

## **Panasonic**®

# Operating Instructions Progressive Plasma Television

Model No.

**TH-37PA30** 

# Plasma Television with HD Monitor Input

TH-42PV30 TH-50PV30



Pedestal stand shown above is optional extra.

The illustration shown is an image.



Please read these instructions before operating your set and retain them for future reference.

**English** 

## Dear Panasonic Customer

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

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.

## **Contents**

Important Safety Nation

iiiiportaiit salety Notice	٠ ٠
Safety Precautions	4
Maintenance	
Accessories	6
Fitting remote control batteries	6
How to open the front cover	7
Terminal cover open and close	7
Fastening method	7
Antenna connection	8
Connections	9
How to connect the Headphones / AV3 terminals	9
How to connect the Monitor Output terminals	
to other Equipment	. 10
How to connect the AV1 Input terminals	. 10
How to connect the Component Input terminals	. 10
How to connect the PC Input terminals	. 1
Power On / Off	. 12
Basic controls: front panel and remote control	. 13
Using the On Screen Displays	
Tuning	
Tuning menu	
Auto tuning	
Auto tuning (via front panel)	. 16

Manual tuning	17
Manual tuning (via front panel)	17
Channel Allocation	18
Picture menu	19
Sound menu	20
Setup menu	21
Owner ID	22
Aspect Controls	23
Multi window	24
Still	25
Channel search	25
Picture and text	25
PC mode	26
Photo View mode	28
Teletext operation	32
Stereo / Bilingual Sound Selection	34
VCR / DVD operation	
Remote control setting	
Troubleshooting	
Input signal can be displayed	
Specifications	
•	

## **Important Safety Notice**

#### **WARNING**

1) To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.

Do not place containers with water (flower vase, cups, cosmetics, etc.) above the set. (including on shelves above, etc.)

No naked flame sources, such as lighted candles, should be placed on / above the set.

- 2) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 3) Do not remove the earthing pin on the power plug. This apparatus is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.

Do not defeat the purpose of the earthing plug.

#### **CAUTION**

- 1) This appliance is intended for use in environments which are relatively free of electromagnetic fields. Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear. To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.
- 2) If a static electricity discharge occurs inside the front cover, the screen may momentarily flicker. This is not a malfunction.

The screen will return to normality in a short while.

To prevent electric shock, ensure the earthing pin on the AC supply power plug is securely connected.

#### **Trademark Credits**

- VGA is a trademark of International Business Machines Corporation.
- · Macintosh is a registered trademark of Apple Computer, USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
   Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- · SD Logo is a trademark.

#### **CAUTION:**

Symptoms	Check
After-images appear	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma TV.  Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.  Without signals and operations for 2 minutes, the level of the contrast decreases automatically to prevent image retention.
	Note: The permanent after-image on the Plasma TV resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.

## **Safety Precautions**

#### WARNING

#### ■ Setup

This Plasma TV is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

(All of the following accessories are manufactured by Matsushita Electric Industrial Co., Ltd.)

• Pedestal ...... TY-ST42PX20 (TH-37PA30, TH-42PV30)

TY-ST50PX20 (TH-50PV30)

• Display stand ····· TY-DP4201W

TY-S37PX20W (TH-37PA30) TY-S42PX20W (TH-42PV30) TY-S50PX20W (TH-50PV30)

• Wall-hanging bracket (vertical) ···· TY-WK42PV3W

• Wall-hanging bracket (angle) ······ TY-WK42PR2W

Always be sure to ask a qualified technician to carry out set-up.

#### Do not place the Plasma TV on sloped or unstable surfaces.

• The Plasma TV may fall off or tip over.

#### Do not place any objects on top of the Plasma TV.

• If water is spilt onto the Plasma TV or foreign objects get inside it, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Plasma TV, please consult your local Panasonic dealer.

#### For sufficient ventilation;

If using the pedestal (optional accessory) for the Plasma TV, leave a space of at least 10 cm at the top, left and right, at least 6 cm at the bottom, and at least 7 cm at the rear. If using some other setting-up method, leave a space of at least 10 cm at the top, bottom, left and right, and at least 1.9 cm at the rear.

#### Avoid installing this product near electronic equipment that is easy to receive electromagnetic waves.

• It will cause interference in image, sound, etc. In particular, keep video equipment away from this product.

#### ■ When using the Plasma TV

The Plasma TV is designed to operate on 220 - 240 V AC, 50/60 Hz.

#### Do not cover the ventilation holes.

• Doing so may cause the Plasma TV to overheat, which can cause fire or damage to the Plasma TV.

#### Do not stick any foreign objects into the Plasma TV.

 Do not insert any metal or flammable objects into the ventilations holes or drop them onto the Plasma TV, as doing so can cause fire or electric shock.

#### Do not remove the cover or modify it in any way.

• High voltages which can cause severe electric shocks are present inside the Plasma TV. For any inspection, adjustment and repair work, please contact your local Panasonic dealer.

#### Securely insert the power supply plug as far as it will go.

• If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket is loose, they shall not be used.

#### Do not handle the power supply plug with wet hands.

Doing so may cause electric shocks.

## Do not do anything that may damage the power cable. When disconnecting the power cable, pull on the plug body, not the cable.

Do not damage the cable, make any modifications to it, place heavy objects on top of it, heat it, place it near any
hot objects, twist it, bend it excessively or pull it. To do so may cause fire and electric shock. If the power cable is
damaged, have it repaired at your local Panasonic dealer.

If the Plasma TV is not going to be used for any prolonged length of time, unplug the power supply plug from the wall outlet.

## **Safety Precautions**

#### ■ If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odour starts to come out from the Plasma TV, immediately unplug the power supply plug from the wall outlet.

• If you continue to use the Plasma TV in this condition, fire or electric shock could result. After checking that the smoke has stopped, contact your local Panasonic dealer so that the necessary repairs can be made. Repairing the Plasma TV yourself is extremely dangerous, and should never be attempted.

If water or foreign objects get inside the Plasma TV, if the Plasma TV is dropped, or if the cabinet becomes damages, disconnect the power supply plug immediately.

 A short circuit may occur, which could cause fire. Contact your local Panasonic dealer for any repairs that need to be made.



#### ■ When using the Plasma TV

Do not bring your hands, face or objects close to the ventilation holes of the Plasma TV.

• Heated air comes out from the ventilation holes at the top of Plasma TV will be hot. Do not bring your hands or face, or objects which cannot withstand heat, close to this port, otherwise burns or deformation could result.

Be sure to disconnect all cables before moving the Plasma TV.

• If the Plasma TV is moved while some of the cables are still connected, the cables may become damaged, and fire or electric shock could result.

Disconnect the power supply plug from the wall socket as a safety precaution before carrying out any cleaning.

• Electric shocks can result if this is not done.

Clean the power cable regularly to prevent it becoming dusty.

• If dust built up on the power cord plug, the resultant humidity can damage the insulation, which could result in fire. Pull the power cord plug out from the wall outlet and wipe the mains lead with a dry cloth.

This Plasma TV radiates infrared rays, therefore it may affect other infrared communication equipment.

Install your infrared sensor in a place away from direct or reflected light from your Plasma TV.

## **Maintenance**

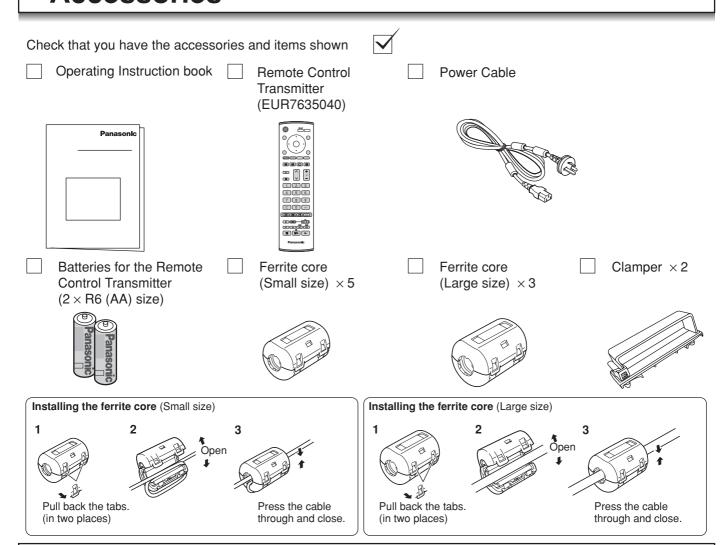
The front of the display panel has been specially treated. Wipe the panel surface gently using only a cleaning cloth or a soft, lint-free cloth.

