

Wide Projection Television Operating Instructions

Model No.







This is a combined Operating Instruction manual for all the above series of models. Please read these instructions before operating your set and retain them for future reference.

TQBC0532

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new Wide Projection television set. To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference. Retain your purchase receipt also, and note down the Model Number and Serial Number of your set in the space provided on the rear cover of these Instructions.

Visit our Panasonic Web Site http://www.panasonic.co.jp/global/

Important Information

(1) The long time (max. 2 hours) use of a TV game on this set is not recommended, since the signal from the TV game may cause damage to the picture projection tubes of the set.

(2) Do not allow a still picture to be displayed for an extended period, as this can cause a permanent afterimage to remain on the Wide Projection TV screen. Examples of still pictures include logos, video games, computer images and teletext. If still picture cannot be avoided, reduce the brightness and contrast levels of the picture to minimize any damage that might occur.

(3) In order to minimize any damage to the projection tubes, this set uses the PICTURE SHIFT function (Refer to page 25) to change (shift) the entire picture approximately 2 mm every 15 minutes.

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Warnings and Cautions

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



≜ Cautions			
	DO NOT place in humid or dusty location, or areas exposed to smoke or steam. DO NOT place in direct sunlight and other sources of direct heat.		DO NOT place in an unstable location.
	DO NOT stand, or place heavy objects on the unit. Particular care should be taken by families with small children.		Place in a safe location. Fix the TV to a wall. (refer to page 6)
	When inserting batteries, ensure that the polarities (positive and negative) are correctly aligned. Insert as shown on remote control. If inserted incorrectly, battery fluid may leak, and fire, injury, or damage to surrounding components may result.	S	Do not mix new and old batteries. Use only the specified batteries. Failure to follow this precaution may result in leakage of battery fluid. Fire, injury, or damage to surrounding components may also result.
	Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 10 cm (\leftrightarrow) is left all around this unit even when it is placed inside a cabinet or between shelves.		Turn the power "Off" before connecting other electrical equipment.
	Before cleaning, unplug the power plug from the socket.		DO NOT Jolt the unit.
	Unplug the power plug from the socket if you are not going to use the unit for an extended period.		Ask your sales outlet to install the aerial.

To ensure continued excellent performance by this product, periodic cleaning is recommended. See page 40 for more information.

Before Operating This Set

/

Safety Precaution

Please take safety precautions to prevent the unit form falling over.

The unit may fall over during earthquakes, or if someone stands on or shakes the TV.



Securing the casters



Fixing to a wall Use a strong rope or a chain to fasten the TV firmly to a strong support such as a wall or a pillar.



Connecting the Plug to the Wall Outlet



Note:

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

How to Turn the Power On



Notes:

- When in the Stand-by condition (Refer to page 13), it is also possible to turn the TV set on by pressing any of the "Direct Programme Number Selection buttons" (0-9) or "Programme Number Up or Down buttons" on the TV set or on the Remote Control.
- If the Wall Outlet is switched OFF or the Main Plug is unplugged, when the TV set is again turned ON (by either connecting the Main Plug to the Wall Outlet or switching the Wall Outlet ON), it will have returned to the original state.

Battery Installation

1 Open the cover.

Apply slight downward pressure while pulling towards the bottom.



3 Replace the cover.



Insert the batteries ensuring the correct polarities. This is identifiable by the "+" and "-" symbols on the batteries and inside the battery





Do not use rechargeable (Ni-Cd) batteries.

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

▲ Battery cautions

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

Old Batteries





New Batteries

Replace both batteries at the same time.



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



Don't Recharge.

Controls and Terminals on the TV



ltem No.	Function	Refer to Page	ltem No.	Function	Refer to Page
0	Main Headphones Jack	9	8	TV/AV Selection	12
2	Sub Headphones Jack	9	9	Aerial Terminal (RF In Terminal)	9
3	AV3 Input Terminals	10	Ð	Monitor Output Terminals	11
4	STR	12	0	AV1 Input Terminals	10
5	Function	12	Ð	AV2 Input Terminals	10
6	Volume Down (–) / Programme Number Down (v)	12	ß	AV4 Input Terminals	10
7	Volume Up (+) / Programme Number Up (Λ)	12	4	DVD (Y. Pв. Pr) Input	11

Connecting the Aerial Cable to the RF In Terminal



Notes:

- To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ohm coaxial) and the correct terminating plug are required.
- If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and your set.
- Your local Television Service Centre or Dealer may be able to assist you in obtaining the correct Aerial system for your particular area and accessories required.
- Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

Connecting Headphones

Connect headphones as follows.





