows you to change between List and TOP or FASTEXT modes.

**FASTEXT** ↔ **List** (FASTEXT mode is the current preferred method in New Zealand).  
**TOP** ↔ **List** (TOP mode is the current preferred method in Australia).



**Off timer** Switches the TV off within a preset time which you can choose from between 0 to 90 minutes in 15 minutes intervals.



**Wake up timer** Switches the TV on within a preset time which you can choose from 0:15 to 12:00 hours in 15 minutes intervals.

**Ch colour set** Colour density varying between broadcast channels can be adjusted to three levels for each reception channel.

**Child lock** If the Child lock function is set ON, picture and sound of the TV/AV mode being viewed will disappear and a Black screen will appear.

**Blue back** You can choose Blue back display ON or OFF when there is no signal.

**3D-COMB** You can choose 3D-COMB function ON or OFF. If the 3D-COMB function is ON, dot interference or cross colour will be reduced.

**Note:**

- Not available in component input.

**Tuning menu** (RF Mode only) This provides access to many other features including system select and tuning options.

**Geomagnetic** If you notice a slight tilt to the picture or if there are coloured patches at the corners of the screen, use this feature to eliminate them. (See page 15)

**Owner ID** This television lets you to prove ownership by letting you enter personal identification into it. The "Owner ID" function allows you to enter a security code and address information so that in the unfortunate event of theft it will help the Police to determine the owner. Refer to page 22 for instructions on how to set the Owner ID.

**VCR/GAME** (AV Mode only) Reproduction of irregular signals such as certain Video (AV mode only) games or some rental video tapes may be improved by turning the VCR/GAME feature On.

**Colour system** (AV Mode only) This option is only available in AV mode. It allows you to select the correct colour system for the signal being received. If a clear picture with correct colours cannot be obtained, a change to the Colour System may improve the picture. The settings are AUTO, PAL, NTSC4.43 and NTSC3.58. The Australian and New Zealand colour system is PAL.


**Note:**

- PAL and NTSC3.58 are different colour signal broadcast transmission systems applicable to differing countries. NTSC4.43 is a system used in special VCRs to playback NTSC recorded tapes on a PAL television.

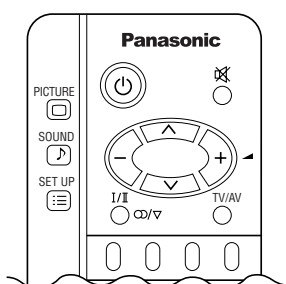
## Setup Menu






### ■ Owner ID


**Owner ID** allows you to enter a security code (Owner ID) and personal details into its memory, so that in the unfortunate event of theft, it will help the police to trace the owner.

If you wish to check the personal details already entered into the TV, press the  (Side panel) and hold for 5 seconds. The details already entered are displayed on screen.

If **Owner ID** information was not entered when you switched on your TV for the first time or it is necessary to alter some of the information, **Owner ID** can be reaccessed via the **Setup menu**.





- 1 Press .
- 2 Move to chosen menu option by using  or .
- 3 Access Owner ID by using  or .


If the **Owner ID** has previously been set, enter the **PIN NUMBER** (using 0 to 9 on the Remote Control) followed by  to proceed, this will take you to the **NAME** option.

If no **Owner ID** has previously been set, enter the required 4-digit **Owner ID PIN NUMBER** (using 0 to 9 on the Remote Control).


If a 4-digit **PIN NUMBER** was entered above, you will be taken automatically to the **NAME** line.

If not, move to the **NAME** line by using  or .

Change character by using  or .

Select character position by using  or .

Repeat above until **NAME**, **HOUSE NUMBER** and **POSTCODE** are entered.

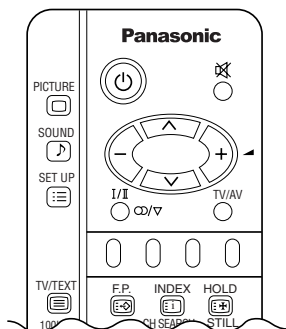
Press  to store the details.