- If the surface is particularly dirty, wipe with a soft, lint-free cloth which has been soaked in pure water or water to which a small amount of neutral detergent has been added, and then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects, otherwise the surface may become damaged. Furthermore, avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the surface may be adversely affected.

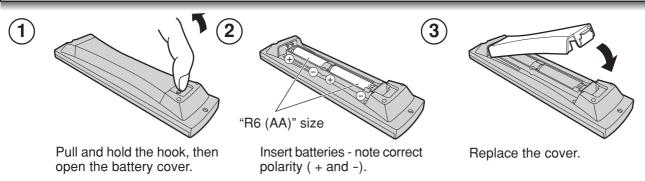
If the cabinet becomes dirty, wipe it with a soft, dry cloth.

- If the cabinet is particularly dirty, soak the cloth in water to which a small amount of neutral detergent has been added and then wring the cloth dry. Use this cloth to wipe the cabinet, and then wipe it dry with a dry cloth.
- Do not allow any detergent to come into direct contact with the surface of the Plasma TV.
   If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the
  cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long
  periods in contact with articles made from rubber or PVC.

## **Accessories**



## Fitting remote control batteries



Do not use rechargeable (Ni-Cad) batteries.

They are different in shape and performance and may fail to ensure correct operation. Dispose batteries in an environment-friendly manner.

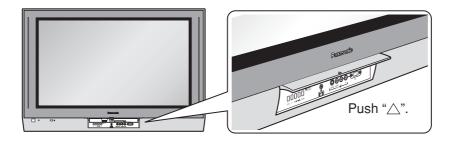
### ♠ Battery cautions

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

#### Observe the following precaution:

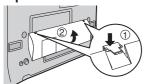
- 1. Batteries shall always be replaced as a pair. Always use new batteries when replacing the old set.
- 2. Do not combine a used battery with a new one.
- 3. Do not mix battery types (example: "Zinc Carbon" with "Alkaline").
- 4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
- 5. Battery replacement is necessary when remote control acts sporadically or stops operating the TV set.

## How to open the front cover



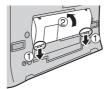
## Terminal cover open and close

#### Open

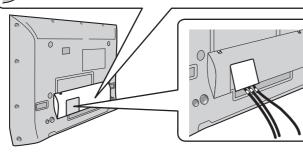


- Push down hooks and pull the cover slightly towards yourself to disengage the claws (at 4 points).
- 2. Slowly pull out in the downward direction.

#### Close



- 1. Insert the claws (at 4 points) at the bottom end.
- 2. Push until it clicks.

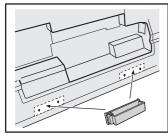


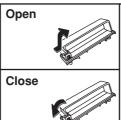
When connecting to the rear AV Input / Output terminals, connect through this window. (This window cannot close completely when connecting the cables.)

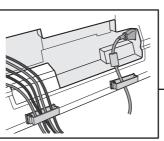
Other cables should be connected before closing the terminal cover.

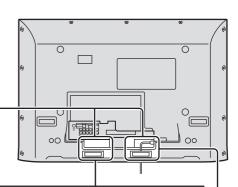
## **Fastening method**

#### Clamper

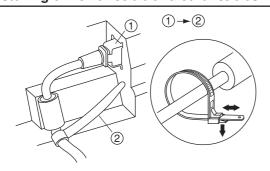








#### **Fastening of Power Cable and other cables**



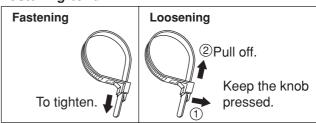
#### **Fastening method of Power Cable**

- 1. Insert the power plug into the main body.
- 2. Fasten with the Power Cable fastening band.

#### Fastening method of other cables

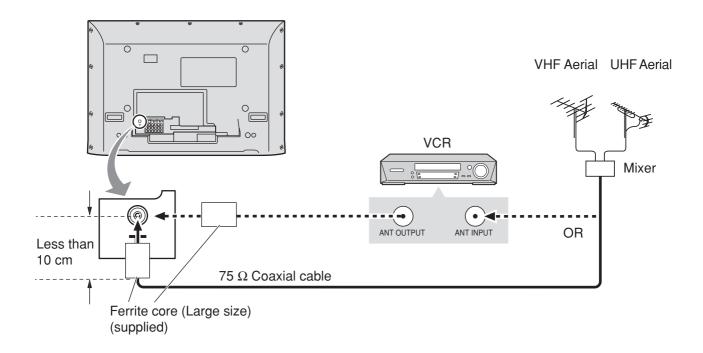
Attach the clamper on the installation hole, and fasten them. Bundle the cable with the cable fastening clamper.

#### **Fastening band**

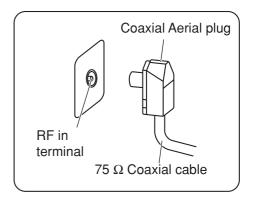


## **Antenna connection**

For proper reception of VHF / UHF channels, an external antenna is required. For best reception, an outdoor antenna is recommended.



- Do not put the Coaxial cable close to the Power cable to avoid noise.
- Do not place the Coaxial cable under the TV.
- Additional equipment, cables and adapter plugs shown are not supplied with this TV set.
- To obtain optimum quality picture and sound, an Aerial, the correct cable (75  $\Omega$  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 TV.
- Your local Television Service Centre or Dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the 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.



## **Connections**

It is possible to connect a variety of additional equipment to this TV. The following pages detail how to connect external equipment to the front and rear of the TV.

Once your equipment is connected, use the following procedure to view the input:

#### Press the TV/AV button.

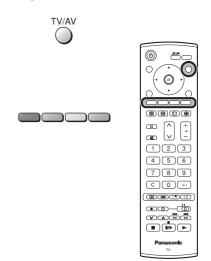
Whilst the on screen selector keys are displayed, press coloured buttons to select the AV source you wish to view.

Red button : AV1 Audio, Video, S-Video terminals
Green button : AV2 Audio, Video / Component terminals
Yellow button : AV3 Audio, Video, S-Video / PC terminals
: AV4 Audio, Video / Component terminals

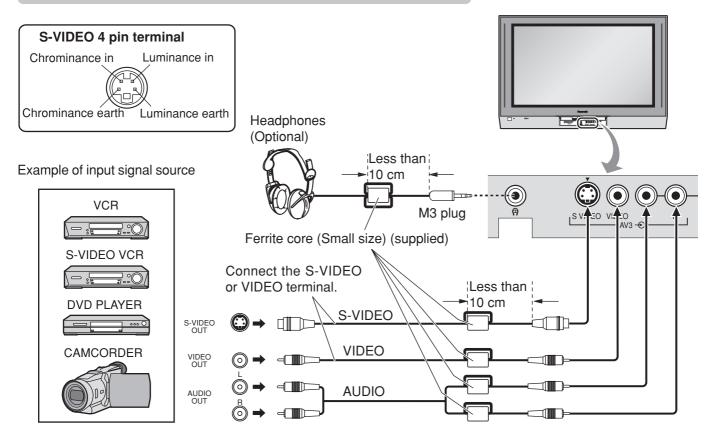
The on screen selector keys that appear clear after a few seconds. If you want to select an input when the keys are not shown, press any coloured button and the keys will reappear.

#### Notes:

- You can also select an AV source using the TV/AV button on the front panel of the TV.
  - Press the **TV/AV** button repeatedly until you reach the AV source you wish to view.
- When a Monaural VCR is used, connect the Monaural Audio cable to the AUDIO L terminal.
- Additional equipment and cables shown are not supplied with this TV set.



#### How to connect the Headphones / AV3 terminals



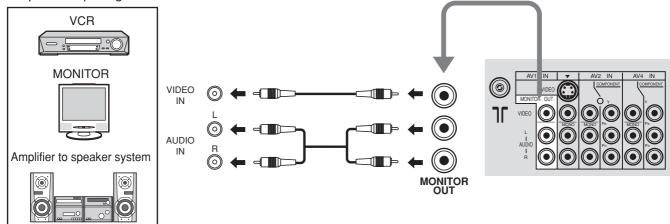
#### Note:

The volume level of the headphones can be adjusted by selecting "Headphone volume" from the Sound menu.

