

Panasonic[®]

Operating Instructions Wide LCD TV

Model No. **TX-26LX500A**
TX-32LX500A



The illustration shown is an image.



HDMI[™]
HIGH-DEFINITION MULTIMEDIA INTERFACE

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

English

TQBC2050

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new LCD 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 back cover of these instructions.

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Trademark Credits

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U. S. patent No. 4,907,093.

Warnings and Precautions

In explanations below, the type of contents which should be observed is classified by the following picture indications.

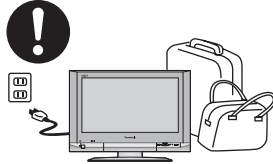
⊘ : "Prohibition" which must not be carried out

! : "Directions" which should be followed

- This TV set is designed to operate on AC 110-127 / 220-240 V, 50 / 60 Hz.

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

Remove the mains plug from the wall socket before connecting or disconnecting any leads, or if the TV set is not used for a prolonged period of time.



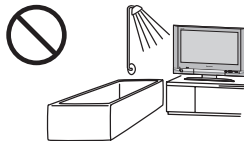
Note:

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 the TV is in AV mode.

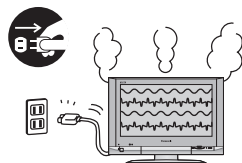
- To prevent damage which might result in electric shock or fire, do not expose this TV set to rain or excessive moisture. This TV must not be exposed to dripping or splashing water, and objects filled with liquid, such as vases, must not be placed on top of or above the TV.



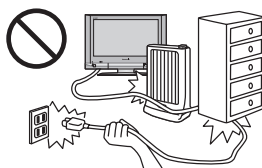
- DO NOT use this unit near water. (Near a bath tub, etc.) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



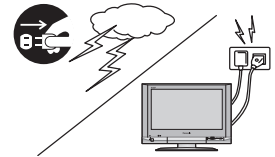
- Unplug the power cord in the event of any malfunction (screen goes blank, no sound, odd sounds, smoke or unusual odours coming from the unit). Unplug the power cord if foreign matter or water falls into the unit, or if the unit is dropped or the cabinet is damaged.



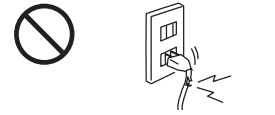
- TAKE CARE NOT to damage the power cord.



- DO NOT touch the aerial cable and this unit when there is lightning.



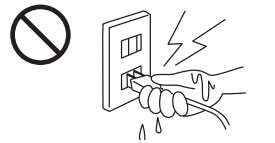
- DO NOT use if the power cord or power plug is damaged, or if the plug does not fit tightly into the socket.



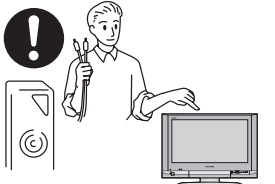
- DO NOT use at a voltage other than indicated.



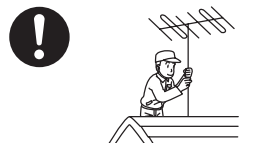
- DO NOT touch the power plug if your hands are wet.



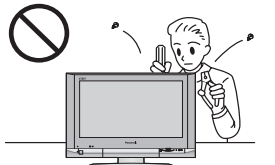
- Turn the power "Off" before connecting other electrical equipment.



- Ask your sales outlet to install the aerial.



- **WARNING : HIGH VOLTAGE!!!** Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.



WARNING

- Keep unneeded small parts and other objects out of the reach of small children. These objects can be accidentally swallowed. Also, be careful about packaging materials and plastic sheets.

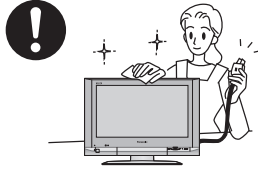


- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warnings and Precautions

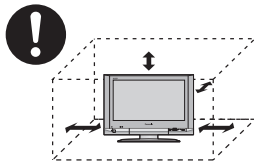
- **Cabinet and LCD panel care**

Remove the mains plug from the wall socket. The cabinet and LCD panel can be cleaned with a soft cloth moistened with mild detergent and water. Do not use solutions containing benzol or petroleum.

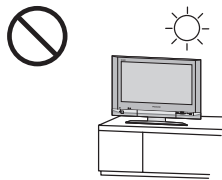


- When ambient temperature is cool, the picture may take a short time to reach normal brightness, but this is not a malfunction. (After brief moment, the picture will have normal brightness.)

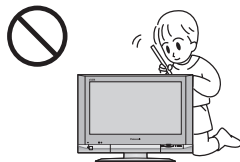
- Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 10cm is left all around this TV set even when it is placed inside a cabinet or between shelves.



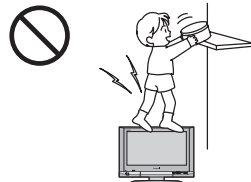
- Avoid exposing the TV set to direct sunlight and other sources of heat. To prevent fire, never place any type of candle or naked flame on top or near the TV set.



- DO NOT insert foreign objects (metal or easily flammable objects).



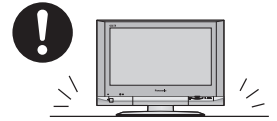
- DO NOT stand, or place heavy objects on the unit. Particular care should be taken by families with small children.



- DO NOT place in an unstable location.



- Place in a safe location.



- DO NOT jolt the unit.



Preparation

- **Receiver Location**

Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen.

Use of some types of fluorescent lighting can reduce remote control transmitter range.

Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture.

To insure optimum picture do not position magnetic equipment (motors, fans, other speakers, etc.) nearby.

- **Optional External Equipment**

The Audio / Video connection between components can be made with shielded video and audio cables. For best performance, we recommend 75 Ω coaxial aerial cable is used. Cables are available from your dealer or electronic supply store.

Before you purchase any cables, be sure you know what type of output and input connectors your various components require. Also determine the length of cable you will need.

- **For optimum quality picture**

When the LCD is exposed to light from outdoors or lighting fixtures, high-contrast pictures may not be displayed clearly. Turn off florescent lamps near the LCD and place in a location not exposed to outdoor light.

Pixel Statement (LCD)

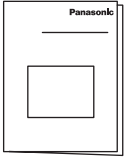
An image on an LCD panel is created by many dots known as pixels. The more pixels on the panel, the more detailed image can be displayed. To create a colour image each pixel is made up of three tiny coloured dots (1 each of red, green and blue). This gives a total far in excess of one million individual dots manufactured into the panel. Each one of these dots is precisely controlled by the electronics of the TV to produce the picture.

Whilst Panasonic maintains the highest standards in manufacturing technology and processes in the construction of these panels, there are a number of allowable Pixel/Dot failures that would still allow the panel to be defined as a good panel. It is not possible to guarantee absolutely no pixel loss.

Accessories

Check that you have the accessories and items shown

Operating Instructions



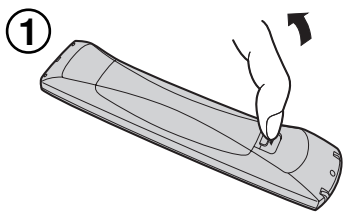
Remote Control Transmitter (N2QAJB000156)



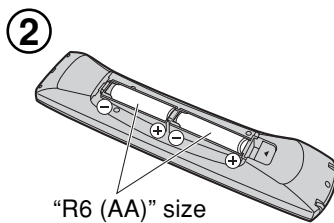
Batteries for the Remote Control Transmitter (2 × R6 (AA) size)



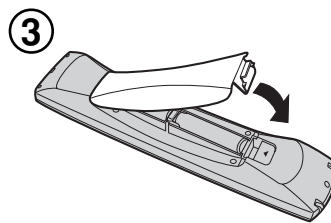
Fitting remote control batteries



Pull and hold the hook, then open the battery cover.



“R6 (AA)” size
Insert batteries - note correct polarity (+ and -).



Replace the cover.

Do not use rechargeable (Ni-Cad) batteries.

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

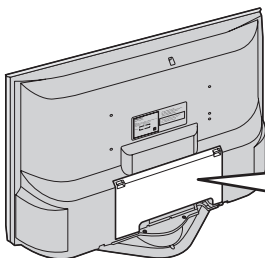
⚠ Battery cautions

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

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.

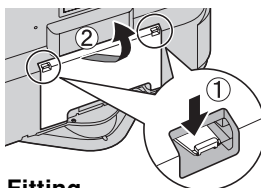
Cable cover removal and fitting



Note:

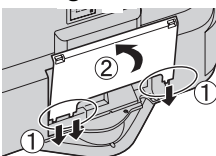
To avoid interference appearing on the screen, do not bundle the RF cable and mains lead together.

Removal



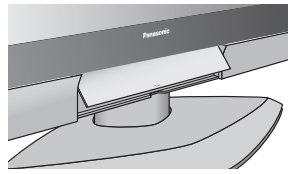
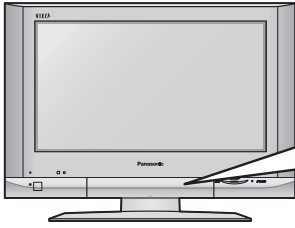
1. Push down hooks and pull the cover slightly towards yourself to disengage the claws (at 3 points).
2. Slowly pull out in the downward direction.

Fitting



1. Insert the claws (at 3 points) at the bottom end.
2. Push until it clicks.

How to open the front cover

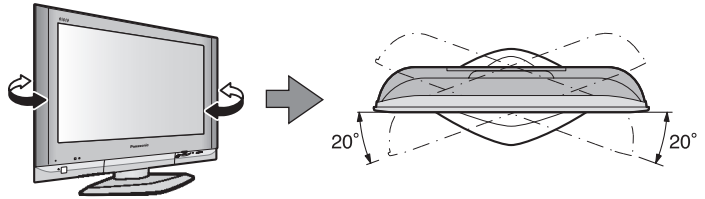


Raise the lower part of the door marked "PULL".

How to use the LCD stand

Adjust the LCD panel to your desired angle. The LCD panel can be adjusted the following direction:

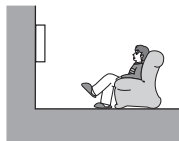
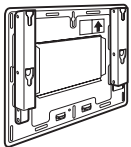
- 20° Right
- 20° Left



How to hang the LCD TV on the wall

This LCD TV is for use only with the following optional accessory.

- Wall-hanging bracket TY-WK32LX20W



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

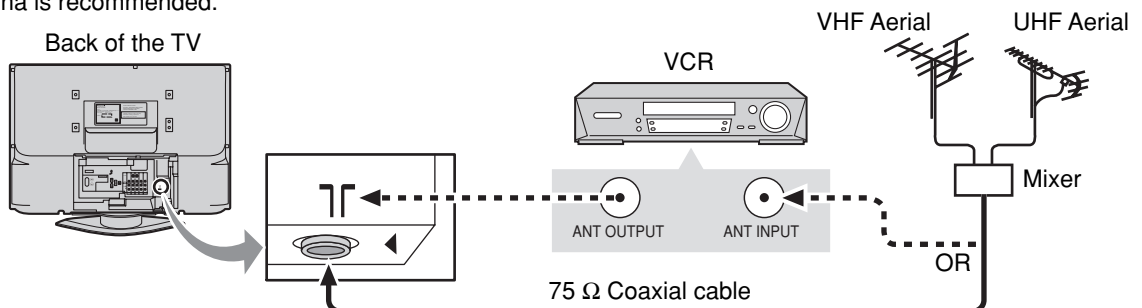
WARNING



- DO NOT use other optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

Antenna connection

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



Notes:

- 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 Ω 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.