Press again when you are asked, "Are you sure?"  
The **Tuning menu** will be displayed.

Press the  to exit.



## Tuning Menu



- 1 Press .
- 2 Move to chosen Tuning menu option by using or .
- 3 Access Tuning menu by using or .
- 4 Move to chosen menu option by using or .
- 5 Adjust chosen option or access chosen menu by using or .

Press at any time to go back to watching TV.

Pressing after having adjusted a feature will store the setting as the default (replacing the factory setting).

**Sys select**  
(System Selection)

Select the system.

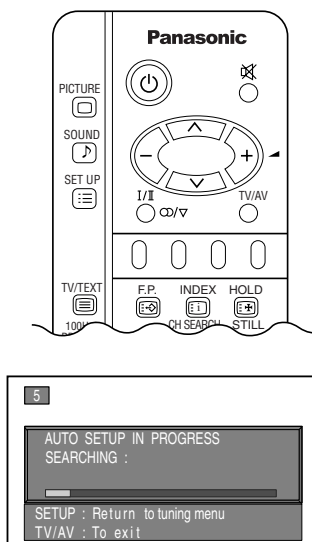
→ Australia ←  
← NZ/INDONES →












<b>Auto tuning</b>	Allows you to automatically retune the TV. Useful if you move house and wish to retune your TV to the local stations. (See page 24)
<b>Manual tuning</b>	Allows individual programme positions to be tuned, manually. (See page 25)
<b>Fine tuning</b>	Use to make small adjustments to the tuning of an individual station (useful for example when weather conditions are affecting reception quality of a programme).
<b>Skip</b>	It is possible to skip Programme Number on which no TV stations are tuned appearing on the screen. The function is only effective when selecting Programme Numbers by pressing the Programme Number Up or Down button either on the TV set or the Remote Control.

## Tuning Menu



### ■ Auto tuning




- 1 Press .
- 2 Move to chosen Tuning menu option by using  or .
- 3 Access Tuning menu by using  or .
- 4 Move to chosen menu option by using  or .
- 5 Access Auto tuning by using  or .

#### Notes:

- If you proceed with the next step all tuning data will be erased (all stations and their programme positions stored in your TV's memory will be wiped out so the new settings can be stored).
- If you exit the procedure after this point and before Auto tuning is completed, no station information will be stored. Restart and complete the Auto tuning procedure so that the TV is re-tuned.

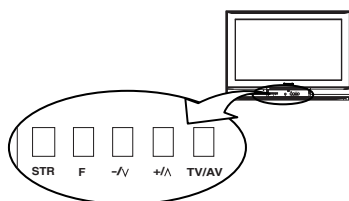
- 6 Start Auto Tuning by using  or .







Once this operation is completed the TV will display the programme now stored on programme position 1.


Press  at any time to go back to watching TV (please read the Note in the above procedure).

### ■ Auto Tuning (via front panel)


It is also possible to use the control panel buttons on the front of the TV to tune individual programme positions.



- 1 Press  (Front panel) until Tuning mode is reached.
- 2 Press  or  to access Tuning mode.
- 3 Press  (Front panel) to access Auto tuning.
- 4 Press  or  to start search.

When the desired station is found, press  to store.

The programme position will flash.  
Repeat above procedure to tune additional programme positions.

Press  at any time to exit the Tuning menu.

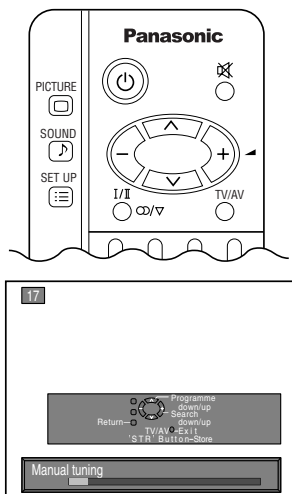
#### Helpful Hint

1. After the Auto tuning is finished, press the Programme Number "Up" button to confirm the tuning condition for each Programme Number. If some Programme Numbers are unused, it is possible to skip such Programme Numbers. Please refer to the Programme Skip function on page 23.