## **Connections**

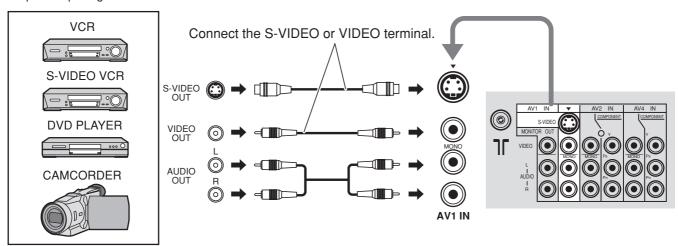
#### How to connect the Monitor Output terminals to other Equipment

Example of output signal source

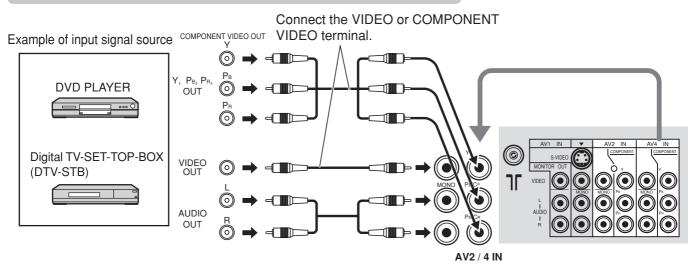


#### How to connect the AV1 Input terminals

Example of input signal source



#### How to connect the Component Input terminals

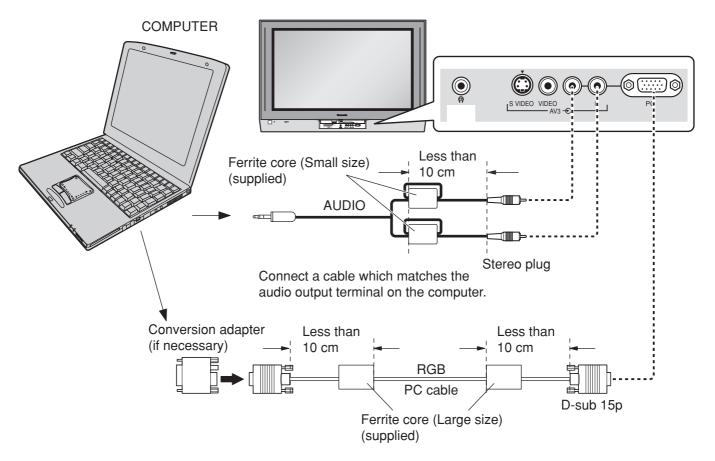


#### Note:

Component input terminals are used for 525i / p, 625i / p, 1125i / 50 Hz, 1125i / 60 Hz or SMPTE295M standard 1250i signal.

## **Connections**

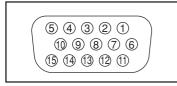
#### How to connect the PC Input terminals



#### Notes:

- Computer signals which can be input are those with a horizontal scanning frequency of 15 to 110 kHz and vertical scanning frequency of 48 to 120 Hz. (However, the image will not be displayed properly if the signals exceed 1,200 lines.)
- The display resolution is a maximum of  $640 \times 480$  dots (TH-37PA30),  $768 \times 768$  dots (TH-42PV30),  $1,024 \times 768$  dots (TH-50PV30) when the aspect mode is set to "4:3", and  $852 \times 480$  dots (TH-37PA30),  $1,024 \times 768$  dots (TH-42PV30),  $1,366 \times 768$  dots (TH-50PV30) when the aspect mode is set to "16:9". If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
- Some PC models cannot be connected to the set.
- There is no need to use an adapter for computers with DOS/V compatible D-sub 15P terminal.
- The computer shown in the illustration is for example purposes only.
- Additional equipment and cables shown are not supplied with this set.
- Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range.

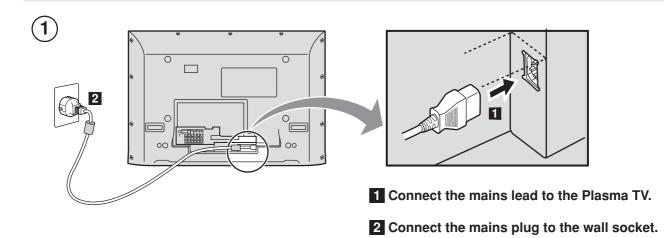
#### Signal Names for D-sub 15P Connector

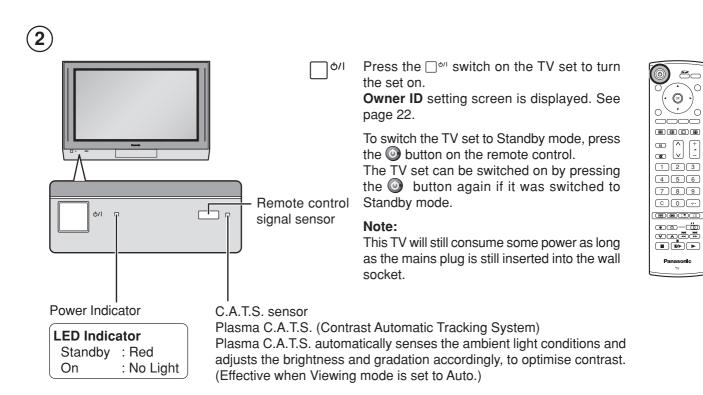


Pin Layout for PC Input Terminal

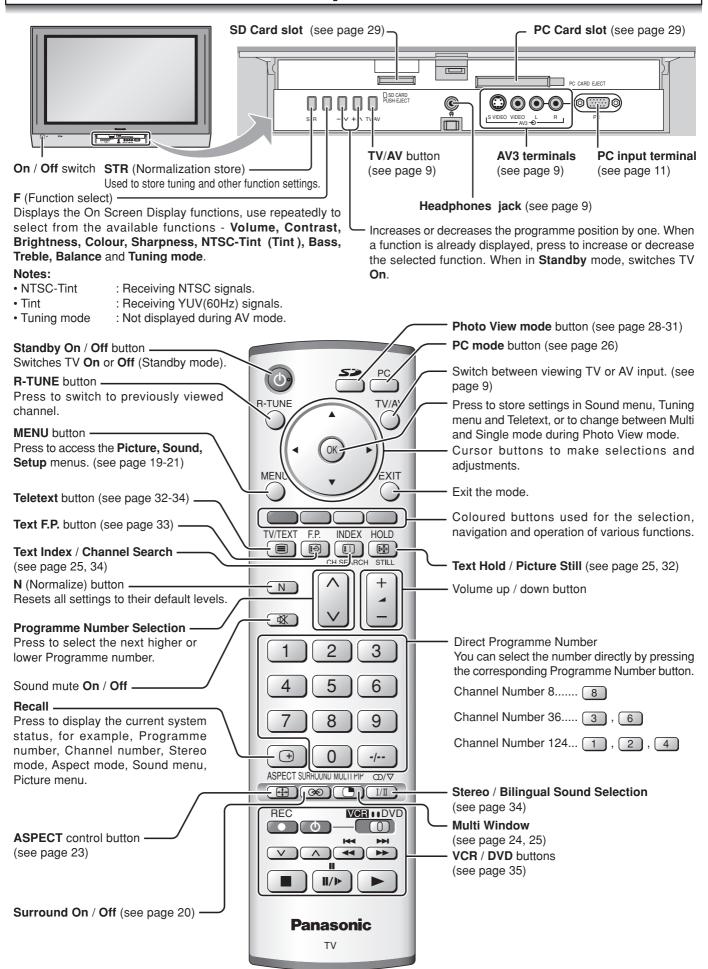
Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	R	6	GND (Ground)	11)	NC (not connected)
2	G	7	GND (Ground)	12	NC
3	В	8	GND (Ground)	13	HD/SYNC
4	NC	9	NC (not connected)	14)	VD
<b>(5</b> )	GND (Ground)	10	GND (Ground)	15	NC

## Power On / Off





## Basic controls: front panel and remote control



## **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.

The **MENU** button is used to open the Main menu and also to return to the previous menu.

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

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

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

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









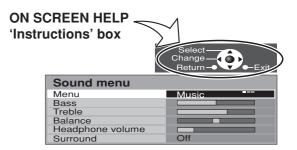




An On Screen Help box is displayed whenever a menu is displayed on the TV. This Help box indicates which buttons on the remote control are used to navigate the menu shown, see above for descriptions of button functions.

#### Note:

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



## **Tuning**

#### Tuning menu

#### During TV mode

Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

Access **Tuning menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.

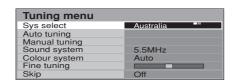
Pressing the **OK** button after having adjusted some features will store the setting as the default (replacing the factory setting).











Picture menu

Sound menu

Setup menu

Off

Off

Access

Main menu

Setup menu

Teletext
Off timer
Ch colour set
Child lock
Side panel
Power save

Tuning menu Owner ID

Sys select

Select the system.