You can listen to sound from each of the headphones plugs as shown below.

Sc	reen conditio	on		Speaker Sound	Main Headphones	Sub Headphones	Monitor Output
Single picture/ Teletext		A		A (Stereo)	A (Stereo)	A (Mono)	A (Stereo)
Picture in Picture		A	В	A (Stereo)	A (Stereo)	B (Mono)	A (Stereo)
Picture and Picture	A	Ą	В	A (Stereo)	A (Stereo)	B (Mono)	A (Stereo)

Main Headphones plug:

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

Use Volume Up "+" or Down "-" button to control volume level.

Sub Headphones plug:

For the sub Headphones volume control, refer to page 28.

How to connect the "AV1, 2, 3 or 4" Input Terminals

Connect VCRs and other peripheral equipment



Notes:

- When an S Video cable is connected to the S Video terminal, the corresponding Video input will be switched off and the signal from the S Video input will be used.
- When a Monaural VCR is used, connect the Monaural Audio cable to the Audio "L" (Left) terminal.
- Select the desired AV input position by pressing the TV/AV button. (Refer to page 13)
- Input 3 is located on the front of the unit.
- The AV2 and AV4 audio input terminals serve as the audio input terminal for both the Video input and the DVD input.

How to connect the DVD Input Terminals



Notes:

- The AV4 audio signal is common for both AV4 and DVD input signal terminals.
- The DVD signal input terminal takes priority over the AV4 video signal input terminal.
- Similar connection are available at the COMPONENT VIDEO input 2 terminal.

How to connect the AV Monitor Output Terminals to other equipment

The "Monitor Out" Terminals output the same signals as main picture on the TV screen and sound from the speaker at that time, e.g. TV programmes or signals from AV1, AV2, AV3 or AV4 input.



Notes:

- Never connect the same video recorder with both the VIDEO IN and MONITOR OUT terminals on this TV set, as this could cause incorrect operation.
- The monitor output emits the main picture normal video and audio signals.
- Teletext display on screen will not be output at the MONITOR OUT terminals.
- Even if the television is in picture-in-picture condition, MONITOR OUT terminals output the same signals as main picture on the screen and sound from speakers. Sub picture including strobe, still, channel search, etc. will not be output at the MONITOR OUT terminals.
- The DVD signal (Y, PB, PR) is not output at the MONITOR out terminals.

General Operation

		TV/AV Selection
		Press to select TV, AV1, AV2, AV3 and
	STR F -/V +/AV	AV4 input signal modes sequentially.
		Volume Up (+) /
Power switch		Programme Number Op (^)
	Volume Down (–) /	Programme Number Down (V)
Used to store tuning and oth	ber	Picture Menu (see page 14, 26)
function settings. Also used	to	- /
start the menu demonstration.		Sound Menu (see page 14, 28)
Function selection		
Displays the on screen displa	y functions, use repeatedly	Set up menu (see page 15, 25) ———
to select from the available fu	nctions.	Stores /Bilingual Sound Salastian
I ne following adjustments cal	n de accessed directly.	(see page 37)
ſ	Notos	(000 page 01)
VOLUME TUNING MODE	NTSC-TINT: Displayed when	TEXT Favourite Page Selection
	receiving NTSC signals.	(see page 35)
	• TUNING MODE : Not displayed	TV/TEXT Selection (see page 34)
BRIGHTNESS TREBLE	during AV mode.	
L I COLOUR BASS		100Hz/PROGRE (see page 27) ———
SHARPNESS NTSC-TINT		
		Surround (see page 20, 29)
		Aspect Controls (see page 30) —
		Aspect options
		Multi P in P Selection ———
		(see page 32)
	Recall —	
	Press to display the current system	
	status, for example, Programme	VCR/LD/DVD Rewind/Review
	mode. Picture menu. Sound menu.	
	Scan mode, Sound system and colour	
	system.	Normalization (see page 27, 29, 30)
	Store	
	Stores some pattings in TUNING	
	menus and TELE TEXT.	Help (see page 14) ———

General Operation



On-Screen menu Display from Remote Control





Convergence Adjustment mode







Press to select the "CONVERGENCE".

