

**Stereo Colour Television With Teletext** 

# TX-68PS12A TX-68PS13A



### **Operating Instructions**

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

# turn your life on

TQB4A0150

Dear Panasonic Customer,

Welcome to the Panasonic family. We hope that you will have many years of enjoyment from your new Colour Television.

Please retain your proof of purchase along with these operating instructions. Space has been made available on the back page of this instruction book for recording the Serial Number. The Serial Number can be found on the back cover of the set and on the packing carton.

# **Important Information**

### Programme Location Numbers

This television comes to you "factory tuned" to all the major capital city broadcast stations. Adjustments to the tuning should not be necessary. However, if you have to make adjustments, please read these instructions carefully first. Throughout this booklet "Programme Location Numbers" are referred to. *These are memory locations into which you can tune television broadcast stations*. Any television station can be tuned into any Programme Location Number.

### Picture Quality



All televisions are affected by Magnetic Interference.

- ? Your Panasonic Television is designed to overcome this with the inclusion of a demagnetising (degaussing) function.
- ? To activate this feature, simply switch your Television OFF with the Power On/Off Switch (not with the remote control) for 30 minutes and then switch it back ON.
- ? If the television is to be left unattended for extended periods (several days or more), turn the power off to the unit. DO NOT leave in Standby mode.
- ? This will ensure that you enjoy the picture clarity as it was meant to be.

Refer to page 31 for operating instructions for the GEOMAGNETIC feature.

# **Connect the Aerial**

The RF (Aerial) Input impedance of this television is 75? . If your aerial lead is 300? ribbon (two wires separated by a flat plastic sheet) you will require a 300? /75? Balun in order to connect your aerial to the television.



For your safety any external aerial should be installed by a reputable qualified installer and should comply with Australian Standard AS1417.1.

# **Connect the Power Plug**



This television is designed for the Australian Standard Mains Voltage of 240V 50Hz.

### NOTE:

If the television is not going to be used for an extended period, remove the power plug from the wall outlet.

# **Turn on the Television**

Push the Power Switch to turn the television ON. Sit back and enjoy your new Panasonic television.



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# **Television Control Panel**

# **Connecting Headphones**



## **Control Panel**

Open the control panel door to gain access to the Television controls Push the door at the point marked  $\Delta$  to open.



### **Control Panel Buttons**

# BUTTON WHAT IT DOES



### POWER

This button is used to turn the television on and off.

### **Television Control Panel Buttons**

### BUTTON

### WHAT IT DOES



#### PRE.

PRE. stands for Preset. This button is used for tuning and setting the Colour System. The on-screen display will be as shown below. Please refer to page 18 and pages 25 to 31 for a complete description of this button.





### TV/AV

This button is used to select the normal broadcast television stations or one of the three AV (Audio/Video) inputs.



### **VOLUME DOWN and UP**

These buttons are used to reduce (-) or increase (+) the volume output level from the television. The volume level is indicated on the screen as a green bar and as a number  $(0 \sim 63)$ .





### **PROGRAMME NUMBER DOWN and UP**

Pressing these buttons selects the next lower ( V ) or higher (  $\wedge$  ) Programme Number in sequence. Programme Numbers which have been "Skipped" (See page 29) will be bypassed when this button is used.



### **Remote Control Television Buttons**

For details of VCR, LD and DVD remote control operation, please refer to page 20. For details of Teletext remote control operation, please refer to page 22.

## **Battery Installation and Replacement**

Place your thumb on the battery cover triangle. Apply a slight downward pressure with the thumb and slide the cover back. This allows the cover to be removed.

Insert the batteries ensuring the correct polarity. The polarity is identified by the " + " symbol on the battery and the " + " and " - " symbols on the battery compartment. The springs inside the battery compartment connect to the negative terminal of the battery.

Two "AA" size batteries

Fit the battery cover and slide it forward until it "clicks" into place.



- ? **Do Not** use rechargeable batteries. Differences in size and performance may cause incorrect operation.
- ? **Do Not** mix battery types (Alkaline with zinc-carbon etc.)
- ? **Do Not** mix old and new batteries. Replace both batteries at the same time.
- ? **Do Not** attempt to recharge batteries.
- ? Do Not short circuit batteries.
- ? Do Not disassemble batteries.
- ? Do Not heat or burn batteries.

### **Remote Control Television Operation**

# BUTTON

# WHAT IT DOES



R - TUNE (Rapid Tune)

This button is used to swap between the channel you are now watching and the last channel you were watching. This function does not work with AV.



### **STANDBY**

The remote control button is used to turn the television into Standby mode. When the television is in Stand-By it is possible to turn it back on by pressing this remote control Power Button, the Programme Number UP or DOWN Button (front panel or remote control) or any of the direct Programme Number Buttons.



### DIRECT PROGRAMME NUMBER SELECTION

Single Digit Programme Numbers (0 to 9) can be accessed directly by pressing the corresponding number on the Remote Control Transmitter.



### TWO DIGIT PROGRAMME NUMBER SELECTION

To directly access Programme Numbers 10 to 99, press the "- / - -" Button followed by the two digits required. For example, to select Programme Number 12:

Press the "- / - -" Button, followed by the "1" and the "2".

### **Remote Control Television Operation**

### BUTTON WHAT IT DOES



- **RECALL** This button operates in three stages.
- Stage 1 Pressing this button will display all current active functions. The functions that can be displayed include AV Number, Programme Number, Sound Option, Picture Option, Stereo or Mono and Off-Timer setting. After about 2 seconds it automatically switches to stage 2.
- Stage 2 Pressing the button again displays the Programme Number or the AV Number and the Off-Timer setting.
- Stage 3 Pressing for the third time cancels the recall function **and removes the text being displayed on the screen.**



#### MAIN MENU

Pushing this button allows you to access the following options: -PICTUREsee page 14SOUNDsee page 15FEATURESsee page 16LANGUAGEsee page 17PRESETsee page 18



### **POSITION BUTTONS**

These buttons (Up, Down, Left and Right) are used to select menu options and change levels of selected functions.