## Tuning Menu

### Manual tuning



- 1 Press **SET UP**.
- 2 Move to chosen menu option by using **▲** or **▼**.
- 3 Access Tuning menu by using **←** or **→**.
- 4 Move to chosen menu option by using **▲** or **▼**.
- 5 Access Manual tuning by using **←** or **→**.
- 6 Select the programme position to be tuned by using **▲** or **▼**.
- 7 Press repeatedly until required station is found by using **←** or **→**.

When the desired station is found, press **STR** to store.

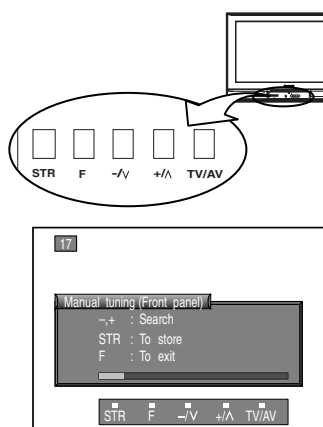
The programme position will flash.

Repeat above procedure to tune additional programme positions.

Press **TV/AV** at any time to go back to watching TV.

### Manual tuning (via front panel)

It is also possible to use the control panel buttons on the front of the TV to tune individual programme positions.



- 1 Press **F** (Front panel) until Tuning mode is reached.
- 2 Press **-V** or **+A** to access Tuning mode.
- 3 Press **F** repeatedly to select the Manual Tune.
- 4 Press **-V** or **+A** to start the search.

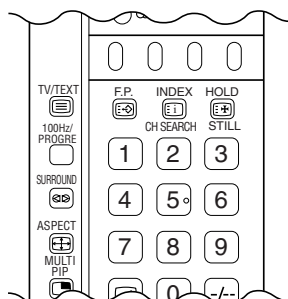
The television will automatically search for the next broadcast signal. As each station is found the search will stop. If you do not want this station restart the search.


- 5 Press the **STR** to store the selected station.
- 6 To return the television to normal operation, repeatedly press the **F** until the volume display appears.
- 7 Repeat steps 1 ~ 6 for the next programme position.

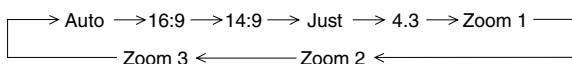
### Helpful Hint



1. If a clear picture cannot be obtained even when an AV signal is received, refer to the "Colour System Selection" operation on page 21.
2. After the Manual tuning is finished, press the Programme Number "Up" button to confirm the tuning condition for each Programme Numbers. If some Programme Numbers are unused, it is possible to skip such Programme Numbers.
3. When using a VCR without video and audio input/output terminals, it is convenient to connect the aerial cable as indicated in the instruction manual of VCR and to set the designated channel to Programme Number "0". In that case, perform Manual tuning after setting the colour system in advance. Further, in multi-system VCR, it is more convenient to set the designated channel to several Programme Numbers.

## Aspect Controls










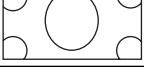

Press  to move through the Aspect options:



Press  or  to backward or forward to select the Aspect options while Aspect mode is displayed.


### Notes:

- Simply press  to display mode information on the center left of the screen.
- 16:9 picture has been used to illustrate all of the Aspect modes described in this section.


Mode	Picture	Explanation
<b>Auto</b>		This option determines the best aspect ratio to use to fill your screen.
<b>16:9</b>		This option will display a true 16:9 picture with no aspect distortion.
<b>14:9</b>		This option will display a 14:9 letterbox or 4:3 picture with no aspect distortion.
<b>Just</b>		This option gives you a "best fit" option when showing 4:3 on wide screen. The centre of the picture is not affected but there is some stretching at the edges.
<b>4:3</b>		This option will display a standard 4:3 picture with no aspect distortion.
<b>Zoom 1</b>		This option will display 16:9 letterbox or 4:3 pictures with no aspect distortion.
<b>Zoom 2</b>		This option will display 16:9 anamorphic letterbox pictures as a full screen display with no aspect distortion.
<b>Zoom 3</b>		This option will display 21:9 letterbox pictures as a full screen display with no aspect distortion.