(System Selection)

NZ/INDONES / Australia

SYSTEM SELECT	REGION	
NZ/INDONES	New Zealand, Indonesia, etc.	
Australia	Australia	

**Auto tuning** Allows you to automatically retune the TV. Useful if you move house and wish to retune your TV

to the local stations. See page 16.

Manual tuning Allows individual program positions to be tuned, manually. See page 17.

Sound system Allows you to change the sound system used for a programme channel.

Choose the required sound system:

5.5MHz / 6.5MHz

Colour system Lets you select the correct transmission standard for the transmission signal being received.

See page 21.

Auto / PAL / NTSC 4.43 / NTSC 3.58

Fine tuning Use to make small adjustments to the tuning of an individual station (useful for example when

weather conditions are affecting reception quality of a program).

To cancel the Fine tuning, tune again by Manual tuning.

It is possible to skip Program Number on which no TV stations are tuned appearing on the Skip

screen. The function is only effective when pressing the Program Number up or down button either on the TV set or on the remote control. Under the normal viewing, select the Program

Number you would like to skip. Then, access Tuning menu and set Skip to On.

## **Tuning**

#### Auto tuning

Auto tuning automatically retunes your TV. This feature is useful if, e.g., you move house and wish to retune your TV to receive the local stations.

Press the MENU button.

Move to choose Setup menu.

Access Setup menu.

Move to choose **Tuning menu**.

Access **Tuning menu**.

Move to choose Auto tuning.

Access Auto tuning.













#### 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 complete, no station information will be stored. Restart and complete the **Auto tuning** procedure so that the TV is retuned.

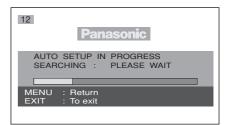
#### Press to start Auto tuning.

The TV will search for, locate, store and then sort into order your local stations.

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

Press the **EXIT** button at any time to go back to watching TV (please read the **Notes** 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:

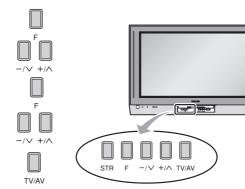
Press F until Tuning mode is reached.

Press  $-/\vee$  or  $+/\wedge$  to access **Tuning mode**.

Press F until Auto tuning is reached.

Press  $-/\vee$  or  $+/\wedge$  to start search.

Press TV/AV at any time to exit the Tuning menu.



- If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, refer to the Colour system selection on page 15.
- 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 Skip function on page 15.

## **Tuning**

#### Manual tuning

It is possible to retune individual programme positions:

Press the MENU button.

Move to choose Setup menu.

Access Setup menu.

Move to choose Tuning menu.

Access Tuning menu.

Move to choose Manual tuning.

Access Manual tuning.

Select the programme position to be tuned.

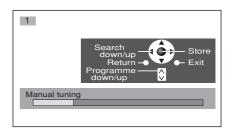
Press repeatedly until required station is found.

When the desired station is found, press the OK button to store.

The programme position will flash.

Press the EXIT button 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:

Press **F** until **Tuning mode** is reached.

Press –/V or +/Λ to access **Tuning mode**.

Press F until **Manual tuning** is reached.

Press TV/AV to move between Change programme, Search and Change sound system.

Press –/V or +/Λ to change programme position or start search.

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

The programme position will flash.

Repeat above procedure to tune additional programme positions.

Press **F** at any time to exit the Tuning menu.

- If a clear picture cannot be obtained even when a Broadcast or AV signal is received, refer to the Colour system selection on page 15.
- 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. Please refer to the Skip function on page 15.
- 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 No."0". In that case,
  perform Manual tuning after setting the Colour system and Sound system in advance. Further, in multi-system VCR,
  it is more convenient to set the designated channel to several Programme Numbers.

## **Channel Allocation**

Sys select	NZ/INDONES	Australia
CH DISPLAY		CHANNEL
0 1 2 3 4 5 6 7 5 11 12 13 14 15 16	11 2 3 11 	- 0 1 2 3 4 5 \$10 6
19 20		9 9A
21 22 23 24 5 28 57 58 59 59 62 63	21 62 63 69	9A 10 11 12 S11 ( S44 20 21
69	69	
70 \( \) 73 74 75 76 77 78 79	- - S'1 S'2 S'3 - - -	
80 81 〈 89	S1 S2 S10	
90 91 92 93 94 95 96 97 98 99	S11 S12 S13 S14 S15 S16 S17 S18 S19 S20	
100 \s\ 107 \s\ 117 118	S21	69 - - -
117 118	S41 - -	_ _ _ _

## Picture menu

Press the **MENU** button.

Move to choose Picture menu.

Access Picture menu.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.















Menu

MENU mode will be memorized for each TV, AV1,

AV2, AV3 and AV4 mode.

Dynamic / Standard / Cinema / Auto

You can change the level of each Item (Contrast, Brightness, Colour, Sharpness, NTSC-Tint, Colour temperature, D.PNR, MPEG NR and 3D-COMB) for each Menu (Dynamic, Standard, Cinema and Auto)

according to your personal preference.



#### Contrast, Brightness, Colour, Sharpness

Increase or decrease the levels of these options according to your personal preference.

**NTSC-Tint (Tint)** 

The picture hue can be adjusted to suit your taste.

Notes:

- When the TV is receiving NTSC signals, NTSC-Tint is displayed and level adjustment is possible.
- When the TV is receiving YUV (60Hz) signals, Tint is displayed and level adjustment is possible.

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

Choose from Cool, Standard and Warm.

Automatically reduces unwanted picture noise. D.PNR

**MPEG NR** Reduces MPEG noise.

Off / Strong / Mid / Weak

This function is effective in reducing the digital block noise when viewing DVD, VCD or digital

broadcasting. The effect will be changed based on the scene and image.

MPEG: Compression technology of the image signal adopted by DVD, VCD or digital

broadcasting.

3D-COMB Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen. Set

> 3D-COMB to On to display sharper and more accurate colours. Displayed only when receiving PAL or NTSC signals. Not displayed during S-Video input and AV2 / AV4 Component input

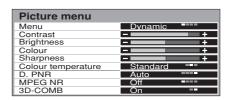
mode.

Note:

By pressing the 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

Press the **MENU** button.

Move to choose Sound menu.

Access Sound menu.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.

Pressing the **OK** button after having adjusted some features will store the setting as the default (replacing the factory setting).















**Menu** Menu mode will be memorized for each TV, AV1, AV2,

AV3 and AV4 mode.

Music / News / Cinema

You can change the level of each Item (Bass, Treble, Balance, Headphone volume and Surround) for each

Menu (Music, News and Cinema).

Bass Increase or decrease level to enhance or minimise

lower, deeper sound output.

Treble Increase or decrease level to enhance or minimise

sharper, higher sound output.

**Balance** The levels of sound between the left and right speakers

can be adjusted to suit your listening position.

Headphone volume

Can be adjusted independently of the TV speakers so that everyone can enjoy listening at a level comfortable

for them.

**Surround** To enjoy a concert hall effect, turn Surround to On.

Switching is also possible by pressing the SURROUND

button.

The benefits of Surround sound are enormous.

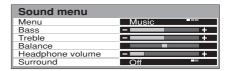
You can be completely enveloped in sound; just as if

you were at a concert hall or cinema.

The Surround effect can be obtained without the use

of external Surround speakers.





#### Note:

By pressing the **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

Press the **MENU** button.

Move to choose **Setup menu**.

Access Setup menu.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.

**Teletext** Allows you to choose 2 modes. See page 32.

TOP / List

Off timer Switches the TV off within a preset time which you can

choose from between 0 to 90 minutes in 15 minute

intervals.

Ch colour set Colour density varying between broadcast channels

can be adjusted to three levels for each reception

Child lock When On, picture and sound of the TV/AV mode being

viewed will disappear and a Black screen will appear. Child lock can be set for each programme number and

each AV mode.

Side panel Allows you to choose from Off, Low, Mid and High.

> Do not display a picture in 4:3, 14:9, Picture out of picture, Picture and picture, Picture and text modes

for an extended period, as this can cause an after-image to remain on the side panels either side of the display

field.

To prevent the appearance of such an

after-image, illuminate the side panels.















Setup menu	
Teletext	TOP
Off timer	Off
Ch colour set	
Child lock	Off
Side panel	High ====
Power save	Off
Tuning menu	Access
Owner ID	Access

#### AV mode

Setup menu	
Teletext	TOP
Off timer	Off
Ch colour set	
Child lock	Off
VCR/GAME	Off ==
Colour system	Auto ====
Colour matrix	SD ==
Side panel	High
Power save	Off -
Owner ID	Access

Power save By reducing the brightness of picture, power consumption can be lowered.