### **PICTURE MENU**

The Picture Menu Button allows you to select one of three different picture modes (Standard, Dynamic, Soft).

DYNAMIC	For viewing in brightly lit rooms. This menu selects higher than normal levels of Brightness and Contrast.
STANDARD	For viewing in normal (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.
SOFT	For viewing in a dark room. This menu selects reduced levels of Brightness and Contrast.



#### **STEREO / MONO**

Pushing 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 on one signal. Switching between the Main (1) and Sub (II) positions selects the desired language. \* **Note:** Bilingual sound is not currently available in Australia.



#### **FAVORITE**

This button allows you to set up two favourite channel groups. You can put as many channels as you like into each group. The favourite channel group (1 or 2) is selected by the FAVORITE button. Use the Programme Number Up & Down buttons to switch between channels in the group. Refer to page 32.

### **Remote Control Television Operation**

### BUTTON

# WHAT IT DOES



### SOUND MUTE

Pressing this button reduces the sound from the television to nil. The mute symbol will appear on the screen.

Pressing the button again returns the sound to the original setting. Pressing the Volume

Up (+) or Down (-) will also restore the volume level setting.



#### TV / AV

Pressing the TV/AV Button will cycle between TV, AV1, AV2, AV3 and back to TV.



### **PROGRAMME NUMBER UP & DOWN**

Pressing this button selects the next higher (  $\land$  ) or lower (  $\lor$  ) Programme Number in sequence. Programme Numbers which have been "Skipped" (See page 29) will be bypassed when this button is used.



#### **VOLUME UP & DOWN**

This button is used to increase (+) or decrease (-) the volume output level from the television. The volume level is indicated on the screen as a green bar and as a number (0 ~ 63).



#### NORMALISATION

The Normalisation Button is used to reset the television to factory set levels. Colour, Sharpness, Contrast, Brightness, Treble, Bass and Balance will be reset. The button will only operate if the menu is displayed on the screen.



#### SOUND MENU

The Sound Menu Button allows you to choose between three different sound modes (Music, Speech and Movie).

- Music: Used where music is more common than speech such as musicals, video clips etc.
- Speech: Used where speech is more common than music such as talk shows, news broadcasts etc.
- Movie: Used where music and speech are fairly evenly spread.

### **Remote Control Television Operation**



- "SURROUND OFF".
   During Mono broadcasts switches between "MONO SURROUND" and "SUR-ROUND OFF".
- ? In the AV Mode switches between "STEREO SURROUND", "MONO SUR-ROUND" and "SURROUND OFF".

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5	

### **OFF-TIMER**

Pressing the Off-Timer allows the television to be preset to turn off after a period of time. The timer settings (in minutes) are: 30, 60 and 90.

Setting the Off-Timer to AUTO will cause the television to go into Standby five minutes after the television broadcast station you are tuned to stops transmitting.

Setting the OFF-TIMER to 0 cancels the timer operation.

Press the MAIN MENU button. Use the Left (◀) or Right (►) Button to move between menu items The on screen icon display will appear as shown below. Press again to turn Main Menu Off.



### **Picture Menu Operation**

	1 2
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- 1. Push the MAIN MENU Button.
- Select the PICTURE Menu using the Left ( ◀ ) or Right ( ► ) Button. When the Picture symbol is highlighted, the PICTURE Menu has been selected. Push the Down ( ▼ ) Button to access the Menu options.
- 3. Choose the option by using the Up (  $\blacktriangle$  ) or Down (  $\checkmark$  ) Buttons.
- 5. Push the MAIN MENU Button to return to the Menu.
- 6. Push the MAIN MENU Button again to return to normal viewing.

Picture Menu	Function	
DYNAMIC	For viewing in brightly lit rooms. This menu selects higher than normal levels of Brightness and Contrast.	
STANDARD	For viewing in normal (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.	2.
SOFT	For viewing in a dark room. This menu selects reduced levels of Brightness and Contrast.	

#### Note:

- You can change the level for each function (Colour, NTSC-Tint, Bright, Contrast and Sharpness for each picture menu option.
- 2. Picture menu levels can be set for TV, AV1, AV2 and AV3 modes.

Item	Effect		Indicator	
COLOUR	Less	More		I
NTSC-TINT	Reddish	Greenish	₩ 32 TINT	
BRIGHT	Darker	Brighter		
CONTRAST	Less	More	© 60 CONTRAST	
SHARPNESS	Softer	Sharper	U 32 SHARPNESS	

#### Note:

1. The NTSC-Tint adjustment is possible at all times but it only takes effect if an NTSC picture is being viewed.

# Normalisation

Pressing the Normal ( **N**) Button on the remote control, when the Picture Menu is displayed will return all picture settings to the factory preset levels. This is called "Normalisation". Normalisation *will not* occur if the Picture Menu is not displayed when the Normal ( **N**) Button is pressed.

### **Sound Menu Operation**

<ul> <li>2. Select the SOUND Menu using the Left (◄) or Right (►) Button. When the Sound symbol is highlighted, the SOUND Menu has been selected. Push the Down (▼) Button to access the Menu options.</li> <li>3. Choose the option by using the Up (▲) or Down (▼) Buttons.</li> <li>4. Adjust the setting of the option using the Left (◀) or Right (►) Buttons.</li> <li>5. Push the MAIN MENU Button to return to the Menu.</li> <li>6. Push the MAIN MENU Button again to return to normal viewing.</li> </ul>
--

Sound Menu	Function	
MUSIC	Used where music is more common than speech such as musicals, video clips etc.	
SPEECH	Used where speech is more common than music such as talk shows, news etc.	
MOVIE	Used where music and speech are fairly evenly spread.	

Note: Sound menu levels can be set for TV, AV1, AV2 and AV3 modes.