Audio / Video 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, select the page by pressing the **Red** or **Blue** button and then press coloured buttons to select the AV source you wish to view.

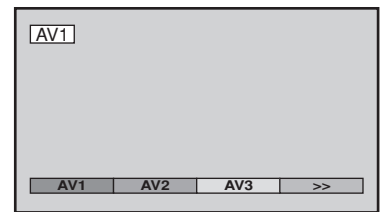
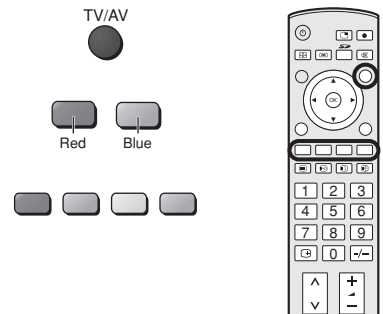
Red button : AV1 / Back page

Green button : AV2 / AV4

Yellow button : AV3 / PC

Blue button : Next page / HDMI

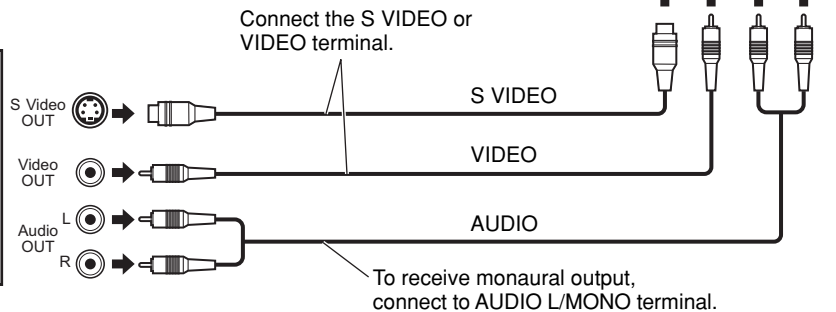
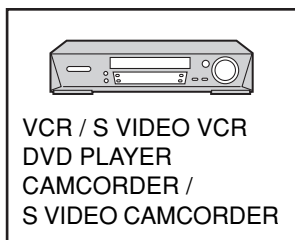
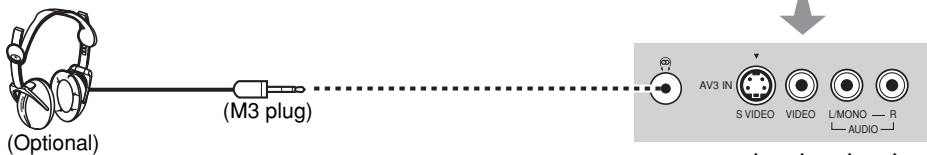
The on screen selector keys that appear clear after a few seconds. If you want to select an input when the keys are not shown, press any coloured button and the keys will reappear.



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. (without HDMI, PC)
- Additional equipment and cables shown are not supplied with this TV set.

How to connect the Headphones / AV3 terminal



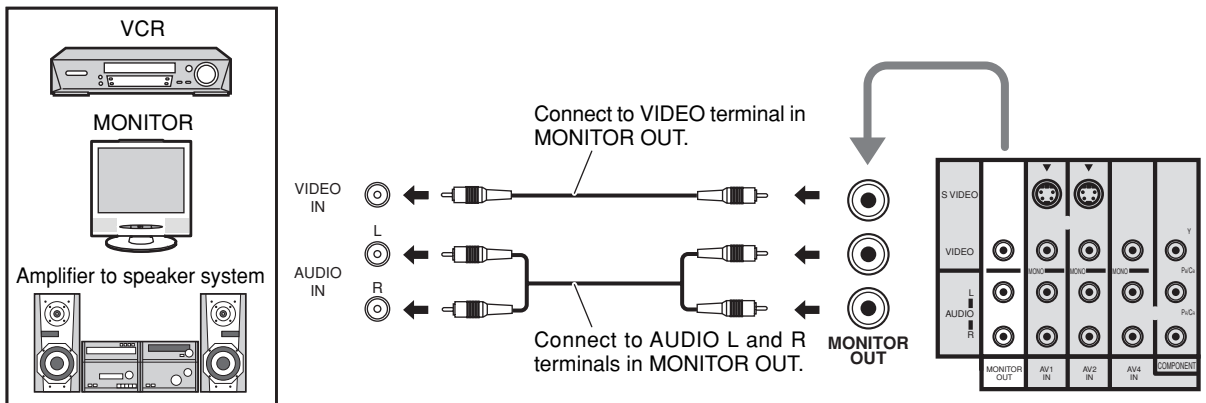
Notes:

- The volume level of the headphones can be adjusted by selecting "Headphone volume" from the Sound menu (see page 18).
- Additional equipment and cables shown are not supplied with this TV set.

Audio / Video connections

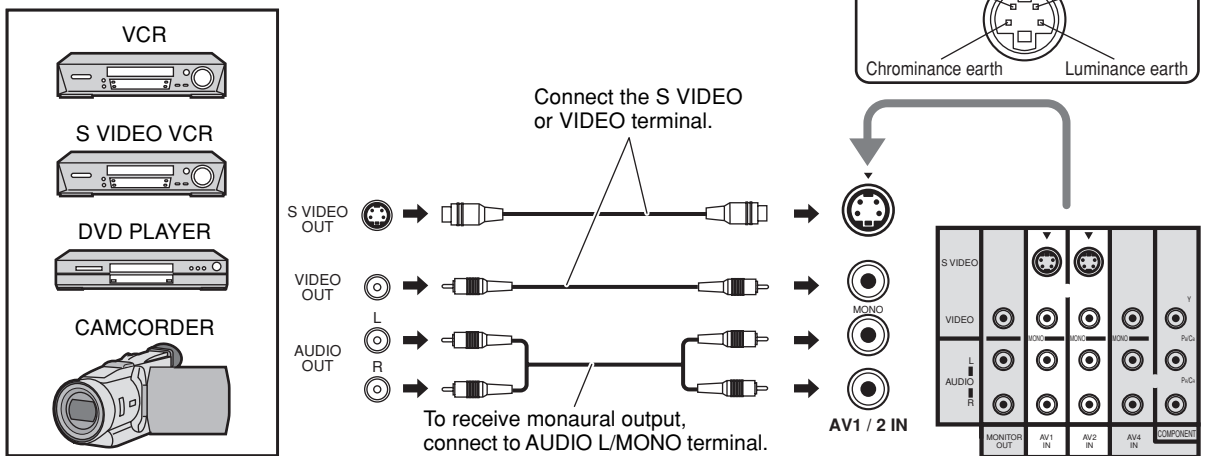
How to connect the Monitor Output terminals to other Equipment

Example of output signal source



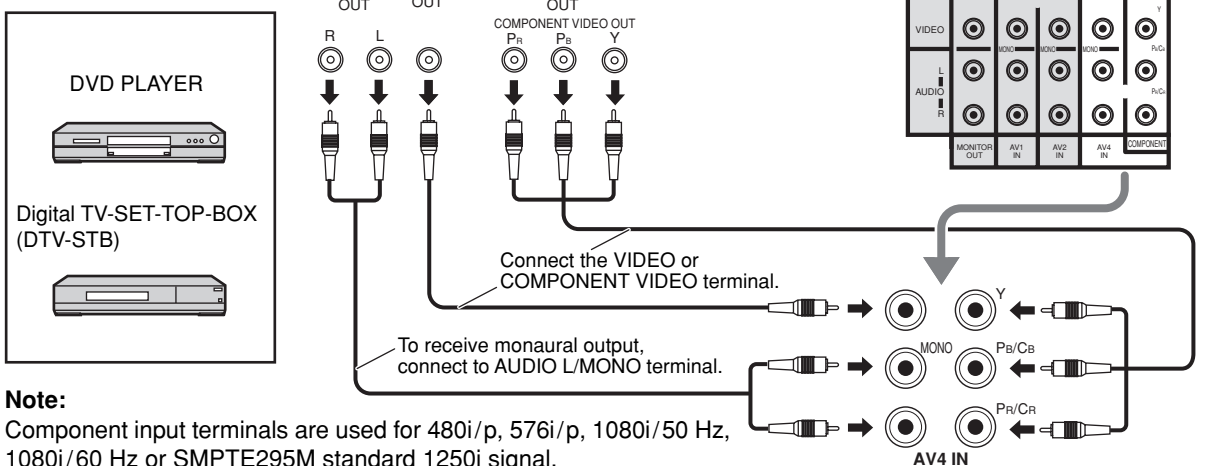
How to connect the AV1/2 Input terminals

Example of input signal source



How to connect the DVD (AV4) Input terminals

Example of input signal source



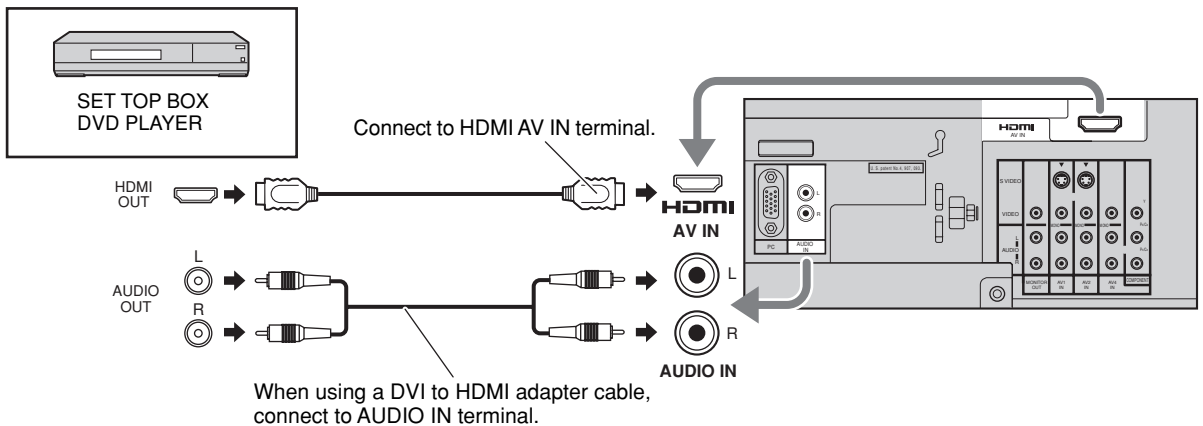
Audio / Video connections

How to connect the HDMI Input terminals

HDMI (High Definition Multi media Interface) is the first all-digital consumer electronics A/V interface that supports uncompressed standard. The HDMI terminal supports both video and audio information.

An HDMI-compliant device*¹ such as a Set Top Box or DVD player with HDMI or DVI output terminal can be connected to the HDMI input terminal.

- If the external device has DVI output only, use a DVI to HDMI adapter cable*² to connect to the HDMI terminal.
- Connect the audio cables to the AUDIO IN terminals when using a DVI to HDMI adapter cable.
- Select the audio setting in HDMI input. See page 18.



Notes:

- This input terminal is not intended for use with computers.
- 720p/1080i signals will be re-formatted to view on your display.
- If the external devices have the aspect adjustment, set to 16:9.
- For applicable HDMI signals information see page 37.