## Menu Operation

### ■ Multi PIP

Press  (whilst the on screen selector keys are on screen) to move between watching the current programme, the **Picture in picture** feature, **Picture out of picture** and **Picture and picture** feature.

The on screen selector keys (corresponding to the four coloured buttons on the Remote Control) that appear for the features clear after a few seconds. If you want

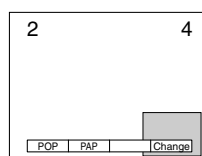
to select an operation when the keys are not shown, press  once more and the keys will reappear.



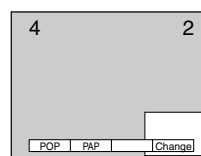
#### PIP (Picture in picture) Mode

Allows a small picture to be viewed inside the main picture.

Pressing the Red button will switch to the POP. The Green button will switch to the PAP mode. The Blue button swaps the position of the two pictures.



Picture in picture mode

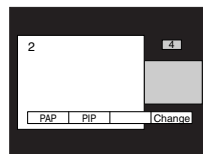


The two programmes have been swapped, the programme in the smaller window has become the main window programme.

#### POP (Picture out of picture) Mode

Allows two pictures to be viewed at the same time. The pictures will be shown side by side. The main picture is larger.

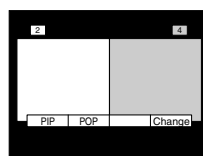
Pressing the Red button will switch to the PAP. The Green button will switch to the PIP mode. The Blue button swaps the position of the two pictures.



Picture out of picture mode

#### PAP (Picture and picture) Mode

Allows two equal sized pictures to be viewed at the same time. The pictures will be shown side by side. Pressing the Red button will switch to the PIP. The Green button will switch to the POP mode. The Blue button swaps the position of the two pictures.



Picture and picture mode

#### Changing channel in Multi PIP mode

When the On-Screen display (coloured boxes) is ON, the sub picture can be changed. Use the normal TV/AV button to switch between each of the 5 AV inputs and the RF input.

When the On-Screen display (coloured boxes) is OFF, the main picture can be changed. Use the normal programme or AV select buttons.

#### Notes:

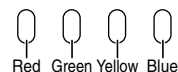
- If, in Auto mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control of your VCR requires adjustment (your VCR instruction book will contain adjustment details).
- The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.
- Multi PIP operations cannot be made during progressive signal input (Y•Pb•Pr).

## Menu Operation

### ■ CH Search

This option is used to show freeze frames of the programmes being broadcast on all the stored channels. The images are displayed clockwise around the edge of the screen starting from the top left corner. The current programme is displayed in the centre of the screen. When the display gets back to the top left corner it will overwrite the first picture with the next one in series.

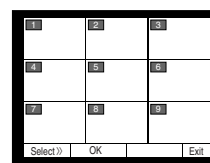
The display will continue to change until any button is pressed.



The Red button is used to select each programme in turn. The green button is used to swap the main display between the current programme and the one selected by the red button. The Blue button returns to normal viewing.

#### Note:

- Skipped channels are not shown.
- When all the programmed channels have been displayed, the television will restart the display starting from the top left corner.



Channel search

### Picture and text

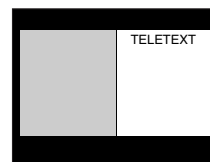
Press to move between watching the current programme, viewing teletext and the **Picture and text** feature. **Picture and text** lets you see the current programme and a page of teletext side by side.

Whilst using this feature, the Remote Control affects the teletext page; if you wish to make changes to

the programme viewed press to return to watching the programme on its own then make the desired changes.



TELETEXT mode



Picture and text mode

### Still

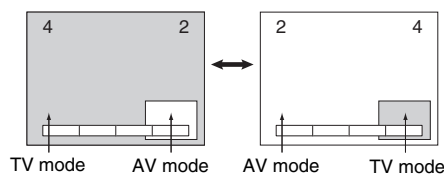
Press to freeze the picture, press again to return to watching the current programme.