Item	Effect	Indicator / Operation
BASS	Less More	9 55 BASS
TREBLE	Less More	<b>♦</b> 56 TREBLE
BALANCE	Left Right	32 BALANCE
BASS BOOST	Cut Boost	Used to increase the Bass level.
LOUDNESS	Off On	Used to increase the Bass level at low volume settings.
AVL	Off On	Limits the maximum volume level. It eliminates variations in volume levels such as quiet speech followed by loud special effects in movies etc.

# Normalisation

Pressing the Normal ( **N**) Button on the remote control, when the Sound Menu is displayed will return all sound settings to the factory preset levels. This is called "Normalisation". Normalisation *will not* occur if the Sound Menu is not displayed when the Normal ( **N**) Button is pressed.

# **Features Menu Operation**



- 1. Push the MAIN MENU Button.
- Select the FEATURES Menu using the Left ( ◀ ) or Right ( ► ) Button. When the Features symbol is highlighted, the FEATURES Menu has been selected. Push the Down ( ▼ ) Button to access the Menu options.
- 3. Choose the option by using the Up (  $\blacktriangle$  ) or Down (  $\blacktriangledown$  ) Buttons.
- 5. Push the MAIN MENU Button to return to the Menu.
- 6. Push the MAIN MENU Button again to return to normal viewing.

Menu Item	Indicator	Function
BLUEBACK	BLUEBACK ON	When no picture is received or when the signal is very weak, the screen reverts to a blue background and the sound is muted. This feature can be turned Off to continue watching weak signals. It may be necessary to turn the BLUEBACK off when watching a videotape when CUE or REVIEW have been selected.
CH COLOUR SET	CH COLOUR SET STD	Colour density varying between broadcast channels can be adjusted to three levels for each channel received. Use the Left ( ◀ ) or Right ( ► ) Button to switch between STD, HIGH and LOW.
CHILD LOCK	CHILD LOCK OFF	CHILD LOCK allows you to "lock out" a channel to prevent a child from watching a particular programme. Select the channel to be locked before pressing the Main Menu button. Use the Left (◀) or Right (►) Button to switch child lock ON and OFF.
VCR/GAME	VCR/GAME ON	Reproduction of irregular signals such as certain video games or some rental video tapes may be improved by turning the VCR/GAME feature On.
FAVORITE	FAVORITE CH OFF	This button allows you to set up two favourite channel groups. Please refer to page 32 for more information.

# Language Menu Operation



# **Preset Menu Operation**



- 1. Push the MAIN MENU Button.
- Select the PRESET Menu using the Left ( ◀ ) or Right ( ► ) Button. When the Preset symbol is highlighted, the PRESET Menu has been selected. Push the Down ( ▼ ) Button to access the Menu options.
- 3. Choose the option by using the Up (  $\blacktriangle$  ) or Down (  $\blacktriangledown$  ) Buttons.
- 5. Push the MAIN MENU Button to return to the Menu.
- 6. Push the MAIN MENU Button again to return to normal viewing.

Menu Item	Indicator	Function
AUTO TUNE	AUTO TUNE	Used to automatically retune all programme location numbers. See page 25.
MANUAL TUNE	MANUAL TUNE	Used to manually retune individual programme location numbers. See page 26.
COLOUR SYS	COLOUR SYS AUTO	Used to select the most appropriate colour system for the type of picture being watched. See page 27.
FINE TUNE	<b>FINE TUNE</b>	Used to fine tune a broadcast signal.
		See page 28.
SKIP	SKIP ON	Used to bypass programme locations which do not have a broadcast station allocated to them. See page 29.
POS. CHANGE	POS. CHANGE 1	This function allows you to store the channel you are viewing into any programme location number. See page 30.
GEOMAGNETIC	GEOMAGNETIC 0	Geomagnetic conditions at the television's location can sometimes cause blurring of colours and discoloured patches on the screen. Adjusting the GEOMAGNETIC level may overcome this problem. If colour patches persist turn the television power OFF for 30 minutes. If the patches still persist it may be necessary to change the location of the television. See page 31.

# **Remote Control VCR/LD/DVD Operation**

This remote control has been designed to work with a variety of VCRs, Laser Disks and DVDs.

Please refer to page 21 for details of manufacturers' codes.



### \* WARNING:

Unauthorised recording of material from Television Broadcasts or from other video and/or audio sources may contravene copyright laws.

# Remote Control VCR/LD/DVD Operation

# **Remote Control VCR/LD/DVD Buttons**

Dutton	Function		
Button	VCR	LD/DVD	
CC 	<b>REWIND / REVIEW</b> Used to rewind the tape quickly or watch the tape in reverse.	<b>REWIND / REVIEW</b> Used to play the disc in reverse while watching the picture.	
	<b>POWER BUTTON</b> Used to switch the VCR ON or OFF (Standby).	<b>POWER BUTTON</b> Used to switch the LD/DVD ON or OFF (Standby).	
	<b>STOP</b> Used to stop the VCR.	<b>STOP</b> Used to stop the LD/DVD.	
VCR LD/DVD	VCR Selects VCR	LD/DVD Selects LD/DVD.	
0	PAUSE / STILL	PAUSE / STILL	
	Pauses the tape during play.	Pauses the disc during play.	
	<b>PLAY</b> Used to start the VCR playing.	<b>PLAY</b> Used to start the LD/DVD playing.	
	<b>FAST FORWARD / CUE</b> Used to wind the tape forward quickly or to watch the tape at fast speed	<b>FAST FORWARD / CUE</b> Used to watch the disc at fast speed.	
	<b>STILL ADVANCE</b> Used to advance the tape One frame at a time. Used With the Pause button.	<b>DISC SIDE A SELECTION</b> Used to select the A side of the disc.	
B	<b>RECORD</b> Press both buttons to Start recording	<b>DISC SIDE B SELECTION</b> Used to select the B side of the disc.	
	PROGRAMME NUMBER UP AND DOWN Used to select the next Higher or lower programme Number.	<b>PROGRAMME SKIP</b> Used to skip tracks on the disc.	