Press to access to the "CONVERGENCE" menu.

) 🔲 SETUP MENU	J (
CHILD LOCK	OFF
PICTURE SHIFT	OFF
(TUNING MENU	
CONVERGENCE	ACCESS
LANGUAGE	ENGLISH



Press to select the "CONVERGENCE1" or the "CONVERGENCE2".

Press to access to the function.



Example: CONVERGENCE1 is selected.

Convergence1 Adjustment for RED, BLUE and GREEN

RED



Press to align the horizontal red line with the horizontal blue line. (Becomes a white line)

Press to align the vertical red line with the vertical blue line. (Becomes a white line)

Press N button to adjust the blue mode.



BLUE



Press to align the horizontal blue line with the horizontal yellow line. (Becomes a white line)

Press to align the vertical blue line with the vertical yellow line. (Becomes a white line)

(Becomes a white line)



Press N button to adjust the green mode.

Only when you cannot adjust with RED and BLUE, proceed to the following GREEN Adjustment.

GREEN



Press to align the horizontal green line with the vertical centre maker.

Press to align the vertical green line with the horizontal centre maker.

Press N button to adjust the red mode.



Horizontal centre marker

Vertical centre marker



Press at any time to return to the normal viewing.

Convergence2 Adjustment for RED and BLUE

This function adjust the convergence of the side part of the screen.



Press to select the CONVERGENCE2.

Press to access to the function.





Remote control

(Example) Position 1 is selected.

Press the Number button on the Remote Control to

select the position which you would like to adjust.





RED



Press to align the horizontal red line with the horizontal blue line. (Becomes a white line)

Press to align the vertical red line with the vertical blue line. (Becomes a white line)

Press **N** button to adjust the blue mode.



BLUE



Press to align the horizontal blue line with the horizontal yellow line. (Becomes a white line)

Press to align the vertical blue line with the vertical yellow line. (Becomes a white line)

Repeat above adjustment for each position.





· Press to return to the normal viewing.

Note:

If you wish to view a video with a different colour system (PAL / SECAM, NTSC), repeat the steps above while displaying a picture.

Tuning Channels

1 Display the TUNING MENU



E SETUP MENU		
TELETEXT	TOP	
OFF TIMER	OFF	
FLICKER REDUC.	DYNAMIC	
STROBE		
CH COLOUR SET		E SETUP MENU
(VCR/GAME	OFF	CHILD LOCK OFF
(TEXT SELECT	ENGLISH	- (PICTURE SHIFT OFF)
		TUNING MENU ACCESS
		CONVERGENCE
		(LANGUAGE ENGLISH

2 Regional System Selection

SYS SELECT (Before AUTO tuning and MANUAL tuning, set the "SYS SELECT" mode, as detailed below.)



TUNING MENU	
SYS SELECT	AUSTRALIA
(AUTO TUNE	
(MANUAL TUNE	
SOUND SYS	5. 5 MHz
COLOUR SYS	AUTO
(FINE TUNE	
(SKIP	OFF

System Select by Regional

SYSTEM 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	U.S.A., Chile, Mexico, Panama, Pelu, Philippines, Taiwan, Venezuela, etc.
CATV	USA CATV
JAPAN	Japan

JAPAN \leftrightarrow CATV \leftrightarrow AMERICA \leftrightarrow SPECL VER \leftrightarrow E.EUROPE \leftarrow

Automatic Tune

This TV uses automatic tuning to determine whether or not the TV can receive a broadcast signal which is being sent. Before Automatic Tune, Regional System must already be set (Refer to pages 19).



When the sound volume is too small to confirm, turn it up by using the sound volume button on the remote control.



Under the normal viewing condition press to enter each programme Number. Confirm the tuning condition.