### CHANGE Mode

When the CHANGE Mode is ON to Swap from Main picture to sub picture and vice versa.

A bar is displayed at the bottom of the screen when the MULTI PIP button is pressed. Press the Blue button to switch to Change mode.



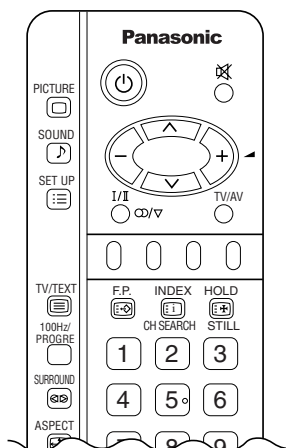
TV mode

AV mode

AV mode

TV mode

## Surround Sound



### Surround

This button switches the Dolby Virtual surround on and off. Please refer to page 20.



### Stereo / Mono

Pressing the button changes the mode from Stereo (∞) to Mono (▽) and back again. Normally the television will detect whether the broadcast signal is Mono or Stereo and will set the mode accordingly. If the Stereo signal is weak or if the receiving conditions are not the best, it is recommended that the Mono mode be manually selected.

### Bilingual \*

This system allows two languages to be transmitted for one broadcast. Switching between the Main (I) and Sub (II) positions selects the desired languages.

#### \* Note:

- Bilingual sound is currently not available in Australia or New Zealand.

## Advanced Remote Control Operation

### ■ Manufacturer's Code Settings

This Remote Control has been designed to work with a variety of VCRs and DVD players. In order for this to occur, the setting for the VCR or DVD must be programmed into the Remote Control.

- To set a VCR, slide the Remote Control VCR-DVD switch to VCR.  
To set a DVD, slide the Remote Control VCR-DVD switch to DVD.
- Press the Remote Control VCR-DVD Power button and keep it pressed.
- Enter the Manufacturer's two-digit code number using the Remote Control Number buttons . (The codes are shown below.)
- Press the Stop button .
- Release the Remote Control VCR or DVD Power button .
- Check the operation of the VCR or DVD. If it does not operate correctly, repeat steps 1 to 5 and use an alternate code (if there is one).

#### VCR Codes

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

#### DVD Codes

Manufacturer	Code
Panasonic	70

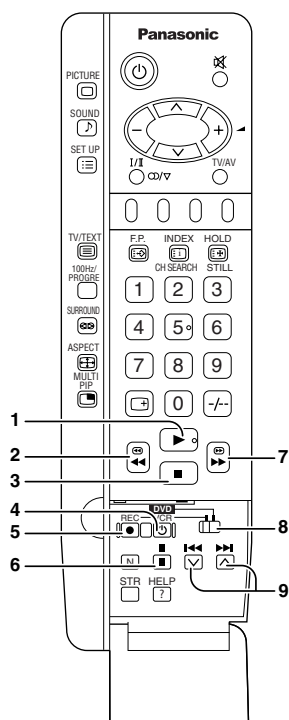
#### Notes:

- If the batteries are removed from the Remote Control, the Manufacturer's codes are lost and must be reprogrammed.
- The list of Manufacturer's codes is given as a guideline only. Panasonic cannot guarantee that any other manufacturer's product will work with this Remote Control.

## Advanced Remote Control Operation

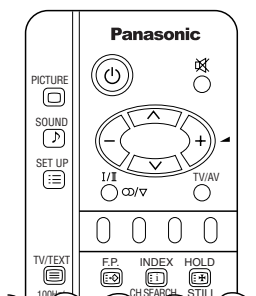
### ■ VCR / DVD

The Remote Control is capable of operating some functions of selected Panasonic VCRs and DVD (Digital Versatile Disc) equipment. Some VCR and DVD equipment have different functions. So to ensure compatibility please refer to the equipment's instruction book or consult your dealer for details.



Button		Function	
		VCR	DVD
1		Play button	
2		Rew (Rewind)/Review button	
3		Stop button	
4		VCR Power button	DVD Power button
5		REC (Record) button	
6		Pause/Still button	
7		FF (Fast Forward)/Cue button	
8		VCR and DVD Select button	
9		Programme Number Up and Down buttons for VCR	Programme Skip button

## Teletext Operation



Teletext is only available on certain broadcast channels. The time taken to display the pages and sub-pages is set by the teletext transmitter and not by the television.