# **Remote Control VCR/LD/DVD Operation**

# Manufacturers' Code Settings

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

- 1. To set a VCR, push the remote control VCR Button. To set a LD or DVD, push the remote control LD/DVD Button.
- 2. Push the remote control VCR or LD/DVD Power Button and keep it pressed.
- 3. Enter the Manufacturer's two-digit code number using the remote control Number Buttons. (The codes are shown below).
- 4. Press the STOP button.
- 5. Release the remote control VCR or LD/DVD Power Button.
- 6. Check the operation of the VCR, LD 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 AIWA FUJITSU HITACHI JVC MITSUBISHI	10, 11, 12, 13 15, 16 20 25, 26, 27 30, 31, 32 35, 36	NEC ORION Philips SANYO SHARP SONY TOSHIBA	40, 41, 42, 43 45, 46 50 55, 56, 57, 58 60, 61 65, 66, 67 70, 71

### LD CODES

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

#### **DVD CODES**

Manufacturer	Code	
Panasonic	70	

### NOTES:

- 1. If the batteries are removed from the remote control the Manufacturer's codes are lost and must be reprogrammed.
- 2. 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.

# **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 for the hearing impaired. Closed captions can be found on Teletext Page 801.

Not all broadcast stations transmit closed captions in the same way. Some, but not all, of the methods are listed below:

- 1. A teletext screen appears and the closed captions are accessed like any other teletext page.
- 2. The picture remains on the screen while you type in 801.
- 3. The picture disappears while you type in 801. The picture stays black until the page is reached.
- 4. The picture disappears while you type in 801. The picture stays black until a programme containing closed captions is broadcast.

Some broadcast stations will have a message on the screen to tell you that closed captions are not available for this programme. Some broadcast stations give you no indication at all.

#### TOP (Table Of Pages) MODE

In TOPTEXT mode, the red button moves to the previous page number and the green button moves to the next page number. The yellow and blue buttons correspond to different subjects. These subjects can be accessed by Pushing the coloured button. This is the current preferred method of operation in Australia.

#### 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.



# **IMPORTANT NOTICE**

Whenever you have selected the Teletext mode, whether for Teletext Information or Closed Captions, you cannot change channels without exiting the Teletext mode. You must press the TV / TEXT before you can change channels.

## **Teletext Operation**

### BUTTON

# WHAT IT DOES



### NUMBER BUTTONS

Used to select the required Teletext page or sub-page number.



### F/T/B (FULL / TOP / BOTTOM)

This button is used when difficulty is experienced in reading text on the screen. Pushing the F/T/B Button expands and displays the upper half of the screen. Pushing the F/T/B Button again expands and displays the lower half of the screen. Pushing the F/T/B Button a third time returns the display to normal condition.



#### TV/TEXT

This button is used to switch between TV and Teletext Modes. The Teletext screen will only appear if the selected channel is transmitting Teletext information.



#### 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 TIME TEXT button

3. When the page has been received, the sub-pages can be viewed. The subpage number must be entered as a four digit number e.g. sub-page 3 would be entered as 0003.

Press TIME TEXT to return to television viewing.

F.P.

#### F.P. (FAVOURITE PAGE)

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

- 1. The TV must be in the LIST mode and receiving a teletext broadcast.
- 2. Push the Light Blue button.
- 3. Select the page number.
- 4. Push LIST/STORE (see page 24).
- 5. The page number is now stored.

Push F.P. to recall this page.

#### **DISPLAY CANCEL**

Push the Display Cancel Button to view the TV picture while waiting for a teletext page. When found, the page number will be displayed the at the top left of the screen.

### **Teletext Operation**

# BUTTON WHAT IT DOES



### PAGE NUMBER UP & DOWN BUTTONS

These buttons are used to select the next higher or lower page. Unused pages are skipped (bypassed).



#### HOLD

When a selected Teletext page consists of a number of sub-pages the sub-pages will rotate automatically unless the "Hold" function has been activated. Pushing this button will cause the sub-page to stay on the screen. Pushing Hold again will cancel the operation. Whenever this function is activated the **F** symbol will appear on the screen.



#### INDEX

This button is used to return to the Main Index Page.

### COLOUR CODED BUTTONS

In TOP TEXT mode these buttons correspond to different subjects. In LIST mode they correspond to different page numbers.



#### REVEAL

Some Text pages contain concealed information, e.g. the solution to a puzzle. To reveal this information press the Reveal Button. To hide the information, press the Reveal Button again.



#### LIST/ F TEXT

Push the List / F Text Button to switch between the Top of Page and List modes.



#### LIST STORE

In LIST mode the page numbers stored in the four coloured buttons can be changed for each teletext channel.

Push a coloured button, enter the page number and push the List Store Button to store the page. Keep the button pressed until the coloured numbers at the bottom of the screen change colour.

<ol> <li>PICTURE MENU In Teletext mode only the brightness and cor</li> <li>FEATURES MENU In Teletext mode the Child Lock and Favorite</li> </ol>	
2. FEATURES MENU	
	ntrast can be adjusted.
In Teletext mode the Child Lock and Favorite	
	e Channel options are not available.
3. PRESET MENU	
In Teletext mode only the Fine Tuning or Ge	omagnetic can be adjusted.

# **Automatic Tune**

This television has been factory tuned to all major city channels. Use the automatic tuning procedure only if you wish to reset ALL Programme Location Numbers. Refer to "Manual Tune" on page 26 if you only want to retune one or two Programme Location Numbers.

The television should be switched ON and the TV/AV Switch set to TV.

When you start the automatic search, the television will automatically search for television broadcasts through both VHF bands and the UHF band. During this process all of the available television broadcast channels will be automatically allocated to sequential Programme Number locations starting with location 1.

# **Auto Tuning Using the Front Panel Controls**

- 1. Open the front panel door .
- 2. Push the PRE. Button once.



3. Press the Volume Up (+) Button to start the Auto Tune. Auto Tune will automatically allocate each received broadcast signal to a sequential Programme Number. The operation will cease when all available channels have been tuned.