VCR/GAME Displayed during AV mode. Reproduction of irregular signals, such as certain TV games and

rental video tapes, may be improved.

Colour system Displayed during AV mode. If a clear picture with current colours cannot be obtained when a

Broadcast or AV signal is received, this function is used.

AUTO / PAL / NTSC 4.43 / NTSC 3.58

PAL and NTSC 3.58 are different colour signal broadcast transmission systems applicable to differing countries. NTSC 4.43 is a trick playback mode used in special VCR's to playback

4:3

NTSC recorded video tapes through PAL television equipment.

Colour matrix Displayed during AV mode. Available only with 480p or 575p input signals in a natural colour

from digital equipment connected to AV2 / AV4 Component terminals.

Select SD or HD to adjust suitable colour parameters for SD (standard definition) or HD (high

definition).

**Tuning menu** Provides access to many other features including Sys select and Auto tuning. See page 15.

Not displayed during AV mode.

**Owner ID** Allows you to enter a security code and address information. See page 22.

## **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 (except your PIN number), press the **F** button(Front panel) and hold for 6 seconds(initially the volume level function will appear, as you continue to hold down the **F** button it will disappear again, and the Owner ID information will appear). The details already entered are displayed on screen and will disappear after a few seconds.

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 re-accessed via the **Setup menu**.

Press the **MENU** button.

Move to choose Setup menu.

Access Setup menu.

Move to choose Owner ID.

Access Owner ID.

If the **Owner ID** has previously been set, enter the **PIN NUMBER** (using 0 to 9 on the remote control) followed by **OK** 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.

Change character.

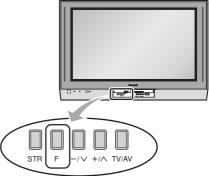
Select character position.

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

Press **OK** to store the details.

Press again when you are asked, "Are you sure?".





















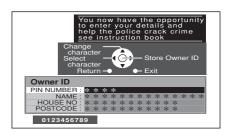












For future reference, write your **PIN NUMBER** here:

## **Aspect Controls**

The Widescreen TV will allow you to enjoy viewing the picture at its optimum size and aspect, including widescreen cinema format pictures.

Press the **ASPECT** button repeatedly to move through the aspect options:

ASPECT 

Auto, 16:9, 14:9, Just, 4:3, Zoom1, Zoom2 and Zoom3 PC mode: 16:9, Just, 4:3 and Zoom

Press the ASPECT button. Whilst the on screen selector keys are displayed, use the **Red** or **Green** buttons to move in either direction through the aspect options (except PC mode and Photo View mode).



#### Note:

This function is not available during 1080i signal input.

#### **Auto**

**Auto** position can be set to 16:9. When a wide screen signal is detected at the Video terminal the TV will select the 16:9 aspect ratio.

#### 16:9

16:9 will display a true 16:9 (anamorphic) picture with no aspect distortions. Signals in the 4:3 format will be stretched to fit the picture.

#### 14:9

14:9 will display a 14:9 picture at its standard 14:9 size without any stretching.

#### Just

Use Just when you wish to expand a 4:3 picture to fill the whole screen (rather than watching a programme with black stripes down the left and right sides of the picture). The 4:3 picture will be stretched horizontally so that the image fills the screen, this is done in such a way that the stretching is only obvious at the left and right edges of the screen.



(CK)

N ^ + 123 4 5 6

789

0 (---

#### 4:3

4:3 will display a 4:3 picture at its standard 4:3 size with no aspect distortions.

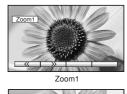


## **Zoom1** allows you to magnify the picture.

#### Zoom2

Zoom1

Zoom2 will display 16:9 anamorphic letterbox pictures as a full screen display with no aspect distortions.



Zoom3

#### Zoom3

Zoom3 will display 21:9 letterbox pictures as a full screen display with no aspect distortions.

16:9 will display the picture at its maximum size but with slight stretching.



## **Multi window**

Press the **MULTI PIP** button. Whilst the on screen selector keys are displayed, use the **Red** or **Green** buttons to move between the **PIP** (picture in picture) feature, **POP** (picture out of picture) and **PAP** (picture and picture) feature. Press the **Blue** button to swap the contents of the two windows.

The on screen selector keys that appear for the features clear after a few seconds. If you want to select an operation when the keys are not shown, press the **MULTI PIP** button again and the keys will reappear.

Press the **MULTI PIP** button (whilst the selector keys are displayed) to return to normal viewing.

#### Notes:

- This operation cannot be made during PC mode and progressive signal, 1080i signal input (Y, PB, PR).
- This TV has one tuner. When the main and sub windows are both TV mode, these are the same TV channel.

#### Changing the channels

#### Main window

Press the Programme Number button on the remote control.

#### Sub window

Press the **MULTI PIP** button. Whilst the on screen selector keys are displayed, press the Programme Number button on the remote control.

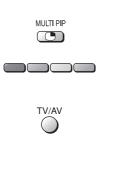
#### Changing the mode

#### Main window

Press the **TV/AV** button to switch between the TV and AV mode. During the AV mode, press any coloured button. Whilst the on screen selector keys are displayed, press coloured button to select the AV source.

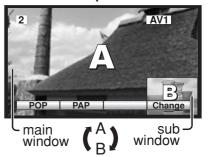
#### Sub window

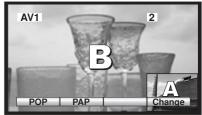
Press the **MULTI PIP** button. Whilst the on screen selector keys are displayed, press the **TV/AV** button to switch between the TV channel and all AV sources in turn.





#### Picture in picture mode



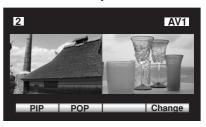


Press the **Blue** button. Each time the main window and the sub window are swapped.

#### Picture out of picture mode



#### Picture and picture mode



## Still

Press the **STILL** button to freeze the picture. Press again to return to watching the current programme.





## Channel search

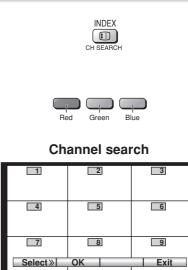
Press the **CH SEARCH** button to show freeze-frames of the programmes being broadcast on all of the stored channels. These images are displayed in series, starting from the top left.

The feature cycles through the stored channels until the **CH SEARCH** button is pressed to exit the feature.

Press the **Red** button to select each channel's freeze-frame in turn.

Press the **Green** button to watch the selected channel, exiting the feature.

Press the **Blue** button to watch the current programme, exiting the feature.





## Picture and text

Press the **TV/TEXT** button, followed by the **MULTI PIP** button to move between 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 the **TV/TEXT** button to return to watching the programme on its own then make the desired changes.





#### Teletext mode

Teletext

#### Picture and text mode

Teletext

## PC mode

When you switch to PC input (AV3/PC), the menu will be changed.

Press the PC button.

OR

Press the **TV/AV** button. Whilst the on screen selector keys are displayed, press the **Yellow** button to access PC mode.

O C

Press the TV/AV button again to go back to watching TV.



#### **Picture**

#### During PC mode

Press the **MENU** button.



Move to choose Picture.



Access Picture.



Move to choose menu option.



Adjust chosen option or access chosen menu.



Press the **EXIT** button at any time to exit Picture.



#### Note:

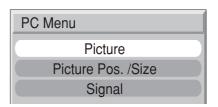
Press the  ${\bf N}$  or  ${\bf OK}$  button whilst the cursor is at the "Normalise" position to reset all settings to their default levels.



The Picture Mode menu allows you to select four different screen settings - **Normal, Dynamic, Cinema** and **Auto**.

In each Picture Mode setting, Contrast, Brightness and Sharpness can be adjusted and stored to suit your

particular viewing requirement.



#### Contrast, Brightness, Sharpness

Increase or decrease the levels of these options

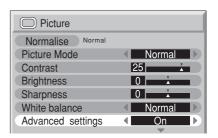
according to your personal preference.

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

Choose from Cool, Normal and Warm.

**Advanced settings On** enables fine picture adjustment at a professional level.

W/B High R : Adjusts the white balance for light red areas.
W/B High B : Adjusts the white balance for light blue areas.
W/B Low R : Adjusts the white balance for dark red areas.
W/B Low B : Adjusts the white balance for dark blue areas.
Gamma : S Curve ← > 2.0 ← > 2.2 ← > 2.5



Normalise Normal W/B High R W/B High B W/B Low R W/B Low B	Advanced settings	
W/B High B  W/B Low R  O	Normalise Normal	
W/B Low R	W/B High R	0 👗
	W/B High B	0 👗
W/B Low B	W/B Low R	0 .
VV/D LOW D	W/B Low B	0 *
Gamma 2.2	Gamma	2.2

#### Note:

Carry out "W/B" adjustment as follows.