Teletext is also used for Closed Captioning of television programmes. Captions are used by people who are deaf, hearing impaired, learning English or viewing in a noisy environment.

Captions differ from foreign language subtitles in that they are coloured and positioned to indicate who is speaking, and provide information on music and sound effects which may be crucial to the understanding of the program. Closed captions can be found on Teletext Page 801.

### What is TOP mode?

In TOP (Table of pages) mode, the red button moves to the previous page number and the green button moves to the next page number. This is the current preferred method of operation in Australia.

### What is List mode?

In List mode, four different coloured page numbers are shown at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. These coloured page numbers correspond to the colour coded buttons on the Remote Control. This is the current preferred method of operation in New Zealand.

### What is FASTEXT?



In FASTEXT mode, four differently coloured subjects are displayed at the bottom of the screen. To access more information about one of these subjects, press the corresponding colour coded button on the Remote Control. This is the current preferred method of operation in New Zealand.



### TV / TEXT

Pressing this button switches the screen between:


- TELETEXT
- Normal television viewing.


When TEXT is on, the sound from the broadcast channel is still audible. To adjust the volume press the  or the  to display the volume indicator. The volume can then be adjusted normally.



### F.P. (FAVOURITE PAGE)

This feature will store a favourite page in the TV memory.


1. The TV must be in the List mode, receiving a teletext broadcast and the programme number must be between 1 and 25.
2. Press the Blue button.
3. Select the page number.
4. Press and hold the  button.
5. The page number is now stored.

Press  to recall this page.



### SET UP

Used with the Coloured buttons to access the Reveal, Full / Top / Bottom, Display Cancel and Time Text functions.

Press the  to return to normal television viewing.



### HOLD

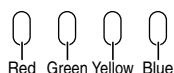
Some TELETEXT pages contain multi-page information. Use this button to stop the page changing. Press it again to release the hold.

## Teletext Operation



### INDEX

Pressing this button returns you to the main index page.




### Red / Green / Yellow / Blue buttons

In FASTEXT or TOP mode these correspond to the differently coloured subjects. In List mode they correspond to the differently coloured page numbers.



### STR

This button is used to store page numbers into the coloured buttons or the Favourite Page button. The  is located behind the Remote Control door.



### Page Numbers Up and Down

These buttons are used to move to higher or lower page numbers.



### Sub Page Numbers Down and Up

These buttons are used to move to higher or lower sub page numbers.




### Page Number buttons

These buttons allow you to directly enter the page number that you want to view.




### Reveal

Some Text pages contain concealed information, e.g. the solution to a puzzle. To reveal this information, press the  followed by the Red button. To hide the information, press the Red button again.



### (Full / Top / Bottom)


This button is used when difficulty is experienced in reading text on the screen. To operate the F/T/B, press the  followed by the Green button. Operating the F/T/B expands and displays the upper half of the screen. Operating the F/T/B button again expands and displays the lower half of the screen. Operating the F/T/B button a third time returns the display to normal condition.

## DISPLAY CANCEL


### Display Cancel

If you wish to watch the television while you are waiting for a page to be transmitted you can use the Display Cancel function.

This function is not available (or necessary) when the picture and the TELETEXT are both being displayed side by side.

Press the  followed by the Yellow button to view the TV picture while waiting for a teletext page to be transmitted. When found, the page number will be displayed at the top left of the screen.

### News Flash or Other Updates

When a news flash page (or another page which provides regular updates) has been selected, press the  followed by the Yellow button to view the TV picture.

When a news flash is received the page number will be displayed on the screen. Press the Yellow button to display the news flash.




## Teletext Operation



### TIME TEXT \*

### TIME TEXT \*

When a Page has more than one screen (sub-page) of information, you may have to wait for some time before the sub-page you require becomes available. With this function it is possible to enter the number of the desired sub-page.