4. Return the television to normal operation by pushing the PRE. Button seven times.

# Auto Tuning Using the Remote Control



After you have finished with the automatic tuning and returned to normal viewing, push the Programme Number Up ( ) Button to confirm the tuning condition for each Programme Number. If a Programme Number is unwanted, it is possible to "SKIP" or bypass that Programme Number. Please refer to "SKIP" setting details on page 29.

# Manual Tune

This Television has been factory tuned to all the major city channels. Use this tuning procedure only if you wish to reset individual Programme Numbers.

The television should be switched ON and the TV/AV Switch set to TV.

# **Manual Tuning Using the Front Panel Controls**

- 1. Open the front panel door.
- 2. Push the PRE. Button twice.
- 3. Use the front panel Programme Number Up ( $\Lambda$ ) or Down ( $\vee$ ) Buttons to select the Programme Location Number you want to tune.
- 4. Press the Volume Up (+) or Volume Down (-) Button to start the Manual Tune.
- 5. If you do not want to save this broadcast station in this programme location number, repeat step 4.
- 6. When you are satisfied with your selection you can
  - Tune more stations by repeating steps 3, 4 and 5

-Return to normal operation by pushing the PRE. Button six times.

			-
ſ	1 PRESET		
	AUTO TUNE		
	COLOUR SYS	AUTO	
	SKIP	OFF	
l	POS. CHANGE GEOMAGNETIC	1 0	
	-		/
$ \begin{pmatrix} 1 \end{pmatrix} $			٦
(	CH 1		_

MANUAL TUNE

# Manual Tuning Using the Remote Control



- 1. Push the MAIN MENU Button.

Push the Down (  $\blacktriangledown$  ) Button to access the MANUAL TUNE option.

- 3. Use the front panel Programme Number Up (∧) or Down (∨) Buttons to select the Programme Location Number you want to tune.
- 5. If you do not want to save this broadcast station in this programme location number, repeat step 4.
- 6. When you are satisfied with your selection you can
  - Tune more stations by repeating steps 3, 4 and 5
  - Return to normal operation by pushing the MAIN MENU Button twice.

# **Tuning the Television to a VCR**

- 1. Turn the VCR On and either start a known tape playing or set the VCR Test Signal, if fitted, to On (refer to the VCR operating instructions).
- 2. Repeat steps 2, 3 and 4 of the Manual Tuning procedure above. The television will treat the VCR as if it was a normal television broadcast station.

### NOTES:

- 1. The antenna lead must be connected to the VCR and the VCR RF-Out must be connected to the TV RF-In. Please refer to page 33.
- 2. The picture and sound quality are usually much better if the VCR is connected using the AV Terminals. Please refer to page 33.

# **Colour SYS**

If a clear picture with correct colours cannot be obtained, a change to the Colour System may improve the picture. The television should be switched ON and the TV/AV Switch set to AV1, AV2 or AV3. The Colour SYS is normally set to AUTO and generally does not need to be changed.

# **Colour SYS Setting Using the Front Panel Controls**

### **RF (Normal Television) MODE**

- 1. Open the front panel door.
- 2. Push the PRE. Button three times.
- 3. Press the Volume Up (+) or Volume Down (-) Button to switch between AUTO, PAL and NTSC-4.43.
- 4. Return the television to normal operation by pushing the PRE. Button five times.



$\begin{pmatrix} 1 \end{pmatrix}$	PRESET	
	O TUNE JUAL TUNE	
	OUR SYS	PAL
SKI		OFF
POS	6. CHANGE	1
GEC	DMAGNETIC	0



$\bigcap$	PRESET	
	auto tune Manual tune	
	COLOUR SYS	NTSC-3.58
	FINE TUNE	
	SKIP	OFF
	POS. CHANGE	1
	GEOMAGNETIC	0

### AV (Audio / Video) MODE

- 1. Open the front panel door.
- 2. Push the PRE. Button once.
- 3. Press the Volume Up (+) or Volume Down (-) Button to switch between AUTO, PAL, NTSC-4.43 and NTSC-3.58.
- 4. Return the television to normal operation by pushing the PRE. Button twice

AV1 PRESET	AV1 PRESET	AV1 PRESET	AV1 PRESET
COLOUR SYS AUTO	COLOUR SYS PAL	COLOUR SYS NTSC-4.43	COLOUR SYS NTSC-3.58
GEOMAGNETIC 0	GEOMAGNETIC 0	GEOMAGNETIC 0	GEOMAGNETIC 0

# **Colour SYS Setting Using the Remote Control**



- 1. Push the MAIN MENU Button.
- 3. Push the Down (▼) Button to access the Colour SYS option.
- 4. Press the Left ( ◀ ) or Right ( ► ) Button to switch between AUTO, PAL, NTSC-4.43 and NTSC-3.58.
- 5. Push the MAIN MENU Button twice to return the television to normal operation

# **Fine Tuning**

In areas of poor reception or constant interference a slight adjustment to the tuning may improve the picture quality. The television should be turned ON and the TV/AV switch set to TV.

# **Fine Tuning Using the Front Panel Controls**

- 1. Open the front panel door.
- 2. Push the PRE. Button four times.
- 3. Use the front panel Programme Number Up (∧) or Down (∨) Buttons to select the Programme Location Number you want to tune.
- 4. Press the Volume Up ( + ) or Volume Down ( ) Button to start the Fine Tune.
- 5. The fine tuning symbol (■) will appear to the left of the Programme Location Number indicator.
- 6. When you are satisfied with your selection you can
  - fine tune more stations by repeating steps 3, 4 and 5
    - Return the television to normal operation by pushing the PRE. Button four times.