Compatible sampling frequency of AUDIO signal through HDMI (L.PCM) : 48 kHz / 44.1 kHz / 32 kHz

Notes:

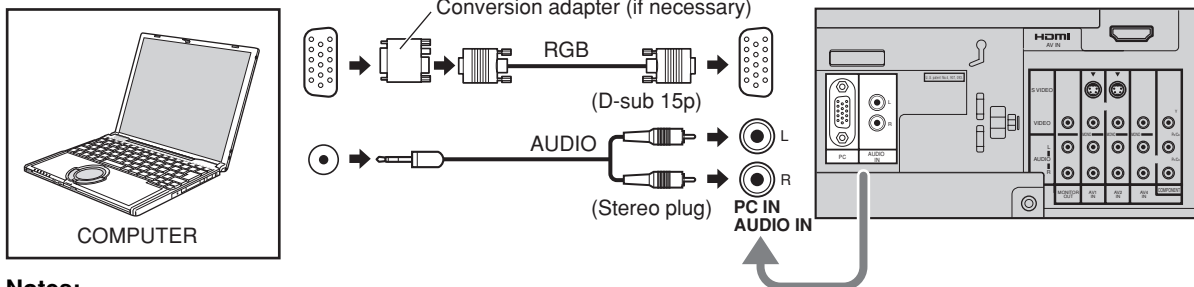
- This HDMI connector is Type A.
- If you connect equipment without a digital output terminal, connect to the COMPONENT, S VIDEO or VIDEO input terminal on the TV so you can receive an analogue signal.
- The HDMI IN terminal can only be used with 480i, 480p, 576i, 576p, 720p or 1080i picture signals. Set the Digital Set Top Box DIGITAL OUT terminal output setting to 480i, 480p, 576i, 576p, 720p or 1080i. For detailed information, refer to the Digital Set Top Box instruction manual. If you cannot display the picture because your Digital Set Top Box does not have a DIGITAL OUT terminal output setting, use the component input (or the S Video input or Video input). In this case the picture will be displayed as an analogue signal.

*1. HDMI-compliant device is that has the HDMI Logo on it.

*2. HDMI-DVI adapter cable: Consult your consumer electronics dealer for availability.

Audio / Video connections

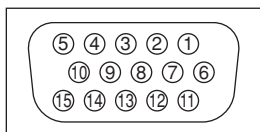
How to connect the PC Input terminals



Notes:

- Connect a cable which matches the audio output terminal on the computer.
- Computer signals which can be input are those with a horizontal scanning frequency of 31 to 69 kHz and vertical scanning frequency of 59 to 86 Hz. (However, the image will not be displayed properly if the signals exceed 1,024 lines.)
- When the aspect mode is set to "4:3", maximum of 1,024 × 768 dots area of LCD panel is used for display, and when the aspect mode is set to "16:9", full area (1,366 × 768 dots) of LCD panel is used for display.
- 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.
- For applicable PC signals information see page 37.

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 (not connected)
③	B	⑧	GND (Ground)	⑬	HD/SYNC
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Power On / Off

Connect the mains plug to the wall socket.

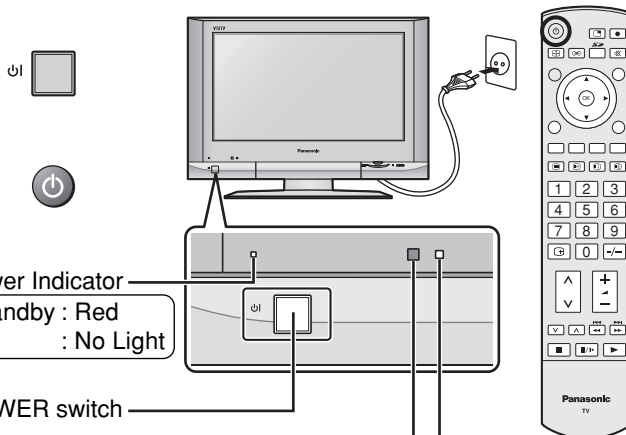
Press the [] switch on the TV set to turn the set on.

To switch the TV set to Standby mode, press the button on the remote control.

The TV set can be switched on by pressing the button again if it was in Standby mode.

Note:

This TV will still consume some power as long as the mains plug is still inserted into the wall socket.



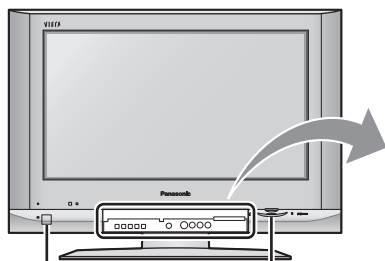
Remote control signal sensor

Within about 23 feet (7 meters) in front of the TV set.

C.A.T.S. sensor

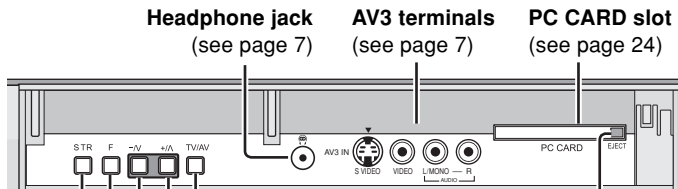
LCD C.A.T.S. (Contrast Automatic Tracking System) automatically senses the ambient light conditions and adjusts the brightness and gradation accordingly, to optimize contrast. C.A.T.S. is in effect when Menu mode (page 17) is set to Auto.

Basic controls: front panel and remote control



On / Off switch
SD CARD slot
 (see page 24)

STR (Normalization store)
 Used to store tuning and other function settings.



Headphone jack
 (see page 7)

AV3 terminals
 (see page 7)

PC CARD slot
 (see page 24)

TV/AV button
 (see page 7)

PC CARD EJECT button
 (see page 24)

Increases or decreases the programme position by one. When a function is already displayed, press to increase or decrease the selected function. When in **Standby** mode, switches TV **On**.

F (Function select)

Displays the On Screen Display functions, use repeatedly to select from the available functions - **Volume, Contrast, Brightness, Colour, Sharpness, Tint** (in **NTSC** mode), **Bass, Treble, Balance** and **Tuning mode** (for TV input only).

Standby On / Off button
 Switches TV **On** or **Off** (Standby mode).

Surround On / Off (see page 18)

Aspect control button
 (see page 20)

N (Normalize) button
 Resets all settings to their default levels.

Press to confirm selections and choices.

MENU button
 Press to access the **Picture, Sound** and **Setup** menus. (see page 17-19)

Coloured buttons used for the selection, navigation and operation of various functions.

Teletext button (see page 32-34)

Text F.P. button (see page 33)

Recall button
 Press to display the current system status, for example, Programme number, Channel number, Stereo mode, Aspect mode, Sound menu, Picture menu.

Channel up / down button

VCR / DVD buttons
 (see page 34)

Stereo / Bilingual Sound Selection
 (see page 35)



MULTI PIP button
 (see page 21)

SD Record button (see page 26)

Sound mute **On / Off**

SD button
 Access Card operations.
 (see page 24-31)

Switch between viewing TV or AV input.
 (see page 7)

Cursor buttons to make selections and adjustments.

Exit the mode.

Text Hold / Picture Still button
 (see page 31, 32)

Text Index button (see page 34)

Programme / channel change buttons (0-9) and **Teletext page** buttons.
 (see page 32-34)
 When in **Standby** mode, switches TV **On**.

Two digit button
 You can select the numbers directly by pressing Programme Number button and the two digit Numbers by pressing "Two Digit" and Programme Number buttons.
 Programme Number 8..... **8**
 Programme Number 12.... **-/-**, **1**, **2**

Volume up / down button

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 menus 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:

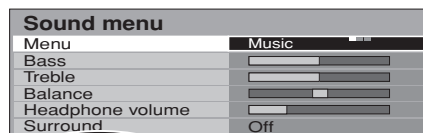
The Help box is not shown in the menu pictures in this instruction book due to space limitations.

MENU



OK

EXIT



**ON SCREEN HELP
'Instructions' box**

Tuning

Tuning menu

During TV mode

Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

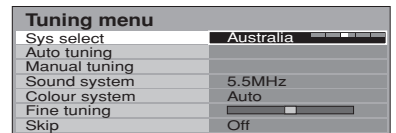
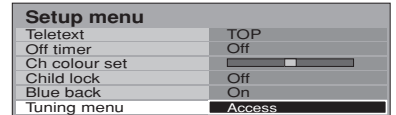
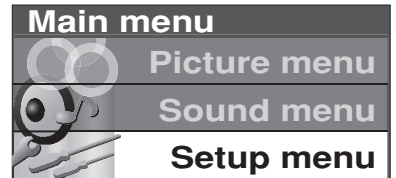
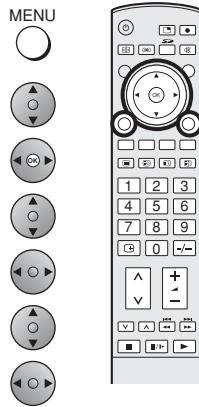
Access **Tuning menu**.

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.

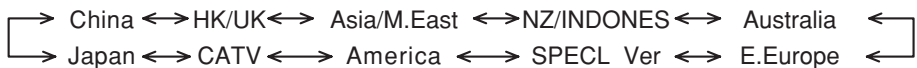
Pressing the **OK** button after having adjusted some features will store the setting as the default (replacing the factory setting).



Sys select

(System selection)

Select the system.



Sys select	REGION
China	China
HK/UK	Hong Kong, United Kingdom
Asia/M.East	Malaysia, Singapore, Thailand, Asia countries, Kuwait, Saudi Arabia, United Arab Emirates, Middle East countries, etc.
NZ/INDONES	New Zealand, Indonesia, etc.
Australia	Australia
E-Europe	CIS, Poland, etc.
SPECL Ver	South Africa
America	USA, Chile, Mexico, Panama, Peru, Philippines, Taiwan, Venezuela, etc.
CATV	USA CATV
Japan	Japan

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 14.

Manual tuning

Allows individual program positions to be tuned, manually. See page 15.

Sound system

Allows you to change the sound system used for a programme channel.
Choose the required sound system:
4.5 MHz / 5.5 MHz / 6.0 MHz / 6.5 MHz

Colour system

Lets you select the correct transmission standard for the transmission signal being received.
See page 19.
Auto / PAL / SECAM / 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.

Skip

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

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

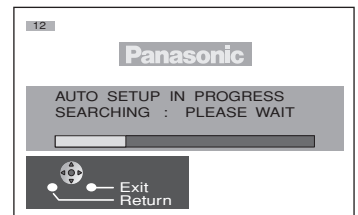
Once this operation is completed the TV will display the programme now stored on programme position 1.

Note:

- 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 the **EXIT** button at any time to go back to watching TV (please read the **Note** in the above procedure).

MENU



EXIT



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:

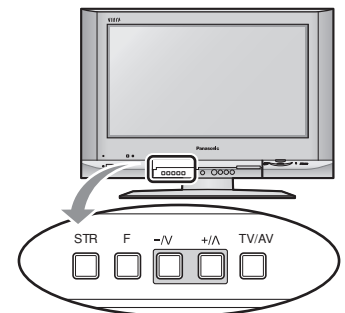
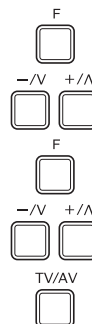
Press **F** until **Tuning mode** is reached.

Press **-/V** or **+/\A** to access **Tuning mode**.

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

Press **-/V** or **+/\A** to start search.

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



Notes:

- 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 13.
- 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 13.

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**.

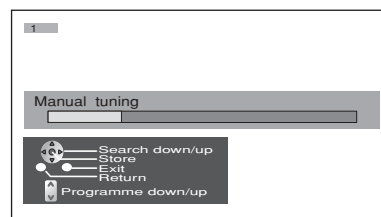
Select the programme position to be tuned.

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.

MENU



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 **+/\A** to access **Tuning mode**.

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

Press **-/V** or **+/\A** to access **Manual tuning**.