- 1. Adjust the white balance of the bright sections using the "W/B High R" and "W/B High B" settings.
- 2. Adjust the white balance of the dark sections using the "W/B Low R" and "W/B Low B" settings.
- 3. Repeat steps 1 and 2 to adjust.

Steps 1 and 2 affect each other's settings, so repeat each step in turn to make the adjustment.

## PC mode

#### Picture Pos. /Size

#### During PC mode

Press the **MENU** button.

Move to choose Picture Pos. /Size.

Access Picture Pos. /Size.

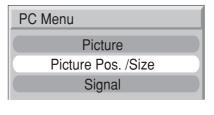
Move to choose menu option.

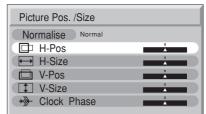
Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to exit Picture Pos. /Size.

## EXIT

MENU

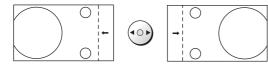




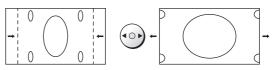
#### Note:

Press the **N** or **OK** button whilst the cursor is at the "Normalise" position to reset all settings to their default levels.

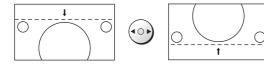
**H-Pos** Adjust the horizontal position.



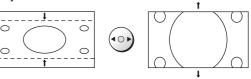
H-Size Adjust the horizontal size.



V-Pos Adjust the vertical position.



V-Size Adjust the vertical size.



**Clock Phase** Eliminate the flickering and distortion.

#### **Signal**

#### During PC mode

Press the **MENU** button.

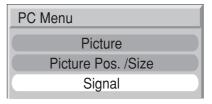
Move to choose Signal.

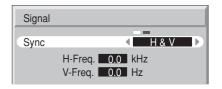
Access Signal.

Adjust Sync.

Press the **EXIT** button at any time to exit Signal.







**Sync H & V**: To synchronize by the horizontal and vertical signals from your PC.

**on G**: To synchronize by the green signal form your PC (if available).

Still image data (JPEG) made with a digital camera or digital video camera can be played back using an SD Card / PC Card.

**Displayable Image Formats:** Baseline JPEG  $64 \times 64 - 8,192 \times 8,192$  pixels (sub-sampling 4:2:2 or 4:2:0) **Displayable number of folders:** Max 100

#### Notes:

- Some parts of an image may not be displayed or the image may be displayed on a smaller scale depending on the size of the image.
- Only EXIF standard JPEG images can be displayed on this TV.
- Photo view cannot support over 3,000 JPEG files.
- Cards must be formatted with FAT12 or FAT16 in order to be viewed on this TV.
- Photo view is not compatible with card type hard disk (Micro Drive, Mobile type hard disk).
- · Some PC Cards may not be usable.
- Without operations for 5 minutes, Screensaver will start automatically to prevent image retention (except Slide show). To exit, press any button.

#### **Card Data Protection**

- Do not remove the card whilst it is being accessed.
- Do not touch the terminals on the back of the SD Card / PC Card.
- Electrical interference, electrostatic discharges and malfunctions of the TV set or card may all result in damage to the card or data loss. It is recommended that any important data also be backed up on a PC.
- Stored data should be periodically backed up as a protection against data corruption, data loss or device malfunction. Please note that our company shall not accept any liability for damage or loss of stored data.
- Before inserting or removing the PC Card, make sure that the TV is turned off. Otherwise, it may damage the unit. Do not insert anything other than the PC Card.

#### **Cautions:**

- · Always insert card in the correct direction. Failure to do so may result in damage to the card and this set.
- The SD Card and PC Card are precision devices. Do not subject them to excessive pressure or strong impacts.

#### Warning:

As with any small object, SD Cards can be swallowed by young children. Do not allow children to handle the SD Card. Please remove the SD Card immediately after use.

#### **Folders and Files**

Digital cameras that are compliant with DCF specifications use folders with a specific structure. The following diagram shows an example of the folder structure.

## 

#### **DCIM Folder**

The digital camera creates this folder automatically.

#### 100 PANA Folder

Folder names consist of a 3-digit folder number which is followed by five arbitrary characters. Digital camera images are stored within these folders.

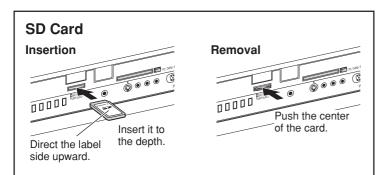
JPEG files in the 100\_PANA folder are displayed when a Card, which is structured as shown left, is inserted.

#### Notes:

- The folder name may vary according to the digital camera being used.
- When a directory or file is created, only the characters "A-Z", "a-z", "0-9" and "\_" are used. Two-byte characters or other special codes shall not be used.

#### P1000001.JPG: DCF File

File names consist of four arbitrary characters followed by a 4-digit file number. DCF files are image files (normally JPEG files) that have been taken by a digital camera.

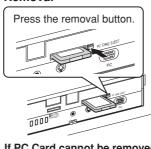


#### **PC Card**

Before inserting or removing the PC Card, make sure that the TV is turned off. Otherwise, it may damage the unit. Do not insert anything other than the PC Card.

# Holding both edges, securely insert it to the depth. Align the direction of mark. Terminal face to the depth. Direct the label side upward.

#### Removal



If PC Card cannot be removed Push in PC Card again, and press the removal button.

#### Caution

If PC Card adapter is used, remove it together with the adapter.

#### Press the SD button.



The screen below is displayed automatically when a card is inserted. If "Card is not inserted correctly" appears, confirm that a card is correctly inserted.

Press the **SD** button again to exit Photo View mode.

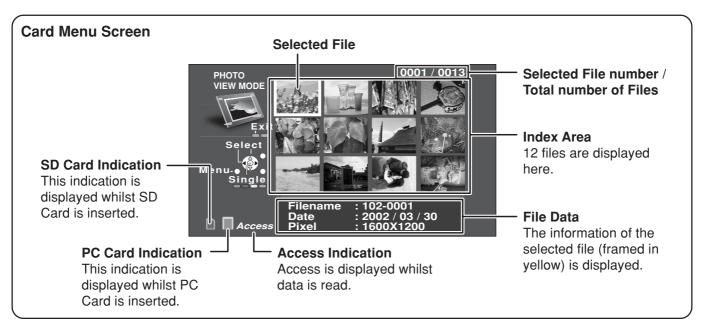


#### **Compatible Card**

SD Card slot	PC Card slot
SD Card	Compact Flash*
Multi Media Card	Smart Media*
miniSD Card	Memory Stick*
	xD Picture Card*
	Flash ATA Card*

- miniSD Card requires miniSD<sup>™</sup> adapter.
- The media\* listed in the right column above can be read via the PC Card in the PC Card adapter.
- Hard disk PC Cards and other recorded media cannot be used.
- Place the selected media onto the PC Card and then insert into the PC Card Slot.
- When both SD Card and PC Card are inserted, the SD Card contents have priority and will be displayed.
- If the Card is incompatible, "This type of card is not supported" is displayed on screen. Remove the Card only when Access indication is not displayed.
- If the file is not formatted with FAT12 or FAT16, "This type of format is not supported" is displayed.
- If the JPEG file is corrupted and cannot be decoded, "This type of image is not supported" is displayed.

- Insert / remove the SD Card while Card Menu Screen or "Card is not inserted correctly" is displayed.
- Be sure Access indication is not displayed before Card insertion / removal.
- Before reinserting the SD Card after removing it, wait until "Card is not inserted correctly" is displayed. If there are Cards in both Card Slots, wait until the Card Menu Screen of the other Slot is displayed and Access indication is no longer displayed before reinserting the Card.
- If the JPEG is modified using a PC, it will not be displayed on the TV.
- It may take long time to display the thumbnail if there are lots of files or if the file size is big.



#### Picture menu

#### During Photo View mode

Press the **MENU** button.



Move to choose Picture menu.



Access Picture menu.



Move to choose menu option.



Adjust chosen option or access chosen menu.



Press the **EXIT** button at any time to exit Picture menu.



#### Contrast, Brightness, Colour, Sharpness

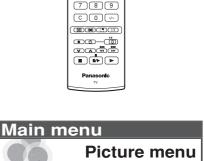
Increase or decrease the levels of these options

according to your personal preference.