# **Fine Tuning Using the Remote Control**



- 1. Push the MAIN MENU Button.
- 3. Use the front panel Programme Number Up (  $\wedge$  ) or Down (  $\vee$  ) Buttons to select the Programme Location Number you want to tune.
- 4. Push the Down (  $\checkmark$  ) Button to access the FINE TUNE option.
- 5. Press the Left ( ◀ ) or Right ( ► ) Button to start the Fine Tune.
- 6. The fine tuning symbol ( •) will appear to the left of the Programme Location Number indicator.
- 7. When you are satisfied with your selection you can
  - fine tune more stations by repeating steps 4, 5 and 6.
  - Return the television to normal operation by pushing the MAIN MENU Button once.

# **Canceling the Fine Tuning**

To cancel the Fine Tuning follow the Manual Tune procedure on page 26.

# **Skip Operation**

This option allows you to "SKIP" (bypass) the unused or undesired Programme Numbers. The Function is only applicable when the Programme Number Up or down buttons are pressed. The use of the remote control Direct Programme Number Buttons overrides the Skip function. The SKIP function is not available if FAVORITE CH has been selected.

# **Using Front Panel Controls**

- 1. Open the front panel door.
- 2. Push the PRE. Button five times.
- 3. Select the Programme Location Number you want to skip using the front panel Programme Number Up or Down Buttons.
- 4. Press the Volume Up ( + ) or Volume Down ( ) Button to switch to SKIP ON.
- When you are satisfied with your selection you can
   Skip more Programme Location Numbers by repeating steps 3 and 4.
   Return the television to normal operation by pushing the PRE. Button three times.





# **Using the Remote Control**

- 1. Push the MAIN MENU Button.
- 2. Select the PRESET Menu using the Left ( ◀ ) or Right ( ► ) Button. When the Preset symbol is highlighted, the Preset Menu has been selected.
- 3. Push the Down (▼) Button to access the SKIP option.
- 4. Select the Programme Location Number you want to skip using the Remote Control Programme Number Up or Down Buttons.
- 5. Push the Left ( $\triangleleft$ ) or Right ( $\triangleright$ ) Button to switch to SKIP ON.
- 6. When you are satisfied with your selection you can
- Skip more Programme Location Numbers by repeating steps 4 and 5.
- Return the television to normal operation by pushing the MAIN MENU Button twice.

# How to Cancel the Skip

To cancel the Skip function follow the procedure outlined above. Use the appropriate button to switch to SKIP OFF.

# POS. CHANGE

This option allows you to save the broadcast channel you are currently watching into any Programme Location Number. The television should be switched ON and the TV/AV Switch set to TV.

# **POS. CHANGE Using the Front Panel Controls**

- 1. Open the front panel door.
- 2. Push the PRE. Button six times.
- 3. Select the new Programme Location Number. (Use the front panel Programme Number Up or Down Buttons)
- 4. Press the TV/AV button to store the channel.
- 5. When you are satisfied with your selection you can
  - Store more Programme Location Numbers by repeating steps 3 and 4.
  - Return the television to normal operation by pushing the PRE. Button twice.



# **POS. CHANGE Using the Remote Control**



- 1. Push the MAIN MENU Button.
- 3. Push the Down ( ▼ ) Button to access the POS. CHANGE option.
- 4. Select the new Programme Location Number. (Use the Remote Control Programme Number Up / Down Buttons, Direct Access Buttons or Two Digit Select Button).
- 5. Push the TV/AV Button to switch to store the channel.
- 6. When you are satisfied with your selection you can
  - Store more Programme Location Numbers by repeating steps 4 and 5.
  - Return the television to normal operation by pushing the MAIN MENU Button twice.

# GEOMAGNETIC

All televisions, particularly large screen televisions, are affected by the earth's Magnetic Field. The symptom may show up as blurring of colours or strange discoloured patches. The location and direction of the television can add to the interference problem.

The Geomagnetic Correction option can be used to overcome some of these effects.

### **Geomagnetic Correction Using the Front Panel Controls**

- 1. Open the front panel door.
- 2. Push the PRE. Button seven times.
- 3. Use the front panel Programme Number Up or Down Buttons to adjust the picture for best colour. Pay special attention to the four corners of the picture. The Geomagnetic Correction has a range of -9 to +9.
- 4. When you are satisfied with your adjustment you can return the television to normal operation by pushing the PRE. Button once.



# Geomagnetic Correction Using the Remote Control



- 1. Push the MAIN MENU Button.
- 3. Push the Down ( ▼ ) Button to access the GEOMAGNETIC option.
- Use the Remote Control Programme Left ( ) or Right ( ▶) Button to adjust the picture for best colour. Pay special attention to the four corners of the picture. The Geomagnetic Correction has a range of -9 to +9.
- When you are satisfied with your adjustment you can return the television to normal operation by pushing the MAIN MENU Button twice.

### **Special Note**

- 1. If the adjustment still allows coloured patches on the screen, turn the mains power off for about 30 minutes.
- 2. In some cases the geomagnetic adjustment will not completely eliminate the interference. In this situation it will be necessary to relocate the television.

# **Favorite CH Operation**

This button allows you to program your favourite channels into one or two groups. The Programme Number Up or Down buttons will only show the channels you have selected. The SKIP function is not available if FAVORITE CH has been selected.

### **Adding Channels to Favorite**

- 1. Push the MAIN MENU Button.
- 2. Select the FEATURES Menu using the Left ( ◀ ) or Right ( ▶ ) Button.
- 3. Push the Down ( $\mathbf{\nabla}$ ) Button to access the Favorite CH option.
- 4. Push the Left ( ◀ ) or Right ( ► ) Button to choose between Favorite CH 1 or 2.
- 5. Push the MAIN MENU Button.
- 6. Select the PRESET Menu using the Left ( ◀ ) or Right ( ► ) Button.
- 7. Push the Down ( $\mathbf{\nabla}$ ) Button to access the Favorite CH.
- 8. Use the Programme Number Up or Down Buttons to select the Programme Location Number you want to add.
- 9. Push the Left ( ◀ ) or Right ( ► ) Button to switch Favorite CH to ON.
- 10. When you are satisfied with your selection you can
  - Add more Programme Location Numbers by repeating steps 8 and 9.
  - Return the television to normal operation by pushing the MAIN MENU Button twice.