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

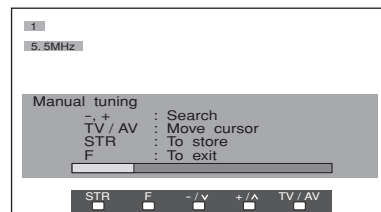
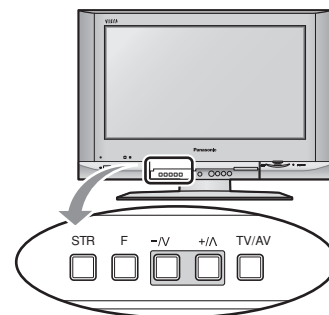
Press **-/V** or **+/\A** to change programme position or start search.

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.



Notes:

- If a clear picture cannot be obtained even when a Broadcast or AV signal is received, refer to the Colour system selection on page 13.
- 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 13.
- 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	China	HK/UK	Asia/M.East	NZ/INDONES	Australia	E.Europe	SPECL Ver	America	CATV	Japan
Channel	Receive Channel									
0	-	-	-	-	-	-	-	-	-	-
1	1	-	-	1	0	1	1	-	1	1
2	2	-	2	2	1	2	2	2	2	2
3	2	-	2	2	2	2	2	2	2	2
4	2	-	2	2	3	2	2	2	2	2
5	2	-	2	2	4	2	2	2	2	2
6	2	-	2	2	5	2	2	2	2	2
7	2	-	2	2	S2	2	2	2	2	2
8	2	-	2	2	2	2	2	2	2	2
9	2	-	2	2	2	2	2	2	2	2
10	2	-	2	2	2	2	2	2	2	2
11	2	-	2	2	2	2	2	2	2	2
12	12	-	11	11	2	11	11	2	2	12
13	13	-	12	-	2	12	12	2	2	13
14	2	-	-	-	2	-	13	13	2	13
15	2	-	-	-	S10	-	14	2	2	2
16	2	-	-	-	6	-	-	2	2	2
17	2	-	-	-	7	-	-	2	2	2
18	2	-	-	-	8	-	-	2	2	2
19	2	-	-	-	9	-	-	2	2	2
20	2	-	-	-	9A	-	-	2	2	2
21	2	21	21	21	10	21	21	2	2	2
22	2	2	2	2	11	2	2	2	2	2
23	2	2	2	2	12	2	2	2	2	2
24	2	2	2	2	S11	2	2	2	2	2
25	2	2	2	2	2	2	2	2	2	2
26	2	2	2	2	2	2	2	2	2	2
27	2	2	2	2	2	2	2	2	2	2
28	2	2	2	2	2	2	2	2	2	2
29	2	2	2	2	2	2	2	2	2	2
30	2	2	2	2	2	2	2	2	2	2
31	2	2	2	2	2	2	2	2	2	2
32	2	2	2	2	2	2	2	2	2	2
33	2	2	2	2	2	2	2	2	2	2
34	2	2	2	2	2	2	2	2	2	2
35	2	2	2	2	2	2	2	2	2	2
36	2	2	2	2	2	2	2	2	2	2
37	2	2	2	2	2	2	2	2	2	2
38	2	2	2	2	2	2	2	2	2	2
39	2	2	2	2	2	2	2	2	2	2
40	2	2	2	2	2	2	2	2	2	2
41	2	2	2	2	2	2	2	2	2	2
42	2	2	2	2	2	2	2	2	2	2
43	2	2	2	2	2	2	2	2	2	2
44	2	2	2	2	2	2	2	2	2	2
45	2	2	2	2	2	2	2	2	2	2
46	2	2	2	2	2	2	2	2	2	2
47	2	2	2	2	2	2	2	2	2	2
48	2	2	2	2	2	2	2	2	2	2
49	2	2	2	2	2	2	2	2	2	2
50	2	2	2	2	2	2	2	2	2	2
51	2	2	2	2	2	2	2	2	2	2
52	2	2	2	2	2	2	2	2	2	2
53	2	2	2	2	2	2	2	2	2	2
54	2	2	2	2	2	2	2	2	2	2
55	2	2	2	2	2	2	2	2	2	2
56	2	2	2	2	2	2	2	2	2	2
57	57	2	2	2	S44	2	2	2	2	2
58	2	2	2	2	20	2	2	2	2	2
59	2	2	2	2	21	2	2	2	2	2
60	2	2	2	2	2	2	2	2	2	2
61	2	2	2	2	2	2	2	2	2	2
62	2	62	62	62	2	62	62	62	62	62
63	2	63	63	63	2	63	63	63	63	C13
64	2	2	2	2	2	2	2	2	2	2
65	2	2	2	2	2	2	2	2	2	2
66	2	2	2	2	2	2	2	2	2	2
67	2	2	2	2	2	2	2	2	2	2
68	2	2	2	2	2	2	2	2	2	2
69	2	69	69	69	2	69	69	69	69	2
70	2	2	2	2	2	2	2	2	2	2
71	2	2	2	2	2	2	2	2	2	2
72	2	2	2	2	2	2	2	2	2	2
73	2	2	2	2	2	2	2	2	2	2
74	2	2	2	2	2	2	2	2	2	2
75	2	S'1	S'1	S'1	2	S'1	S'1	2	2	2
76	2	S'2	S'2	S'2	2	2	S'2	2	2	2
77	2	S'3	S'3	S'3	2	2	S'3	2	2	2
78	2	2	2	2	2	2	2	2	2	2
79	2	2	2	2	2	2	2	2	2	2
80	2	S1	S1	S1	2	S1	S1	2	2	2
81	Z1	S2	S2	S2	2	S2	S2	2	2	2
82	2	2	2	2	2	2	2	2	2	2
83	2	2	2	2	2	2	2	2	2	2
84	2	2	2	2	2	2	2	2	2	2
85	2	2	2	2	2	2	2	2	2	2
86	2	2	2	2	2	2	2	2	2	2
87	2	2	2	2	2	2	2	2	2	2
88	2	2	2	2	2	2	2	2	2	2
89	Z9	S10	S10	S10	2	S10	S10	2	2	2
90	Z10	S11	S11	S11	2	S11	S11	2	2	2
91	Z11	S12	S12	S12	2	S12	S12	2	2	2
92	Z12	S13	S13	S13	2	S13	S13	2	2	2
93	Z13	S14	S14	S14	2	S14	S14	2	2	2
94	Z14	S15	S15	S15	2	S15	S15	2	2	2
95	Z15	S16	S16	S16	2	S16	S16	2	2	2
96	Z16	S17	S17	S17	2	S17	S17	2	2	2
97	Z17	S18	S18	S18	2	S18	S18	2	2	2
98	Z18	S19	S19	S19	2	S19	S19	2	2	2
99	Z19	S20	S20	S20	2	S20	S20	2	99	C49
100	Z20	S21	S21	S21	2	S21	S21	2	100	2
101	2	2	2	2	2	2	2	2	2	2
102	2	2	2	2	2	2	2	2	2	2
103	2	2	2	2	2	2	2	2	2	2
104	2	2	2	2	2	2	2	2	2	2
105	2	2	2	2	2	2	2	2	2	2
106	2	2	2	2	2	2	2	2	2	2
107	2	2	2	2	69	2	2	2	2	2
108	2	2	2	2	2	2	2	2	2	2
109	2	2	2	2	2	2	2	2	2	2
110	2	2	2	2	2	2	2	2	2	2
111	2	2	2	2	2	2	2	2	2	2
112	2	2	2	2	2	2	2	2	2	2
113	2	2	2	2	2	2	2	2	2	2
114	2	2	2	2	2	2	2	2	2	2
115	2	2	2	2	2	2	2	2	2	2
116	2	2	2	2	2	2	2	2	2	2
117	Z37	2	2	2	2	2	2	2	2	2
118	2	2	2	2	2	2	2	2	2	2
119	2	2	2	2	2	2	2	2	2	2
120	2	S41	S41	S41	2	S41	S41	2	2	2
121	2	2	2	2	2	2	2	2	2	2
122	2	2	2	2	2	2	2	2	2	2
123	2	2	2	2	2	2	2	2	2	2
124	2	2	2	2	2	2	2	2	2	2
125	2	2	2	2	2	2	2	2	125	2

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



EXIT



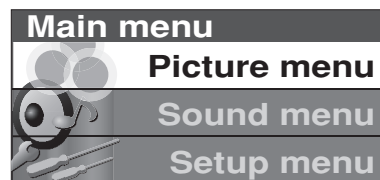
Menu

Menu mode will be memorized for each TV, AV1, AV2, AV3, AV4, PC, HDMI and Card operations mode. Dynamic / Standard / Cinema / Auto

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

Note:

C.A.T.S. (page 10) is in effect when Menu mode is set to Auto.



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.

Colour management Enables vivid colour adjustment automatically.

D.PNR

Reduces noise in a channel with many noises. Remains Off when receiving a strong signal.

Off: Recommended mode when receiving a strong signal.

Strong: Applies strong noise reductions regardless of input signals.

Weak: Applies weak noise reductions regardless of input signals.

Auto: Automatically reduces unwanted picture noise.

MPEG NR

Reduces MPEG noise.

Allows you to choose from **Off**, **Strong**, **Mid** and **Weak**.

This function is effective in reducing the digital block noise when viewing DVD, VCD, SD card 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, SD card 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.

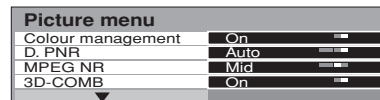
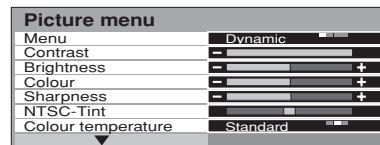
Note

Not displayed during RGB Video, S Video, Component, PC, HDMI input and Card operations.

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.

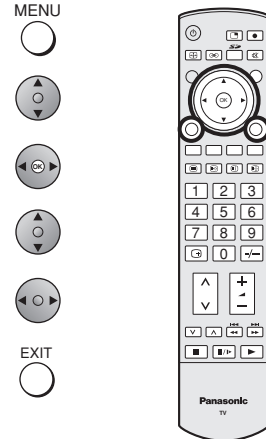
Move to choose **Sound menu**.

Access **Sound menu**.

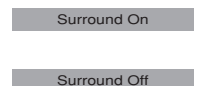
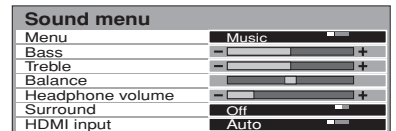
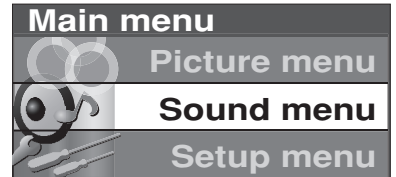
Move to choose menu option.

Adjust chosen option or access chosen menu.

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



- Menu** Menu mode will be memorized for each TV, AV1, AV2, AV3, AV4, PC, HDMI and Card operations mode. Music / News / Cinema
You can change the level of each Item (Bass and Treble) 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.
- HDMI input** Displayed during HDMI input mode. Allows you to choose from **Auto**, **Digital** and **Analogue**. Select to fit the input signal.
Auto : Set in normal use
Digital : HDMI cable connection
Analogue : HDMI-DVI adapter cable connection
See page 9.



Note:

By pressing the **N** button on the remote control while the Sound menu is displayed, the selected menu (Bass, Treble and Balance) 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.