**NTSC-Tint** The picture hue can be adjusted to suit your taste.

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

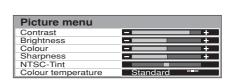
temperature Choose from Cool, Standard and Warm.



Card setup menu

1 2 3

4 5 6



#### Card setup menu

#### During Photo View mode

Press the **MENU** button.



Move to choose Card setup menu.



Access Card setup menu.

Move to choose menu option.



Adjust chosen option or access chosen menu.

EXIT

Press the **EXIT** button at any time to exit Card setup menu.

**Slide show** Provides access to Slide Show mode.

See page 31.

Interval When the Slide Show, allows you to select the display

intervals between 5 to 90 seconds.

Sequence When the Slide Show, allows you to select the Order

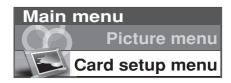
or Random.

**Repeat** When Repeat is **On**, the Slide Show repeats

automatically.

Card Select either SD or PC when both cards are inserted

in the slots.



Card setup menu		
Slide show	Access	
Interval	5Sec	
Sequence	Order	
Repeat	On	
Card	PC	

When you press the **SD** button, thumbnail screen is displayed automatically. After that you can choose your desirable view mode between the following three modes.

#### Multi mode

12 images are displayed.

Press to select desired image.

Press the **OK** button to display Single mode.





#### Single mode

A single image selected from the index area fills the screen. You can also rotate or magnify the image.

Press to select the next or previous image.

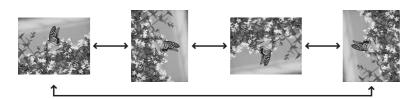
Press the **OK** button to display Multi mode.

Press the **Red** or **Green** button to rotate the image. Each press rotates images 90  $^{\circ}$ .





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Press the **Yellow** button to magnify the image. To restore press the **Blue** button.



#### Slide Show

Images are displayed one after another as a slide show.

To start Slide Show access **Card setup menu**.

After setting Interval Sequence and Report acc

After setting Interval, Sequence and Repeat, access **Slide show**. When both SD Card and PC Card are inserted, move to choose CARD and select SD or PC before accessing Slide show. See page 30.

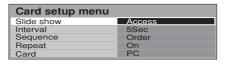


Press the **OK** button at any time to return to the Single mode.

## OK

#### Note:

When you are in the Slide Show mode, you can change the Aspect of the image on screen by pressing the **ASPECT** button on the remote control.



Card setup menu		
Interval	5Sec	
Sequence	Order	-
Repeat	On	-
Card	PC	-

## Teletext operation

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- Pressing the **MENU** button whilst in Teletext operation will display the contrast function with a cyan bar, press opto alter the setting as required.
- Pressing the MENU button whilst in Teletext operation will display special function options at the bottom of the screen.
- Pressing the Volume up / down button whilst in Teletext operation will display the volume function with a green bar, press to alter the setting as required.

#### What is List mode?

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

#### What is TOP mode?

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

#### Note:

If Teletext is in use, the aspect ratio is set to 16:9.



#### TV / Teletext mode

Press the TV/TEXT button to switch between the current programme.





**Page Selection** 

Pages can be selected in two ways:

- a. Press the Up / Down buttons to increase or decrease the page number by one.
- b. By entering the page number, using 0 9 on the remote control.





#### Full / Top / Bottom

Press the **MENU** button to display special functions, followed by the **Green** button.

Press the **Green** button again to expand the BOTTOM half.

Press again to return to normal (FULL) size.





#### Reveal

Press the **MENU** button to display special functions, followed by the **Red** button to reveal hidden words e.g. quiz page answers. Press again to hide.



#### Red / Green / Yellow / Blue buttons

In TOP mode they correspond to the differently coloured subjects.

In List mode they correspond to the differently coloured page numbers.



#### **List Store**

In List mode the four page numbers can be altered (programme positions 1 - 25 only). To do this, press one of the four coloured buttons and enter the new page number. Press and hold the **OK** button, the page numbers will change to white indicating that the page is stored.



#### HOLD

To hold the Teletext page when viewing multi-page information. Press again to return to automatic page update.

## Teletext operation

It is not possible to change the programme position when in News flash, Update or Sub Coded Page Access operation.





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#### **Favourite Page (F.P.)**

Stores a favourite page in memory for instant recall. To store such a page, the TV must be in List mode, and the programme position must be from 1 - 25.

Press the **Blue** button, select the page number, then press and hold the **OK** button. The page number is now stored.

Press F.P. to recall this page.



Press the MENU button to display special functions, followed by the Yellow button to view the TV picture whilst searching for a Teletext page (this is not necessary in picture and text mode, as the picture is displayed on the left of the screen). When found, the screen will display the page number at the top left. Press the **Yellow** button to view the page. Press the **TV/TEXT** button again to return to normal TV operation.

#### **News Flash**



When a news flash page has been selected, press the MENU, Yellow buttons, to view the TV picture. When an update is received, the page number will be displayed on screen. Press the **Yellow** button to display the News Flash.

Press the **TV/TEXT** button to return to normal TV operation.

#### Update

screen.

Press the **MENU**, **Yellow** buttons to see the update of information on certain pages. When an update is received, the page number will be displayed at the top left of the

Press the **Yellow** button to view the page.

Press the **TV/TEXT** button to return to normal TV operation.

#### Accessing sub pages

When Teletext information exceeds one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. As each sub page is found its number is displayed at the top of the page so that you may select it; as more sub pages are picked up, the display at the top of the page changes, so that you are always offered the most recently transmitted selection of sub pages.









When the sub page you are waiting for is available press the Yellow button to return to viewing the Teletext pages, then use the left and right cursor buttons to select the sub page of your choice.

If the sub page you want to look at is not yet available, press the MENU button (to display

special functions) followed by the Yellow button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the







#### Notes:

screen.

- If you do not want to display the on screen selector keys on the TV picture whilst waiting for a sub page to be found, press the **MENU** button to clear the keys from the screen. Press again to redisplay the keys.
- · If you have cleared the special function keys from the screen and then used the left and right cursor buttons to select a sub page, whilst still viewing the TV picture, you must press the **MENU** button then the **Yellow** button to display the Teletext page again.
- If the top of the page indicates that sub pages are being transmitted but the page displayed never changes, then the 'sub page number' is there to show the page contents have been updated, there are no sub pages.

## **Teletext operation**

Alternatively, if you know which sub page you require, press the **MENU** button (to display special functions) followed by the **Blue** button; T\*\*\*\* will be displayed where the page number is normally found.

Enter desired sub page number before the T\*\*\*\* disappears.

e.g., to select page 6 enter 0, 0, 0 and 6.

Press th

Press the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.

When the page is available, press the **Yellow** button to view the page. Regardless of how many pages are found, pressing the **Yellow** button will take you to the sub page which you requested.

Press the **TV/TEXT** button to return to normal TV operation.



#### When in TOP operation



Depending on the way information is transmitted, this may have to be pressed more than once to return to the main index page.

## Stereo / Bilingual Sound Selection

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When you receive the stereo / bilingual sound system, sound output modes can be selected by pressing the **Stereo** / **Bilingual Sound Selection** button.

Audio Signal	STEREO	MAINI	SUB II	MONO
Mode Indicator	$\odot$	I	П	$\nabla$

NICAM ......Used in New Zealand, Singapore, Hong Kong etc.

	, 01	, 0		
Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator → ▽	I → ▽	$\bigcirc$ $\longrightarrow$ $\lor$	I I

A2(German) ......Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator → ▽	I ↔ I	$\bigcirc$ $\longrightarrow$ $\triangledown$

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- · Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position, using the stereo / bilingual sound selection button.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

## VCR / DVD operation

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
Ф	Standby
VCR 11 DVD	VCR / DVD selection switch
<b>•</b>	Play
	Stop
<b>₩</b>	VCR : Fast Forward / Cue DVD : Slow / Search
44	VCR : Rewind / Review DVD : Slow / Search
II II/▶	Pause / Still
VA	Programme Number up / down
REC	Record

## Remote control setting

Remote Control Operation is possible for the Panasonic VCR's and DVD's equipment.

After completion of setting, execute the various operations after pressing the VCR / DVD selection switch.

Switch to select VCR or DVD.

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

#### **VCR**

Manufacturer	Code
Panasonic/ National	10,11,12,13

#### DVD

Manufacturer	Code	
Panasonic	70, 71	





- After setting, execute operation confirmation. If there is no operation, set a different code.
- The respective VCR / DVD code is cancelled when battery has been exchanged. Please set it again.
- Depending on the model, operation of VCR's or DVD's of the manufacturers listed above may not be possible.
- In some cases, new products may not be operative.
- It will not operate with other than the above manufacturers.