#### For example:

If you watch channels 3, 4, 5 and 8 on a regular basis, you can include them all onto a Favorite CH. For this example we will use CH 2.

Perform the above steps in the following order:

- 1. Push the MAIN MENU Button.
- 2. Push the Right (▶) Button to select the FEATURES Menu.
- 3. Push the Down (▼) Button to access the Favorite CH option.
- 4. Push the Right ( $\blacktriangleright$ ) Button to choose 2.
- 5. Push the MAIN MENU Button.
- 6. Push the Right (▶) Button to select the PRESET Menu.
- 7. Push the Down  $(\checkmark)$  Button to access the Favorite CH.
- 8. Use the Programme Number Up or Down Buttons to select Programme Location 3.
- 9. Push the Right ( $\blacktriangleright$ ) Button to switch Favorite CH to ON.
- 10. Use the Programme Number Up Button to select the Programme Location 4.
- 11. Push the Right ( $\blacktriangleright$ ) Button to switch Favorite CH to ON.
- 12. Use the Programme Number Up Button to select Programme Location 5.
- 13. Push the Right ( $\blacktriangleright$ ) Button to switch Favorite CH to ON.
- 14. Use the Programme Number Up Button to select Programme Location 8.
- 15. Push the Right ( $\blacktriangleright$ ) Button to switch Favorite CH to ON.
- 16. Push the MAIN MENU Button twice.

# **Using the Favorite CH**

When you press the Programme Number Up or Down Buttons only those Programme Numbers you have selected will be shown. In the above example prssing the Programme Number Up or Down Buttons will select 3, 4, 5 and 8. No other programmes will be selected. You can select programmes out side this group by pressing the Direct Access and Two Digit buttons as shown on page 9.

# How to Cancel Favorite CH

To cancel the Favorite CH function keep pushing the FAVORITE button until OFF is displayed on the screen.

# **Connecting Equipment to the TV**

# **Front Panel Connections**

Behind the front panel door is the headphone socket and the AV2 input.

The front input terminals allow quick and easy access for computer games, video cameras and other equipment which is not usually permanently connected.



# **Rear Panel Connections**

When using a VCR with the television *always* connect the Aerial to the VCR and connect an RF Cable (not supplied) between the VCR RF-Out and the television RF-In.

You can watch videos by either tuning the television to the VCR (see page 26) or by connecting the VCR to the rear AV terminals (see below and page 34).

Note: When connecting a mono VCR through the RF-In, please switch the TV to mono.



# **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.



**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.

# **Connecting S-Video & DVD Equipment to the AV Input**

S-Video equipment uses a 4Pin Mini Din (Male) plug for the video and RCA plugs for the audio. When an S-Video cable is connected to an S-Video input terminal, the RCA video terminal for that AV position will be disconnected.



### **Monitor Out**

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 or more of the AV inputs, the television becomes a visual display for tape editing or copying. Unauthorised recording of material from Television Broadcasts or from other video and/or audio sources may contravene copyright laws.

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



(NO VIDEO CONNECTION)

To keep your Panasonic Television in good working order please observe the following warnings and cautions. Please be careful with this television. Like all electrical equipment it can cause serious injury or damage if it is mistreated.

## Warnings



**Danger Do not** insert foreign objects. (Keep metal or easily inflammable objects out of this television).



### Danger

Always pull the plug out of the wall outlet by holding the plug itself.

**Do not** pull the plug by the power cord.



**Danger: High Voltage Do not** remove the rear cover, as High Voltage components will be exposed.



### Danger

**Do not** alter the power cord. **Do not** use if the power cord or plug is damaged or if the plug does not fit tightly into the socket.



**DO NOT** touch the aerial cable and metal parts of the television when there is lightning around. During storms switch the television off. **DO NOT** leave in standby. Remove the plug from the wall socket.



**Do not** allow the power cord to come into contact with flame or hot surfaces.



**Do not** place any containers of water or other liquids on or near this television.



**Do not** place heavy objects on the power cord.

# Cautions



Remove the Power Plug from the wall socket when the Television is not going to be used for an extended period of time.







Turn the power OFF before connecting other electrical equipment.



Any external aerial should be installed by a reputable qualified installer and should comply with Australian Standard AS1417.1.

# **Cleaning the Television**



### **Cabinet and Picture Tube Care**

The cabinet and picture tube can be kept in good condition by wiping with a clean, lint free cloth moistened with mild detergent and water. For safety, remove the plug from the power outlet when cleaning.



This television contains many plastic parts. For this reason **Do Not** use benzene, thinners or any solutions containing petroleum or other chemicals.

Remove dirt and soiling by wiping with a soft cloth. Even if the television is heavily soiled do not apply cleaner directly to

the unit. Soak a cloth in a

solution of neutral cleanser

thinned with water. Wring out

clean and finish by wiping with a

the cloth, wipe the television

dry cloth.



**Do not** spray insecticide or volatile solvent on the TV. **Do not** allow rubber and vinyl products to stay in contact with the TV for long periods of time. They may cause changes in paint quality.

# Locating the Television



**Do not** place the TV in humid or dusty locations, or areas exposed to smoke or steam. Avoid exposing the television to direct sunlight or any other sources of direct heat.



Adequate ventilation is essential. Allow a gap of at least 10cm around the TV, even in a cabinet or between shelves.

# **Caring for the Television**



**Do not** stand or place heavy objects on top of the television.



**Do not** subject the TV to any physical shocks. Always remove any connector cables when moving the TV. When moving the TV from one place to another wrap it in something protective.

# **Caring for the Remote Control**

The lens of the Remote Control should be kept clean and free of dirt and grease. Use a soft cloth moistened with water and a mild detergent to keep the lens clean.



# **Frequently Asked Questions**

Some minor problems can be corrected very quickly and easily without the cost of a service call. Panasonic has a Customer Care Centre which can answer most questions over the phone. Before you contact the Customer Care Centre with your question we have included the most commonly asked questions.