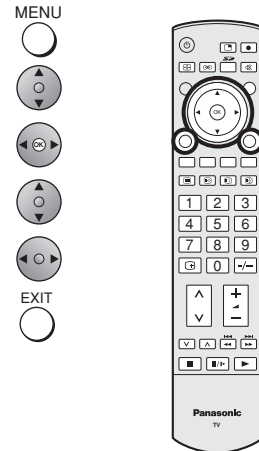
Move to choose **Setup menu**.

Access **Setup menu**.

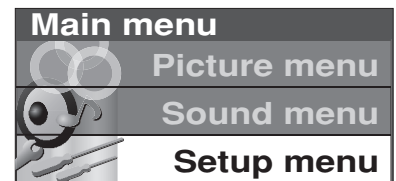
Move to choose menu option.

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 minutes intervals.
- Ch colour set** Colour density varying between broadcast channels can be adjusted to three levels for each reception channel.
- 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.
Note: Cannot change the setting during SD recording.
- Blue back** You can choose Blue Back display On or Off when there is no signal.
- 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 / SECAM / NTSC 4.43 / NTSC 3.58



Setup menu	
Teletext	TOP
Off timer	Off
Ch colour set	---
Child lock	Off
Blue back	On
Tuning menu	Access

AV mode

Setup menu	
Teletext	TOP
Off timer	Off
Ch colour set	---
Child lock	Off
Blue back	On
Colour system	Auto
Colour matrix	SD

PAL, SECAM 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 NTSC recorded video tapes through PAL television equipment.

- Colour matrix** Displayed during **AV** mode.
Displays 480p/576p input signals in a natural colour from digital equipment adapters connected to COMPONENT VIDEO INPUT (Y, P_B, P_R) terminals.
Select HD or SD to automatically adjust colour parameters for HD (high definition) or SD (standard definition).
SD: When the input signal is a normal TV system.
HD: When the input signal is a High-Definition system.
Note: This feature is available only with 480p/576p signal and not available with 480i/576i signal.
- Tuning menu** Provides access to many other features including Sys select and Auto tuning. See page 13. Not displayed during AV mode.

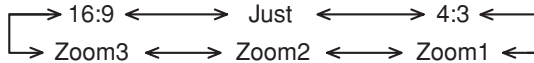
* : Teletext is not displayed during HDMI mode, PC mode and 60Hz.
Colour system is not displayed during HDMI mode and PC mode.

Aspect Controls

The TV will allow you to enjoy viewing the picture at its optimum size and aspect.

The aspect mode changes each time the **ASPECT** button is pressed.

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 six aspect options.



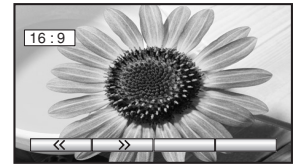
Notes:

- During PC mode aspect switching is between 16:9 and 4:3 only.
- For 720p and 1080i signal input aspect is fixed to "16:9" and switching is not possible.



16 : 9

16:9 will display a true 16:9 (anamorphic) picture with no aspect distortions.

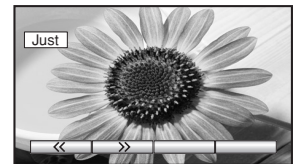


16 : 9

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.



Just

4 : 3

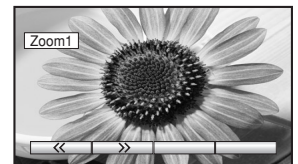
4:3 will display a 4:3 picture at its standard 4:3 size with no aspect distortions.



4 : 3

Zoom1

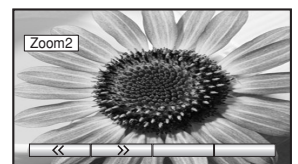
Zoom1 will display 16:9 letterbox or 4:3 pictures with no aspect distortions.



Zoom1

Zoom2

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

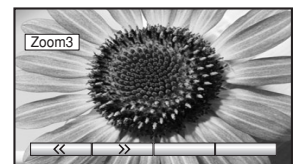


Zoom2

Zoom3

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

16:9 picture will be displayed at its maximum size but with slight stretching.



Zoom3

MULTI PIP

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.

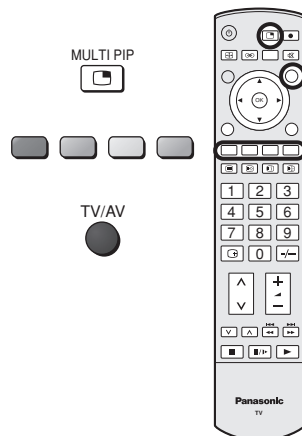
Press the **Blue** button to swap the contents of the two windows.

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



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

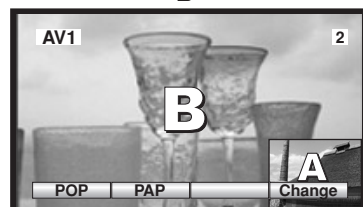
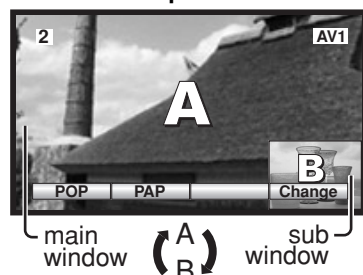
• Main window

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

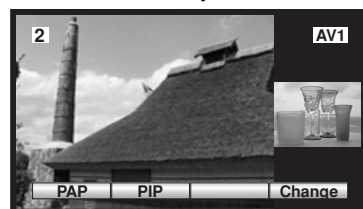
Press the **MULTI PIP** button. Whilst the on screen selector keys are displayed, press the **TV/AV** button to switch between the TV channel and all AV sources in turn.

Picture in picture mode



Press the **Blue** button. The two pictures have been swapped, the picture in the smaller window has become the main window picture.

Picture out of picture mode



Picture and picture mode



PC mode

When you switch to PC input, the menu will be changed.
About the PC connection, see page 10.

Press the **TV/AV** button. Whilst the on screen selector keys are displayed, press the **Blue** button to move to the next page, and then press the **Yellow** button to access PC mode.

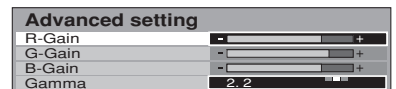
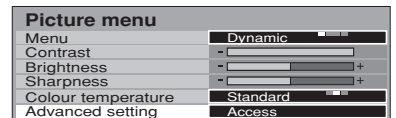
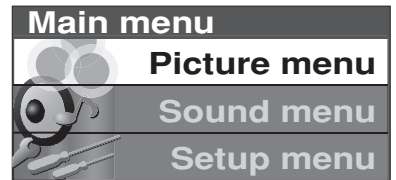
press the **TV/AV** button again to go back to watching TV.



Picture menu

During **PC 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.



Menu, Contrast, Brightness, Sharpness, Colour temperature

About settings, see page 17.

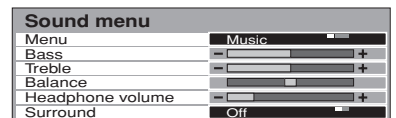
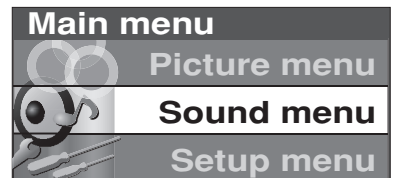
Advanced setting Access to adjust to the fine picture at a professional level.

- R - Gain** : Adjusts the white balance for red areas.
- G - Gain** : Adjusts the white balance for green areas.
- B - Gain** : Adjusts the white balance for blue areas.
- Gamma** : 2.0 <—> 2.2 <—> 2.5

Sound menu

During **PC mode**

- 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 exit Sound menu.



Menu, Bass, Treble, Balance, Headphone volume, Surround

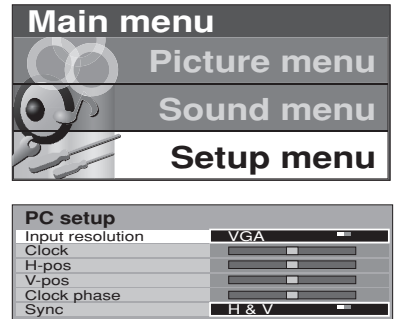
About settings, see page 18.

PC mode

Setup

During PC mode

- 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 exit Setup menu.



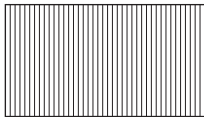
PC setup

Access to adjust chosen option.

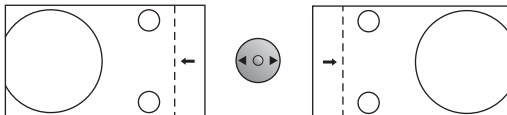
Input resolution : Displayed during VGA, WVGA, XGA, WXGA input signals.
 Select WVGA or WXGA during WVGA or WXGA input signal to avoid noise.
 Select VGA or XGA during VGA or XGA input signal to avoid noise.

Note:
 WVGA and WXGA signals may not be displayed properly.

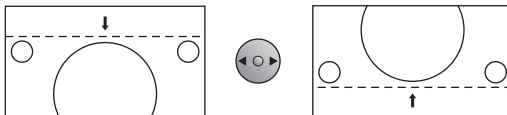
Clock : If a periodic striped pattern (noise) occurs, carry out adjustments to reduce the noise to the lowest level.



H-pos : Adjust the horizontal position.



V-pos : Adjust the vertical position.



Clock phase : Eliminate the flickering and distortion.
 Carry out this adjustment after adjusting Clock.
 Adjust to reduce noise to the most inconspicuous level.

Sync : **H & V** - To synchronize by the horizontal and vertical signals from your PC.
On G - To synchronize by the green signal from your PC (if available).

H-freq. / V-freq.

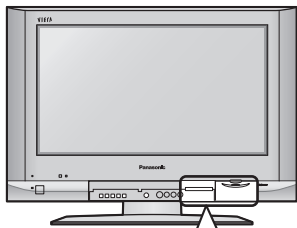
Displays the frequency of PC input signal.
 If the input signal is not applicable, the characters will turn to red.
 For applicable PC signals information see page 37.

Note:
 H-FREQ. / V-FREQ. is displayed on the upper right of the screen during PC setup.

Card operations

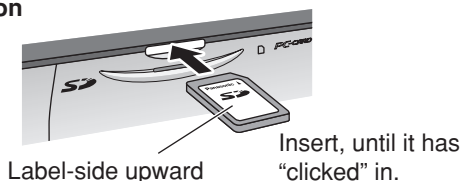
This function lets you display Still images (JPEG) or Animated pictures (MPEG4) recorded by this unit, DIGA, D-snap or digital camera on a memory card when it is inserted in the proper card slot.

Inserting and removing a card

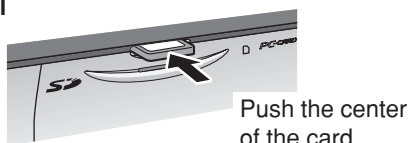


SD CARD slot

Insertion



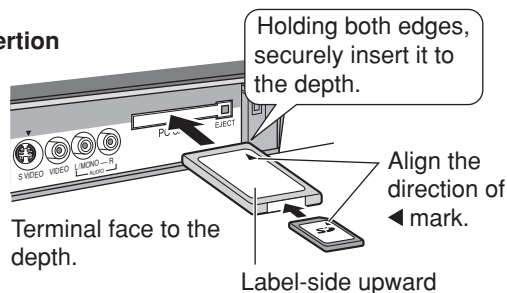
Removal



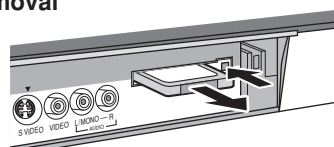
PC CARD slot

Turn the TV off before inserting or removing a PC card.