1. Select Text Mode and choose a page.
2. Press the  followed by the Blue button. T\*\*\*\* will be displayed at the top left of the screen.
3. Enter the sub-page number before the T\*\*\*\* disappears. The sub-page number must be entered as a four-digit number e.g. sub-page 3 would be entered as 0003. (If in List mode, a "T" will appear in the current box at the bottom.)
4. Press the Yellow button to view the TV picture while waiting for the sub-page to be found. (This function is not necessary when the picture and the TELETEXT are both being displayed side by side.)
5. When found, press the Yellow button.

To clear the page, perform one of the following:



















- Press the .
- Select a new page number.
- Press the  to return to normal television viewing.

#### \* Note:

- TIME TEXT is currently not available in Australia.

## Troubleshooting

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

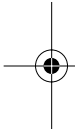
Symptoms		Check
Picture	Sound	
 Snowy Picture	 Noisy Sound	Aerial location, direction or connections
 Multiple Image	 Normal Sound	Aerial location, direction or connections
 Interference	 Noisy Sound	Electrical appliances Cars/Motorcycles Fluorescent lamps
 Normal Picture	 No Sound	Volume (Check whether 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	 Normal or Weak sound	Retune channels
 Coloured Patches	 Normal Sound	Magnetic interference from unshielded equipment; TV set moved while "ON". Turn the TV set off for 30 minutes, using the Power Switch on the TV set.
 No Colour	 Noisy Sound	Colour System

### Specifications

<b>Power Source</b>	AC SINGLE 230-240V, 50Hz		
<b>Power Consumption</b>	184 W		
<b>Receiving System</b>	1. PAL B/G	Reception of Off air broadcasts	
	2. NTSC 4.43 3. NTSC 3.58 / 60Hz 4. PAL 60Hz	Playback from Video Tape Recorders Playback from Special Video Tape Recorders and Special Video Disc Players (Via the AV Sockets) only.	
<b>Receiving Channels</b>	VHF 0 to 12 UHF 21 to 69 S'1 to S'3 S1 to S41	PAL B PAL G HYPER TUNER	
<b>Receiving Stereo System</b>	NICAM I, NICAM B/G, NICAM D, A2 (German)		
<b>Tuning System</b>	Frequency synthesizer 100 Position (0 to 99)		
<b>Picture Tube</b>	76 cm Viewable (measured diagonally)		
<b>Audio Output</b>	32 W [2 speakers ; 10 W + 10 W, woofer 12 W]		
<b>Headphones</b>	3.5 mm Plug		
<b>Aerial Impedance</b>	75 $\Omega$ Unbalanced coaxial		
<b>Video/Audio/Component Terminals</b>	AV 1, 3	S-Video In	Y:1 Vp-p, 75 $\Omega$ C:0.3 Vp-p, 75 $\Omega$
	DVD	Y	1.0 Vp-p, 75 $\Omega$
		Pb	0.7 Vp-p, 75 $\Omega$
		Pr	0.7 Vp-p, 75 $\Omega$
	AV1, 2, 3, 4, 5	Video In	1 Vp-p, 75 $\Omega$
		Audio In	Approx. 0.5 V, 47 k $\Omega$
	Monitor Out	Video Out	1 Vp-p, 75 $\Omega$
		Audio Out	Approx. 0.5 V, 1 k $\Omega$
	AV1 IN(Rear) : S-Video, Video, Audio L/R terminals		
	AV2 IN(Rear) : Video or Y•Pb•Pr, Audio L/R terminals		
	AV3 IN(Front) : S-Video, Video, Audio L/R terminals		
	AV4 IN(Rear) : Video or Y•Pb•Pr, Audio L/R terminals		
	AV5 IN(Rear) : Video, Audio L/R Terminal		
<b>Remote control Transmitter</b>	EUR511267R		
<b>Dimensions (W x D x H)</b>	798 mm x 548 mm x 579 mm		
<b>Weight (Mass)</b>	55 kg		

#### Note:

Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.



**Customer's Record**

The model number and serial number of this product can be found on its cabinet. 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 \_\_\_\_\_

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