If necessary, repeat step 2 for each Programme Number.

- W-Helpful Hint

(1) If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, refer to the "Colour System Selection" operation on page 24.



After the Automatic tune is finished, under the normal viewing condition press this button to confirm the tuning condition for each Programme Number. If some Programme Numbers are unused (no TV stations), it is possible to skip such Programme Numbers. Please refer to the Programme Number Skip operation on page 23.

Manual Tune

Before Manual Tune, Regional System must already be set (Refer to page 19).

1 MANUAL TUNE



3 Adjust the Sound System (refer to page 20 step 2 to 3).

· 🗑 Helpful Hint

(1) If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, refer to the "Colour System Selection" operation on page 24.



After the Manual tune is finished, under the normal viewing condition press this button to confirm the tuning condition for each Programme Number. If some Programme Numbers are unused (no TV stations), it is possible to skip such Programme Numbers. Please refer to the Programme Number Skip operation on page 23.

(3) When using a VCR without video and audio input/output terminals, it is convenient to connect the aerial cable as indicated in the instruction manual of VCR and to set the designated channel to programme No. "0". In that case, perform manual tune 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.

Fine Tuning

Under normal reception conditions this function is not required or necessary.

However, in areas of poor reception or constant interference, a slight adjustment of the tuning may improve the picture and sound quality.



How to Cancel the Fine Tuning

Cancelling previously adjusted (manually) fine tuning, means re-activating the AFT (Automatic Fine Tuning). Re-Activating the Automatic Fine Tuning means allowing the set to automatically tune to the optimum tuning position, for that Programme Number.



Programme Number Skip

It is possible to skip Programme Number on which no TV stations are tuned appearing on the screen. The function is only effective when selecting Programme Numbers by pressing the Programme Number Up or Down button either on the TV set or on the Remote control.



How to Cancel the Skip Function



Sound System Selection (Different region use differing systems)

This function is used only in the TV mode when the sound is not clear or no sound is produced on a Programme Number, and is not applicable in AV mode .



Colour System Selection (Different region use differing systems)

If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, this function is used.



) TUNING MENU (
(SYS SELECT	AUSTRALIA
(AUTO TUNE	
(MANUAL TUNE	
SOUND SYS	5. 5 MHz)
COLOUR SYS	AUTO
(FINE TUNE	
(SKIP	OFF

Colour System Condition.

Note:

2

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 to playback NTSC recorded video tapes through PAL television equipment.

STR

- Press to store the Colour System.

TV/AV

Press to exit from the "COLOUR SYS".

This returns the set to the normal viewing condition.

Setup Adjustment

SET UP
Press to display the SETUP MENU.
Press to select the desired function.
Press to adjust or change the function.
TV/AV
Press to go back to watching TV.



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.

VCR/GAME

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

FLICKER REDUCTION

Lets you control any picture movement. Set to Dynamic to activate motion compensation, to smooth the image and get rid of picture movement. Set to Normal to correct minor picture movement, or if slight ghosting of figures occurs when using the Dynamic setting. Set to Off to have no flicker reduction at all, occasional broadcasts may benefit from using this setting.

COLOUR SYSTEM

During **AV** mode, COLOUR SYSTEM is displayed. (refer to page 24)

) 📰 setup menu (=	
TELETEXT	ТОР
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
COLOUR SYS	AUTO
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
CH COLOUR SET	OFF

CHILD LOCK

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

PICTURE SHIFT

For use as a screen saver, this function changes the entire picture position (shift) approximately 2 mm every 15 minutes.

LANGUAGE

When you first install the TV, the On Screen Display language is set according to your choice of region. LANGUAGE lets you change the language used for On Screen Displays.

English \iff Chinese

Picture Adjustment





MENU

Picture menu mode will be memorized for each TV, AV1, AV2, AV3 and AV4 mode.

• You can change the level of each Item (CONTRAST, BRIGHTNESS, COLOUR, SHARPNESS and NTSC-TINT) for each Picture Menu (DYNAMIC, STANDARD and SOFT).