Insertion



Removal



1. Push, the EJECT button pops out.
2. Push it again.

If the EJECT button does not pop out

Push in PC card again, and then push the EJECT button again.

Note:

If the card adapter is used, remove it together with the adapter.

Compatible card type and maximum card size

SD CARD slot

- SD Card (1GB)
- Multi Media Card (128MB)
- miniSD Card* (512MB)

PC CARD slot

- SD Card (1GB)
- Multi Media Card (128MB)
- Smart Media (128MB)
- xD Picture Card (512MB)
- Memory Stick Pro (1GB)
- miniSD Card* (512MB)
- Compact Flash (1GB)
- Memory Stick (128MB)
- Flash ATA (128MB)

The cards require standard PC card adapter.
(Some PC card adapter will not be compatible.)

* miniSD Card requires miniSD™ adapter.

- This function is not compatible with card type hard disk (Micro Drive, Mobile type hard disk, etc).
- Memory cards are not supplied with this television.
- When both SD card and PC card are inserted in the slot, SD card has the priority. You can change the priority. See page 29.

Note:

Suitable SD Memory Cards

Please confirm the latest information on the following website.

<http://panasonic.co.jp/pavc/global/cs>

(This site is in English only)

Card Data Protection

- Do not remove the card or turn the unit off while the unit is accessing the information. Such action may damage the memory card or the unit itself.
- The blue LED lights during recording.
- Before inserting or removing the PC card, make sure that the TV is turned Off. Otherwise, it may damage the unit.
- Do not touch the terminals on the back of the SD card/ PC card.
- Always insert a card in the correct direction. Failure to do so may result in damage to the card and this unit.
- Do not subject the card to excessive pressure or strong impacts.
- Electrical interference, electrostatic discharges and malfunctions of the unit or card may all result in data loss or damage to the card.
- 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.

WARNING: As with a small object, SD card can be swallowed by young children. Do not allow children to handle SD card. Please remove SD card immediately after use.

Card operations

Folders and Files

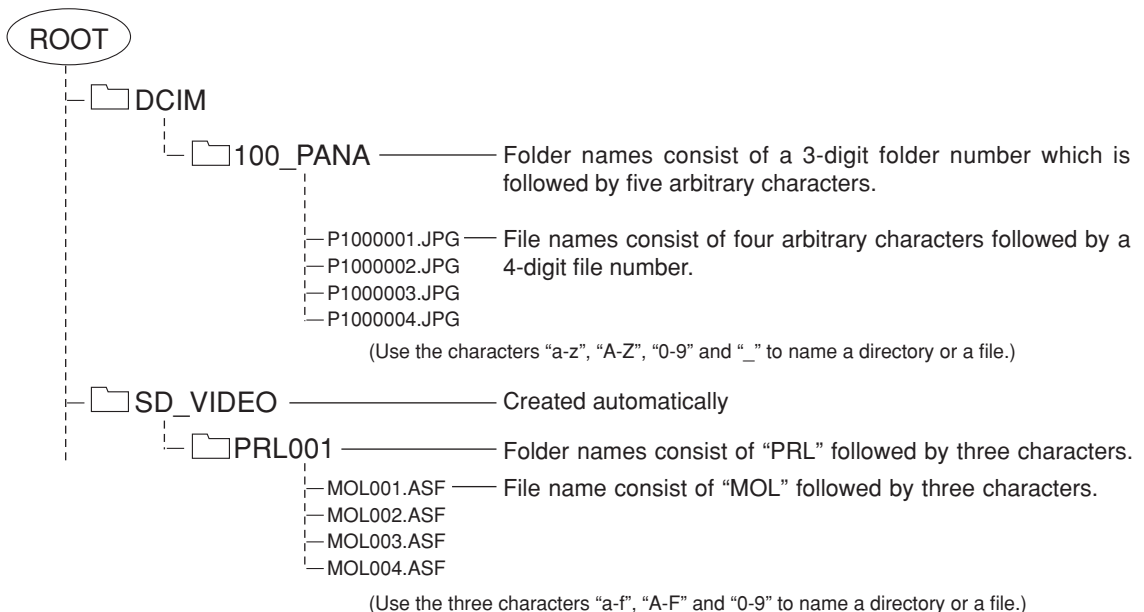
- Photo view can show still images recorded by a digital still camera with DCF* and EXIF standard JPEG file.
* DCF (Design rule for Camera File system)
Unified standard established by Japan Electronics and Information Technology Industries Association (JEITA).
If the image is imported from a PC, it must follow the EXIF (Exchangeable image file format) 2.0, 2.1, 2.2 or JFIF (JPEG file interchange format) in addition to the DCF (design rule for Camera File system) format.
- MPEG4 view can only show moving pictures recorded by this unit, Panasonic DVD recorder DIGA or mobile camera D-snap.
- When recording in MPEG4, format the SD card with this unit. The card may not operate properly if formatted with different equipment.
- Memory cards must be formatted with FAT12 or FAT16 in order to be viewed on TV. If the card is not formatted, it may cause incompatibility with certain memory card adapters. If this happens, reformat the card using your digital camera.

Reformatting the card will erase the images and pictures stored in it. Refer to your camera manual for more information.

- Maximum number of files that can be displayed: **65,535**.
- **Picture resolution:** Compatible in the range 8 x 8 - 5,120 x 3,840
If the picture resolution is not compatible, the image will be shown as the error display.
- The JPEG modified using a PC may not be displayed on TV.
- This function cannot display Motion JPEG and still image not DCF formatted (i.e. TIFF, BMP).
- If the file is partially corrupted, it may be shown in lower resolution.
- The displayed image size depends on the recorded image size.
- The number of pixels for movies is 320 x 240 (QVGA) or 176 x 144 (QCIF).
- When the number of files exceeds 65,535, no further recording is possible.
- The audio format used is G.726 (32 Kbps, 8 kHz sampling frequency, monaural).

Example folder structure

When the Card file hierarchy is displayed on the PC as shown below.



Notes:

- Folder and file names may vary according to the digital camera.
- Do not use two-byte characters or other special codes.
- The card may become unusable with this unit if file or folder names are changed.

Card operations

SD Record

The TV channels can be recorded on the SD card. The recording is not available for AV input signal.

During recording, it is possible to watch other terminals input signal.

Setup Rec mode and Rec time in Setup menu before recording. See page 30.

Select the channel you want to record.

Insert the SD card into the card slot. See page 24.

Press the **SD REC** button to start recording.

If the remaining time is not enough or Rec time in Setup menu is set to No setting, the message will appear.

Remaining time is not enough

Start recording?
 Not enough memory
 Current setting
 Rec time 180min
 Rec mode Economy
 Recordable at 15min

Rec time is set to No setting

Start recording?
 Current setting
 Rec time No setting
 Rec mode Economy
 Recordable at 17min

Press the **OK** button to start recording.

Press the **EXIT** button to cancel.

Notes:

- You cannot record the copy protected signals.
- Even if the Off timer function is activated or the [⏻] button is pressed during recording, the recording will not stop.
- Do not press the [⏻] switch on the TV during recording. Otherwise the file will be broken.
- Do not remove the SD card while recording. The data being recorded and other data stored on the SD card may become unreadable.
- SD recording may not be fully compatible or playable in some PC software or PDA devices.
- When two pictures are shown on the same screen as MULTI PIP functions, the main window is the one that is recorded. The picture can be switched for the sub window.
- If the signal system is changed during recording, it cannot be recorded completely.
- The signals without video (only audio) cannot be recorded completely.
- SD recording is also possible on the Multi Media Card (except EXTRA FINE and SUPER FINE MODE) and MiniSD Card.

To cancel the recording

Press the **SD REC** button during recording.

The confirmation message will appear.

Stop recording?
 Card recording in progress

During the message appears, press the **OK** button.

Recordable time for SD card

(Time is approximate)

Size	Extra fine	Super fine	Fine	Normal	Economy
64MB	7minutes	9minutes	23minutes	34minutes	1hour 21minutes
128MB	14minutes	18minutes	44minutes	1hour 6minutes	2hours 35minutes
256MB	28minutes	37minutes	1hour 32minutes	2hours 17minutes	5hours 20minutes
512MB	55minutes	1hour 10minutes	3hours	4hours 30minutes	10hours 40minutes
1GB	1hour 50minutes	2hours 20minutes	6hours	9hours	21hours 20minutes

This product is licensed under the MPEG-4 patent portfolio license for the personal and non-commercial use of a consumer to (i) encode video in compliance with the MPEG-4 Video Standard ("MPEG-4 Video") and/or (ii) decode MPEG-4 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a licensed video provider. No license is granted or implied for any other use. Additional information may be obtained from MPEG LA. See <http://www.mpegla.com>.



Card operations

Basic operation

To enter Card operations mode

Press the **SD** button.



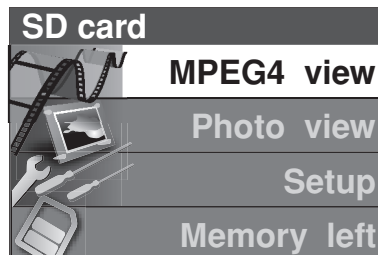
To return to the SD card menu

Press the **EXIT** button.



To exit Card operation

During the SD card menu is displayed, press the **SD** button to return to normal picture.



MPEG4 view

The moving pictures recorded by this unit, DIGA or D-snap will be played back. This function is supported by SD cards only.

Press the **SD** button.



Move to choose **MPEG4 view**.



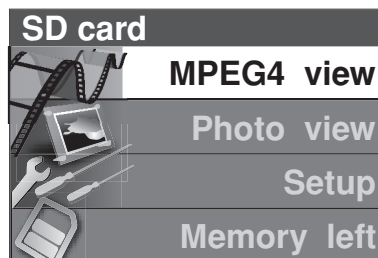
Access **MPEG4 view**.
After for a while, the thumbnail screen is displayed.



Select the file.



Press the **OK** button.
The moving picture starts.

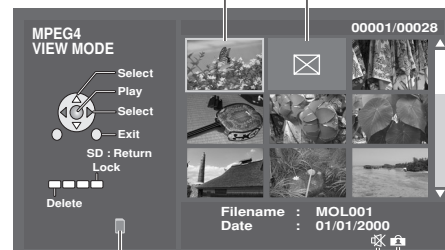


Notes:

- Picture menu, Sound menu (in playback only) or Card setup menu (in thumbnail only) adjustment is possible by pressing the **MENU** button during MPEG4 view.
- "Date" shows the date on which the recording was made by this unit, DIGA or D-snap. Its format is 01/01/2000 when recordings are made without date signal.

Error display
(images that could not be loaded, etc.)

Selected File



Inserted card displayed (this does not appear for PC cards)

Movie without sound

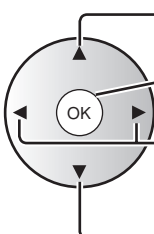
Movie for which lock has been set






Card operations

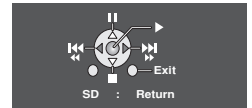
During the playback

When the operation guide is not displayed, press the  button to display it.

During the operation guide is displayed



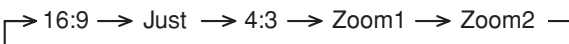
-  (||) Press to pause. Press again to cancel the pause.
-  (▶) Press to playback.
-  (>>>),  (<<<<) Press to skip the picture.
Press and hold to Rew/FF.
-  (■) Press to stop. Automatically returns to the thumbnail screen.



Notes:

- During the playback, the volume can be adjusted using the **Volume up/down** button.
- During the playback, no signals are output from the monitor output terminals.
- During the playback, the Aspect ratio can be changed by pressing the **ASPECT** button.