## **Troubleshooting**

If there is a problem with your TV please refer to the table below to determine the symptoms, then carry out the suggested check. If this does not solve the problem, please contact your local Panasonic dealer, quoting the model number and serial number (both found on the rear of the TV).

Sympto	ms	
Picture Sound		Checks
Snowy Picture	Noisy Sound	Aerial location, direction or connection
Multiple Images	Normal Sound	Aerial location, direction or connection
Interference	Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lights Switch on D.PNR in PICTURE menu to reduce picture noise.
Normal Picture	No Sound	Volume level Sound mute switched on.
? No Picture	No Sound	TV set to AV mode. Not plugged into AC outlet. Not switched on. Picture / Sound controls set at minimum levels. Check if in Standby mode.
No Colour	Normal Sound	Colour controls set at minimum levels. Colour System
Poor or Distorted Picture	Weak or No Sound	Retune Channel (s).
Normal Picture	Weak or Distorted Sound	Sound reception may have deteriorated. Sound System

#### Plasma TV panel

Symptoms	Check		
Some parts of the screen do not light up.	The plasma TV panel is manufactured using an extremely high level of precision technology, however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a malfunction.		
After-images appear  Panasonie	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma TV.  Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.  Without signals and operations for 2 minutes, the level of the contrast decreases automatically to prevent image retention.  Note:  The permanent after-image on the Plasma TV resulting from fixed image use is not an operating defect and as such is not covered by the Warranty.  This product is not designed to display fixed images for extended periods of time.		

#### **Sleep Feature**

If the set is not switched off when the TV station stops transmitting, it will automatically go to standby mode after 30 minutes. This function will not operate when this TV is in AV mode.

- External surfaces of the unit may become hot during operation. But this is completely normal.
- See label on the base of this equipment for ratings and other information.

## Input signal can be displayed

#### Applicable input signals for PC Input (D-sub 15P) (\* Mark)

	Signal name	Horizontal frequency(kHz)	Vertical frequency(Hz)	PC
1	640 × 400 @70 Hz	31.47	70.00	*
2	640 × 480 @60 Hz	31.47	59.94	*
3	Macintosh13" (640 × 480)	35.00	66.67	*
4	640 × 480 @75 Hz	37.50	75.00	*
5	852 × 480 @60 Hz	31.50	60.00	*
6	800 × 600 @60 Hz	37.88	60.32	*
7	800 × 600 @75 Hz	46.88	75.00	*
8	800 × 600 @85 Hz	53.67	85.06	*
9	Macintosh16" (832 × 624)	49.73	74.55	*
10	1,024 × 768 @60 Hz	48.36	60.00	*
11	1,024 × 768 @70 Hz	56.48	70.07	*
12	1,024 × 768 @75 Hz	60.02	75.03	*
13	1,024 × 768 @85 Hz	68.68	85.00	*
14	Macintosh21" (1,152 × 870)	68.68	75.06	*
15	1,280 × 1,024 @60 Hz	63.98	60.02	*
16	1,280 × 1,024 @75 Hz	79.98	75.03	*
17	1,280 × 1,024 @85 Hz	91.15	85.02	*
18	1,600 × 1,200 @60 Hz	75.00	60.00	*

#### Note:

Signals other than above may not be displayed properly.

## **Specifications**

	TH-37PA30	TH-42PV30	TH-50PV30	
Power Source		220 V - 240 V 50 Hz / 60 Hz AC		
Power Consumption				
Normal use	245 W	498 W		
Standby				
Power-OFF	1.0 W			
Plasma Display panel				
Drive method	AC type			
Aspect Ratio Contrast Ratio	16:9			
Screen size	4000:1	300		
(No.of pixels)	37-inch	42-inch	50-inch 1,106 mm (W) × 622 mm (H)	
(No.01 pixels)	818 mm (W) × 461 mm (H)	920 mm (W) × 518 mm (H) × 1.056 mm (diagonal)	$\times$ 1,269 mm (diagonal)	
	× 939 mm (diagonal)	, ( ) ,		
	408,960 (852 (W) × 480 (H)) [2,556 × 480 dots]	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]	1,049,088 (1,366 (W) × 768 (H) [4,098 × 768 dots]	
Sound	[2,556 × 460 dols]	[5,072 × 766 dots]	[4,098 × 768 dots]	
Speaker	Woofe	er $\phi$ 80 mm $\times$ 2, Tweeter 16 mm $\times$ 73	mm × 8	
Audio Output		W [8W + 8W, 5W + 5W] (10 %)		
Headphone	20	M3 (3.5 mm) Jack × 1	(שווו)	
Applicable signals		Mo (6.5 mm) back × 1		
Colour System	NTSC, PAL, PAL60, SECAM, Mo	odified NTSC		
Scanning format		50i · 50p, 1125 / 50i, 1125 / 60i, 1250	0i / 50	
PC signals	VGA display	I XGA o		
	VGA	VGA, SV		
	SVGA, XGA, SXGA, UXGA ··· (compressed)		··· (compressed)	
	Horizontal scanning frequency 15 - 110 kHz		equency 15 - 110 kHz	
	Vertical scanning frequency 48 - 120 Hz	Vertical scanning fre		
Receiving	1. PAL B/G Reception of C	Off air broadcasts	•	
System		Video Tape Recorders		
		Special Video Tape		
		Special Video Tape  Special Video Disc Players		
	4. PAL 60Hz (Via the AV So			
		ckets/offiy.		
Receiving Channels	VHF 0 to 12 PAL B			
	UHF 21 to 69 PAL G			
	S'1 to S'3 HYPER			
	S1 to S41	(One tuner)		
OUTPUT	ALIDIO I D (DOAD) T	0.5.1/		
AUDIO OUT	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms		
VIDEO OUT INPUT	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)		
AV1-Rear	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)		
Av I-neal	S-VIDEO (MINI DIN 4-pin)	Y:1.0 Vp-p (75 Ω) C:0.286	(/n n /75 ())	
	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms	νρ-ρ (75 <u>22)</u>	
AV2-Rear	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)		
AVZ Heal	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms		
	Y	1.0 Vp-p (including synchro	nization)	
	PB/PR	±0.35 Vp-p	inzation)	
AV3-Front	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)		
1.00.1.011	S-VIDEO (MINI DIN 4-pin)	Y:1.0 Vp-p (75 Ω) C:0.286	Vp-p (75 Ω)	
	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms	- F F (, •)	
AV4-Rear	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)		
	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms		
	Y	1.0 Vp-p (including synchro	onization)	
	PB/PR	±0.35 Vp-p		
PC	(HIGH-DENSITY D-SUB 15PIN)			
	(,	HD, VD/1.0 - 5.0 Vp-p (high	impedance)	
	SD Card slot × 1, PC Card slot ×		,	
Others	SD Gard Slot X 1, FG Gard Slot X			
ANT-Rear	UHF / VHF			
	UHF / VHF Temperature : 0 ° - 40 °C			
ANT-Rear Operating Conditions	UHF / VHF	-condensing)		
ANT-Rear Operating Conditions Accessories Supplied	UHF / VHF Temperature : 0 ° - 40 °C			
ANT-Rear Operating Conditions  Accessories Supplied Remote Control Transmitter	UHF / VHF Temperature : 0 ° - 40 °C	EUR7635040		
ANT-Rear Operating Conditions  Accessories Supplied Remote Control Transmitter Batteries	UHF / VHF Temperature : 0 ° - 40 °C	EUR7635040 2 × R6 (AA) Size		
ANT-Rear Operating Conditions  Accessories Supplied Remote Control Transmitter Batteries Clamper	UHF / VHF Temperature : 0 ° - 40 °C	EUR7635040 2 × R6 (AA) Size TMME206 × 2		
ANT-Rear Operating Conditions  Accessories Supplied Remote Control Transmitter Batteries Clamper Ferrite core	UHF / VHF Temperature : 0 ° - 40 °C Humidity : 20 % - 80 % RH (non-	EUR7635040 2 × R6 (AA) Size TMME206 × 2 Large size × 3, Small size × 5		
ANT-Rear Operating Conditions  Accessories Supplied Remote Control Transmitter Batteries Clamper	UHF / VHF Temperature : 0 ° - 40 °C	EUR7635040 2 × R6 (AA) Size TMME206 × 2	1,329 mm × 870 mm × 139 mm 55.0 kg	

#### Note:

Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.

Customer's Record The model number and serial number of this product can be found on its rear panel. 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.

Serial Number

Web Site: http://www.panasonic.co.jp/global/

Model Number