If the answer to your problem is not in this list, determine the symptoms and make a few simple checks as shown on the next page. The location of the nearest service centre can be obtained from the Panasonic Customer Care Centre on 132600.

Question: Answer:	<ul> <li>Why are my channels on 1,2,3,4,5?</li> <li>Someone has performed an "Automatic Search" tune of your television. You have two options.</li> <li>1. Use the POS. CHANGE feature described on page 30.</li> <li>2. Retune each channel individually using the Manual Search Instructions.</li> </ul>	
<b>Question:</b> Answer:	<ul> <li>How do I get Channel 10?</li> <li>You have four methods of selecting Channel 10</li> <li>You can use the two digit channel selector on the remote control (- /). Press this button followed by the number 1 button, then the 0 button.</li> <li>You can press the 9 button followed by the channel up button ( ∧ ).</li> <li>You can tune channel 10 into another position such as programme location 0.</li> <li>You can program it into the Favorite button. See page 32.</li> </ul>	
Question:	<b>My channel number is still on the screen. How do I turn it off?</b>	
Answer:	If the channel number is a small green number on the top left of the screen, press the recall button ( ) on the remote control. Any other channel number is one being broadcast by the television station. There is no way to turn this off.	
Question:	How do I tune my stations?	
Answer:	The instructions for tuning the stations are on page 25 for automatic tuning and on page 26 for tuning individual stations.	
Question:	I have done an auto tune because the book told me to. If I am only to do manual search why is automatic search first in the book?	
Answer:	The automatic search and the manual search each have specific uses. The reason for each is clearly described in the book. The reason that automatic search is described first is because this is the first option on the screen.	
Question: Answer:	How do I turn off the Blueback? Push the MAIN MENU Button. Press the Right (▶) Button to select the FEATURES Menu. Push the Down (▼) Button to select the Blueback option. Press the Right (▶) Button to turn the Blueback off.	
Question:	When I skip a station why is a picture still coming up when I press the number that the channel is on?	
Answer:	The Skip operation only works when you use the Channel Up ( $\Lambda$ ) or Down ( $\lambda$ ). Buttens	
Question: Answer:	The Skip operation only works when you use the Channel Up ( $\Lambda$ ) or Down ( $\vee$ ) Buttons. <b>When I use the channel up or channel down why don't I get all the channels?</b> Some of the channels may be "Skipped". See page 29. The Favorite CH option may be turned on. See page 32.	
Question:	Why dosen't the channel change when I press the channel button?	
Answer:	The television might be switched to Teletext mode. If it has been switched to text mode for closed captions and they are not being transmitted there may not be any indication on the screen to let you know that you are in Text mode. See pages 22 and 23.	

# Troubleshooting

Picture	Sound	Check
Snowy Picture	Noisy Sound	Aerial Location, Direction or Connections. If you are watching a tape playback check the state of the Video heads – they may need to be cleaned or replaced. The tape may be old. Check the tracking.
		Aerial Location, Direction or Connections.
Multiple Image	Normal Sound	Electrical Appliances, Motorcycles, Cars or Fluorescent Lamps.
(B. (B. ))		Volume (Check the Mute function) Check the Colour System Mode. Refer to page 27.
Normal Picture	No Sound No Sound	Not plugged in, switched OFF or Set to Stand By. Check volume, brightness, and contrast levels. Various internal safety devices may have been triggered. Switch the TV off for a few minutes and try again.
No Colour	Normal Sound	Colour Control. Colour System Mode. Refer to page 27. If the picture is from a tape playback, try adjusting the tracking.
Scrambled	Normal or Weak Sound	Retune the Television. Refer to page 26.
Colour Patches	Normal Sound	Magnetic Interference from unshielded equipment or the television may have been moved while it was switched ON. (Switch the television OFF with the main power switch and leave it OFF for about 30 minutes. Refer to page 31.
Rolling Picture	Noisy Sound	Colour System Mode. Refer to page 27.

# Specifications

RF Channels	VHF 0 to 12 UHF 21 to 69 S'1 to S'3 S1 to S41	PAL B PAL G HYPER TUNER
Receiving Systems	1. PAL B/G	Reception of Off air broadcasts Playback from Video Tape Recorders
	<ol> <li>NTSC 4.43</li> <li>NTSC 3.58</li> <li>PAL 60Hz</li> </ol>	Playback from Special Video Tape Recorders and Special Video Disc Players (Via the AV Sockets) only.
Power Requirements	240Volts <u>+</u> 10% 50Hz	
Power Consumption	Max 180W Standby 8W	
Chassis	MX10A	
Tuning System	Frequency synthesized, 100 Position (0 to 99).	
Picture Tube	68cm Viewable (Measured diagonally)	
Audio Output	2 Speaker 7.5W + 7.5W	
Headphone Socket	3.5mm Stereo	
Aerial Impedance	75? Unbalanced coaxial	
A/V Terminals		t 1, Rear 2 t 1, Rear 1
Video / Audio In	Video in 1.0V	0Vp-p 75? C: 0.3Vp-p 75? p-p, 75? ox. 400mV 47k?
Monitor Out		p-p, 75? ox. 400mV
Accessories Supplied	Remote Control EUR511044 2 Type 'AA' Batteries Instruction Manual TQB4A0150	
Dimensions	Height 58.7cm Widt	h 65.8cm Depth 50.6cm
Weight	44.6kg	
Note:	Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.	

# **Customer's Record**

The serial number of this product can be found on its rear cover and on the carton. It is recommended that you note the serial number and other details in the space provided and retain this booklet in a safe place as a permanent record of your purchase to aid in identification in the event of theft or loss.

Model No.	
Serial No.	PA
Purchase Date	
Purchased From	



### Matsushita Electric Co. (Aust) Pty Ltd

P.O. Box 326 Penrith NSW 2751 ABN: 25 000 611 389 Certified to International Environmental Standard ISO14001 Certified to International Quality Standard AS/NZS ISO9001