When Frame size is set to Normal: 16:9 ↔ 4:3

When Frame size is set to Large:  16:9 → Just → 4:3 → Zoom1 → Zoom2

Lock / Unlock the file

Select the file you want to lock in the thumbnail.



Press the **Blue** button to lock the file.



Blue

Press again to unlock.

Delete the file

Select the file you want to delete in the thumbnail.



Press the **Red** button to delete the file.



Red

Press again to confirm your decision.

Note:

If the file is locked, it is not possible to delete.

Card setup menu

Press the **MENU** button during MPEG4 view (thumbnail).

MENU



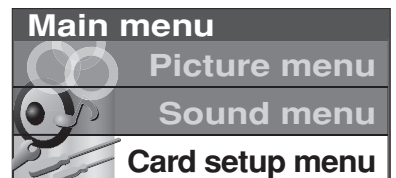
Move to choose **Card setup menu**.



Access **Card setup menu**.



Move and adjust options.



■ Frame size (Normal or Large)

Select the Frame size of the playback picture.



■ Repeat (Off, One file or All)

Select the Repeat mode.

- Off : Return to the thumbnail screen after playing back all the moving pictures in the SD card one time.
- One file : Repeat playing back of the moving picture selected in the thumbnail screen.
- All : Repeat playing back of all the moving pictures in the SD card.

Card operations

Photo view

The still images recorded by the digital camera will be displayed.
This function supports both SD cards and PC cards.

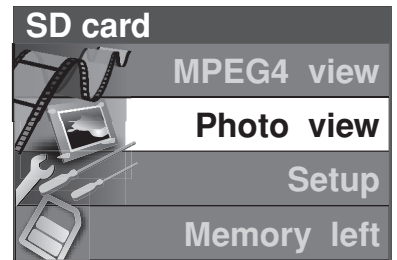
Press the **SD** button.

Move to choose **Photo view**.

Access **Photo view**.
After for a while, the thumbnail screen is displayed.

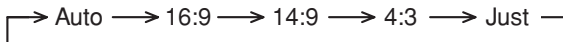
Select the file.

Press the **OK** button to view.



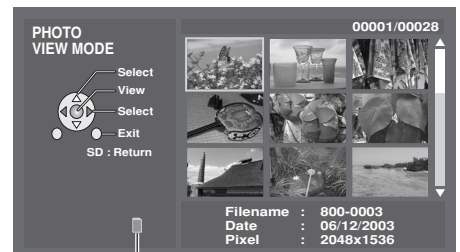
Notes:

- Picture menu or Card setup menu adjustment is possible by pressing the **MENU** button during Photo view.
- During single view and Slide show, the Aspect ratio can be changed by pressing the **ASPECT** button.



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

AUTO : Selects optimum ASPECT (16:9, 14:9 or 4:3) from the resolution (aspect ratio) of Photo size.

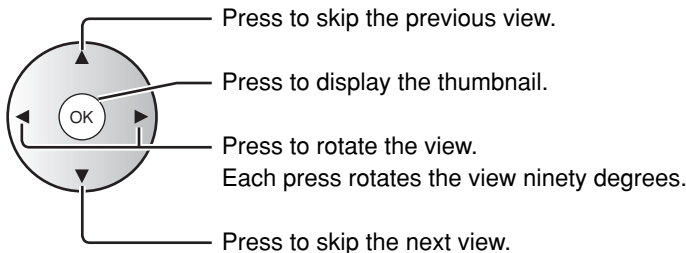


Inserted card displayed

During single view

When the operation guide is not displayed, press the button to display it.

During the operation guide is displayed



Press the **Red** button to zoom the view.
Press again to cancel the zoom.



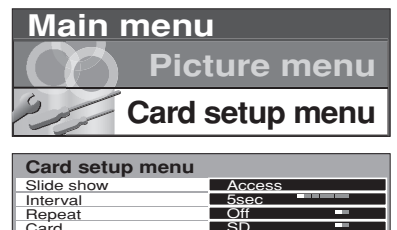
Card setup menu

Press the **MENU** button during Photo view.

Move to choose **Card setup menu**.

Access **Card setup menu**.

Move and adjust options or access Slide show.



Slide show

Select the settings of Interval and Repeat before accessing Slide show.

Interval (5sec, 10sec, 15sec, 30sec, 60sec, 90sec or 120sec)

Select the length of time that a slide is being displayed on screen.

Repeat (On or Off)

Select the Repeat On or Off.

On : Repeat the "Slide show".

Off : Return to the thumbnail screen after playing the "Slide show" one time.

Card (SD or PC)

Select either SD or PC when both cards are inserted in the slots.
Not selected when one card is inserted.

Card operations

Setup

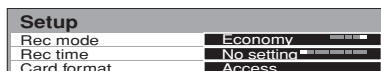
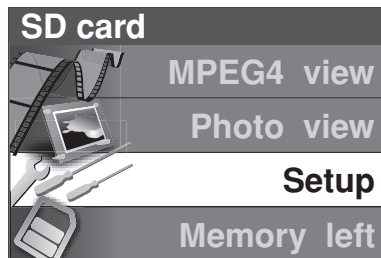
Press the **SD** button.

Move to choose **Setup**.

Access **Setup**.

Move to choose menu option.

Adjust chosen option or access chosen menu.



■ Rec mode (Extra fine, Super fine, Fine, Normal or Economy)

The quality of picture can be changed.

The recordable time will be changed by Rec mode.

Notes:

- Multi Media Cards do not support the Extra fine and Super fine recording mode. If the recording is started in these status, recording will automatically be performed in the Fine mode.
- The quality of audio is not changed.

■ Rec time (No setting, 5min, 10min, 15min, 30min, 60min, 90min, 120min or 180min)

Set the recording time before recording.

Note:

If you set Rec time to No setting, the recording does not stop until the card is fully recorded.

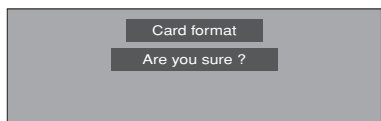
■ Card format

The confirmation message will appear.

Press the OK button to format the card.

Notes:

- If the card is formatted, all data is erased.
- Only cards that are supported by the SD card slot can be formatted.
- Do not remove the SD card while formatting. That may cause the card to not be able to record properly.



Memory left

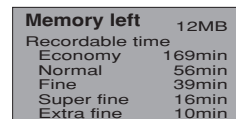
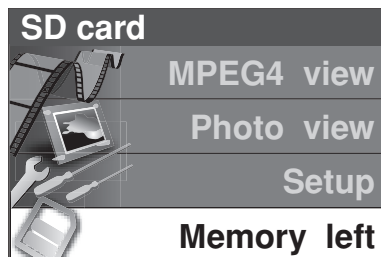
You can confirm the remaining time for recording in each Rec mode.

Press the **SD** button.

Move to choose **Memory left**.

Access **Memory left**.

The recordable time informations are displayed by each Rec mode.



(Time is approximate)

Note:

Since Multi Media Cards do not support the Extra fine and Super fine recording mode, "----" appears.

Card operation

Error messages

Is SD card in?	Insert a card.
SD card is locked Please unlock to operate	Unlock the SD card.
This file is locked Please unlock to operate	Unlock the file in the card.
This type of format is not supported	The card must be formatted with FAT 12 or FAT 16. Still image must be with DCF and EXIF standard JPEG file. Moving picture must be with MPEG4 standard ASF file.
This type of card is not supported	Incompatible card is inserted.
Broken file Cannot display image	The file is broken.
Memory full	The card memory is full.
Not enough memory	The card does not have enough memory to operate.
Cannot read file	The file is not readable.
Unrecordable source SD recording is stopped	It is not possible on restricted channels.
Error Check card	Re-insert the card. If the error persists, format the card.
Card recording in progress Please stop recording to operate	The tuning buttons for the main picture do not work while recording is in progress.

Still

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




Note:

This function is not available in MPEG4 view, Photo view and PC mode.



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 backlight function with a white bar and the contrast function with a cyan bar, press  to 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 the volume up / down button 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.

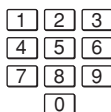
Note:

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



TV / Teletext mode

Press the **TEXT** button to switch between the current programme and teletext.



Page Selection

Pages can be selected in two ways :

- Press the Up / Down buttons to increase or decrease the page number by one.
- 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.

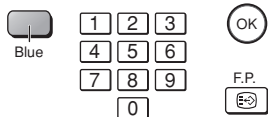


HOLD

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.



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.

Update Display

Press the **MENU** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page. When found, the screen will display the page number at the top left. Press the **Yellow** button to view the page.

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

Update

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 screen.

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

Press the **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.

In Teletext operation, use the following procedure to access sub pages:

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 screen.

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.

Notes:

- 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 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 **TEXT** button to return to normal TV operation.



INDEX

When in TOP operation

Press the **INDEX** button to return to the main index page.

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



Picture and text

Press the **TEXT** button, followed by the **MULTI PIP** button to move between viewing teletext and the Picture and text mode.

Picture and text mode 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 **TEXT** button to return to watching the programme on its own then make the desired changes.

VCR / DVD operation

The Remote Control is capable of operating some functions of selected VCR 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
	Standby
	VCR / DVD selection switch
	Play
	Stop
	VCR : Fast Forward / Cue DVD : Skip / Search
	VCR : Rewind / Review DVD : Skip / Search
	Pause / Still
	Programme Number up / down
	Record

Stereo / Bilingual Sound Selection



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	MAIN I	SUB II	MONO
Mode Indicator		I	II	

NICAMUsed in New Zealand, Singapore, Hong Kong etc.

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 \longleftrightarrow	I \longleftrightarrow	\longleftrightarrow	

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 \longleftrightarrow	I \longleftrightarrow II	\longleftrightarrow

Notes:

- 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.

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.

VCR 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

Notes:

- 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 LCD 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).

Symptoms		Checks
Picture	Sound	
 Snowy Picture	 Noisy Sound	Aerial location, direction or connection
 Multiple Image	 Normal Sound	Aerial location, direction or connection
 Interference	 Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lights
 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
There may be red spots, blue spots and green spots on the screen		This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green, or red. Please note this does not affect the performance of your LCD.
HDMI	Poor Video. (Snow noise, no picture, picture runs, etc.)	HDMI cable is not connected securely. Turn the power supply of the TV and connected equipment off then turn on. Check compatibility of input signal from the connected equipment. The connected equipment must be EIA/CEA-861/861B compliant.
	Poor Audio.	Change the audio setting of the connected equipment to L.PCM. Check the setting of HDMI input in Sound menu. If the problem is due to the digital audio connection, change to the analogue audio connection.
	The error message appears.	Please consult an Authorized Service Center.
The SD card cannot be used even when it is formatted.		Please consult an Authorized Service Center.

Maintenance

To clean this unit, wipe with a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in soap-and-water solution or a weak detergent solution.

- Use eyeglass cleaner to remove stubborn dirt from the LCD.
- Never use alcohol, paint thinner or benzene to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.
- Do not wipe the LCD with water.

Neutral
detergent



Wipe the cabinet with a soft cloth.

If the cabinet is heavily soiled, wipe with a well-wrung soft cloth dipped in neutral cleanser diluted with water.

CAUTION:

If water or similar substances get inside the monitor via the liquid crystal panel surface, a malfunction may result.

Input signal that can be displayed

Applicable input signal for Component (Y, P_B, P_R), HDMI and PC (D-sub 15P) (* Mark)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	Component	HDMI	PC
480i (60Hz)	15.73	59.94	*	*	
480p (60Hz)	31.47	59.94	*	*	
576i (50Hz)	15.63	50.00	*	*	
576p (50Hz)	31.25	50.00	*	*	
720p (60Hz)	45.00	60.00	*	*	
720p (50Hz)	37.50	50.00	*	*	
1,080i (60Hz)	33.75	60.00	*	*	
1,080i (50Hz)	28.13	50.00	*	*	
1,080i (50Hz)*	31.25	50.00	*		
640 × 400 @70 Hz	31.46	70.07			*
640 × 480 @60 Hz	31.47	59.94			*
640 × 480 @75 Hz	37.50	75.00			*
852 × 480 @60 Hz	31.47	59.94			*
800 × 600 @60 Hz	37.88	60.32			*
800 × 600 @75 Hz	46.88	75.00			*
800 × 600 @85 Hz	53.67	85.06			*
1,024 × 768 @60 Hz	48.36	60.00			*
1,024 × 768 @70 Hz	56.48	70.07			*
1,024 × 768 @75 Hz	60.02	75.03			*
1,024 × 768 @85 Hz	68.68	85.00			*
1,280 × 1,024 @60 Hz	63.98	60.02			*
1,366 × 768 @60 Hz	48.36	60.00			*
Macintosh13" (640 × 480)	35.00	66.67			*
Macintosh16" (832 × 624)	49.72	74.54			*
Macintosh21" (1,152 × 870)	68.68	75.06			*

Notes:

- Signals other than above may not be displayed properly.
- Applicable input signal for PC is basically compatible to VESA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.
- * : Based on SMPTE295M standard.

Specifications

	TX-26LX500A	TX-32LX500A																																								
Power Source	AC 110 - 127 / 220 - 240 V, 50 / 60 Hz																																									
Power Consumption	Average use : 137 W Standby condition : 0.4 W	Average use : 168 W Standby condition : 0.4 W																																								
LCD	Wide XGA (1366 × 768 pixels) 16:9 aspect ratio LCD panel.																																									
Visible screen size	64.8 cmV 565 mm (W) × 318 mm (H)	80.0 cmV 697 mm (W) × 392 mm (H)																																								
Sound	Woofer (ø 80 mm) × 2 pcs, Tweeter (16 mm × 73 mm) × 4 pcs																																									
Speaker	20 W [(5 W + 5 W) × 2], 10 % THD																																									
Audio Output	M3 (3.5 mm) Jack × 1																																									
Headphones																																										
Scanning format	480i(60Hz), 480p(60Hz), 576i(50Hz), 576p(50Hz), 720p(50Hz), 720p(60Hz), 1080i(50Hz), 1080i(60Hz)																																									
PC signals	XGA display VGA, SVGA, XGA SXGA (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz																																									
Receiving Systems / Band name	<table border="1"> <thead> <tr> <th colspan="2">17 Systems</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>PAL B, G, H</td> <td rowspan="7">Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders</td> </tr> <tr> <td>2</td> <td>PAL I</td> </tr> <tr> <td>3</td> <td>PAL D, K</td> </tr> <tr> <td>4</td> <td>SECAM B, G</td> </tr> <tr> <td>5</td> <td>SECAM D, K</td> </tr> <tr> <td>6</td> <td>SECAM K1</td> </tr> <tr> <td>7</td> <td>NTSC M (NTSC 3.58 / 4.5 MHz)</td> </tr> <tr> <td>8</td> <td>NTSC 4.43 / 5.5 MHz</td> <td rowspan="7">Playback from Special VCR's</td> </tr> <tr> <td>9</td> <td>NTSC 4.43 / 6.0 MHz</td> </tr> <tr> <td>10</td> <td>NTSC 4.43 / 6.5 MHz</td> </tr> <tr> <td>11</td> <td>NTSC 3.58 / 5.5 MHz</td> </tr> <tr> <td>12</td> <td>NTSC 3.58 / 6.0 MHz</td> </tr> <tr> <td>13</td> <td>NTSC 3.58 / 6.5 MHz</td> </tr> <tr> <td>14</td> <td>SECAM I</td> </tr> <tr> <td>15</td> <td>PAL 60 Hz / 5.5 MHz</td> <td rowspan="3">Playback from Special Disc Players and Special VCR's</td> </tr> <tr> <td>16</td> <td>PAL 60 Hz / 6.0 MHz</td> </tr> <tr> <td>17</td> <td>PAL 60 Hz / 6.5 MHz</td> </tr> </tbody> </table>	17 Systems		Function	1	PAL B, G, H	Reception of broadcast transmissions and Playback from Video Cassette Tape Recorders	2	PAL I	3	PAL D, K	4	SECAM B, G	5	SECAM D, K	6	SECAM K1	7	NTSC M (NTSC 3.58 / 4.5 MHz)	8	NTSC 4.43 / 5.5 MHz	Playback from Special VCR's	9	NTSC 4.43 / 6.0 MHz	10	NTSC 4.43 / 6.5 MHz	11	NTSC 3.58 / 5.5 MHz	12	NTSC 3.58 / 6.0 MHz	13	NTSC 3.58 / 6.5 MHz	14	SECAM I	15	PAL 60 Hz / 5.5 MHz	Playback from Special Disc Players and Special VCR's	16	PAL 60 Hz / 6.0 MHz	17	PAL 60 Hz / 6.5 MHz	
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Receiving Channels	Regular TV VHF BAND 2-12 (PAL / SECAM B, K1) 0-12 (PAL B AUST.) 1-9 (PAL B N.Z.) 1-12 (PAL / SECAM D) 1-12 (NTSC M Japan) 2-13 (NTSC M USA)	UHF BAND 21-69 (PAL G, H, I / SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M USA)	CATV S1-S20 (OSCAR) 1-125 (USA CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A,9A (AUST.)																																							
Aerial - Rear	UHF / VHF																																									
Operating Conditions	Temperature : 5 °C - 35 °C Humidity : 5 % - 90 % RH (non-condensing)																																									
Connection Terminals	<table border="1"> <tbody> <tr> <td rowspan="2">AV1/2-Rear</td> <td>VIDEO (RCA Pin Type)</td> <td>1.0 Vp-p (75 Ω)</td> </tr> <tr> <td>S VIDEO (MINI DIN 4-pin)</td> <td>Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω)</td> </tr> <tr> <td rowspan="3">AV3-Front</td> <td>AUDIO L-R (RCA Pin Type × 2)</td> <td>0.5 Vrms</td> </tr> <tr> <td>VIDEO (RCA Pin Type)</td> <td>1.0 Vp-p (75 Ω)</td> </tr> <tr> <td>S VIDEO (MINI DIN 4-pin)</td> <td>Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω)</td> </tr> <tr> <td rowspan="4">AV4-Rear</td> <td>AUDIO L-R (RCA Pin Type × 2)</td> <td>0.5 Vrms</td> </tr> <tr> <td>VIDEO (RCA Pin Type)</td> <td>1.0 Vp-p (75 Ω)</td> </tr> <tr> <td>Y</td> <td>1.0 Vp-p (including synchronization)</td> </tr> <tr> <td>P_B / C_B, P_R / C_R</td> <td>±0.35 Vp-p</td> </tr> <tr> <td rowspan="4">Others</td> <td>HDMI</td> <td>TYPE A Connector</td> </tr> <tr> <td>PC</td> <td>HIGH-DENSITY D-SUB 15PIN</td> </tr> <tr> <td>AUDIO L - R</td> <td>RCA Pin Type × 2</td> </tr> <tr> <td>Card slot</td> <td>SD CARD slot × 1, PC CARD slot × 1</td> </tr> <tr> <td rowspan="2">MONITOR OUT</td> <td>VIDEO (RCA Pin Type)</td> <td>1.0 Vp-p (75 Ω)</td> </tr> <tr> <td>AUDIO L-R (RCA Pin Type × 2)</td> <td>0.5 Vrms</td> </tr> </tbody> </table>		AV1/2-Rear	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)	S VIDEO (MINI DIN 4-pin)	Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω)	AV3-Front	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)	S VIDEO (MINI DIN 4-pin)	Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω)	AV4-Rear	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)	Y	1.0 Vp-p (including synchronization)	P _B / C _B , P _R / C _R	±0.35 Vp-p	Others	HDMI	TYPE A Connector	PC	HIGH-DENSITY D-SUB 15PIN	AUDIO L - R	RCA Pin Type × 2	Card slot	SD CARD slot × 1, PC CARD slot × 1	MONITOR OUT	VIDEO (RCA Pin Type)	1.0 Vp-p (75 Ω)	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms					
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Dimensions (W × H × D)																																										
Including TV Stand	724 mm × 549 mm × 300 mm	857 mm × 624 mm × 300 mm																																								
TV Set Only	724 mm × 487 mm × 141 mm	857 mm × 563 mm × 141 mm																																								
Weight	21.0 kg Net	22.5 kg Net																																								

Note:

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

WARRANTY - Australia only

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or it's Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.
2. This warranty only applies to products sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). This warranty covers normal office use on office related products and normal domestic use on other products (but not rentals use) and does not cover damage, malfunction or failure resulting from use of incorrect voltages, accident, misuse, neglect, build-up of dirt or dust, abuse, misadjustment of customer controls, main supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. If warranty service is required you should:
 - Telephone Panasonic's Customer Care Centre on 132600 for the name/address of the nearest Authorised Service Centre.
 - Provide a copy of your purchase receipt as proof of date of purchase.
 - Send or bring the product to a Panasonic Authorised Service Centre. Please note that freight to and / or from your nearest Authorised Service Centre must be arranged by you.
 - Note that in-home or pick-up/delivery service is available for Television Receivers (screen size greater than 39 cm) in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
5. The warranties hereby conferred do not extend to any costs associated with the delivery, handling, freight, or transportation of the product or any part thereof or replacement of and do not extend to any damage or loss occurring during, or associated with, transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the Trade Practices Act 1974 and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations and liabilities.

**THIS WARRANTY AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE)
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

WARRANTY - New Zealand only

WE WARRANT that the Panasonic Television that you have purchased is free from defects in material and workmanship under normal home use and service.

Accordingly, we undertake to repair, or at our option, replace without cost to the owner, either for material or labour, any part which within 12 months from the date of delivery is found to be defective, provided that the appliance has been used for domestic purposes only and in accordance with the instructions given in the Instruction Book and not been subjected to misuse, neglect or installed, dismantled, repaired or serviced by any other than an authorised Panasonic New Zealand Dealer or Panasonic New Zealand Authorised Service Centre.

NOTE

- Before reporting a fault, please ensure that you read the item "Troubleshooting" in the information section of your Panasonic Instruction Book.
- It is important to retain your proof of purchase as this will be required by the serviceman or retailer as proof of purchase date, should service be required.
- In the event of service being required, contact your Panasonic New Zealand retailer or Panasonic New Zealand Authorised Service Centre.

IMPORTANT

Any request for warranty service must be through an Authorised Panasonic New Zealand Service Centre who during the period of the warranty, undertakes to make any necessary adjustment and fit any replacement part supplied by the manufacturer, during normal working hours, or alternatively will arrange for such service to be provided by some other Panasonic New Zealand Authorised Service Centre.

AUSTRALIA



www.panasonic.com.au

NEW ZEALAND

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Panasonic New Zealand Limited
350 Te Irirangi Drive East Tamaki,
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Tel. 09 272 0100

Customer Care Center
Email: Customerservice@panasonic.co.nz
www.panasonic.co.nz

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.

Model Number _____

Serial Number _____

Matsushita Electric Industrial Co., Ltd.

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

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