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

PICTURE	
MENU	STANDARD
CONTRAST	
BRIGHTNESS	
COLOUR	
SHARPNESS	
(NTSC-TINT	
C. TEMP	STANDARD
(▼	



CONTRAST, BRIGHTNESS, COLOUR, SHARPNESS, NTSC-TINT

Increase or decrease the levels of CONTRAST, BRIGHTNESS, COLOUR and SHARPNESS options according to your personal preference. With an NTSC-TINT signal source connected to the TV, the picture hue can be adjusted to suit your taste.

ltem	Effect Function	
CONTRAST	Less More	Adjusts for contrast.
BRIGHTNESS	Darker Brighter	Adjusts for easier viewing of dark pictures such as night scenes and hair.
COLOUR	Less More	Adjusts slightly to a lighter colour.
SHARPNESS	Less More	Displays a sharp image.
NTSC-TINT	Reddish Greenish	Adjusts for proper skin colour.



Notes:

- When set to Multi PIP mode, the main and sub pictures are both adjusted simultaneously.
- When the TV is receiving NTSC signals, NTSC-TINT is displayed and level adjustment would be possible.
- Only CONTRAST will be displayed during TEXT mode.

Picture Adjustment

PICTURE	
(MENU	STANDARD
CONTRAST	
BRIGHTNESS	
COLOUR	
SHARPNESS	
(NTSC-TINT	
C. TEMP	STANDARD

PICTURE	
P-NR	AUTO
(AI	ON
SCAN MODE	AUTO

PICTURE		
(P-NR	AUTO	$\mathbf{)}$
AI	ON)
SCAN MODE	AUTO)
)

PICTURE	
(P-NR	AUTO
AI	ON)
SCAN MODE	AUTO

MODE	Function
AUTO	The TV software will select the best mode for the signal being viewed.
100 Hz MODE	100Hz will give a steady picture for most signal transmission.
PROGRESSIVE	Recommended when receiving NTSC signals.

Note:

We recommend that you set **Scan mode** to **Progressive** when viewing a PAL 60 or NTSC transmission. When viewing a PAL transmission (other than PAL 60) with **Scan mode** set to **Progressive**, the screen will flicker, this is not a fault.

- Helpful Hint (Normalization)

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

Normalization will not occur if the menu is not displayed when the "N" Button is pressed.

The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

C. TEMP (Colour Temperature)



P-NR (Picture Noise Reduction)



AI (Artificial intelligence)

SCAN MODE



Automatically analyses the incoming picture and processes it to give improved contrast and optimum depth of field.

Set the overall colour tone of the picture.

 \rightarrow STANDARD \iff WARM \iff COOL \ll

Automatically reduces undesired picture noise.

Press to switch between modes

Press to switch between modes

 \rightarrow OFF \iff > STRONG \iff \Rightarrow AUTO \iff > WEAK \iff

```
ON \iff OFF
```

Choose the screen refresh method:

Press to switch between modes → AUTO ←→100 Hz MODE ←→ PROGRESSIVE ←

Sound Adjustment



MENU

Sound menu mode will be memorized for each TV, AV1, AV2, AV3 and AV4 mode.

• You can change the level of each Item (VOLUME, BASS, TREBLE, BALANCE, HEADPHONE VOL and SUB HEADPHONE) for each Sound Menu (DYNAMIC, STANDARD and SOFT).

Sound Menu	Function
DYNAMIC	Amplifies the Low frequencies and outputs optimum sound. For music programmes for example.
STANDARD	For Normal use.
SOFT	Human voices (middle pitch sounds) will sound more clear.



VOLUME, BASS, TREBLE, BALANCE, HEADPHONE VOL., SUB HEADPHONE

Item	Effect	Function
VOLUME	Less More	Adjusts output volume.
BASS	Less More	Adjusts low sounds.
TREBLE	Less More	Adjusts high sounds.
BALANCE	Left SP. Right SP.	Adjusts left and right volumes.
HEADPHONE VOL.	Less More	Adjusts Headphone volume.
SUB HEADPHONE	Less Hore	Adjusts Sub Headphone volume.



Notes:

- When set to Multi PIP mode, the main and sub sound are both adjusted simultaneously.
- When using one of the double window features, note that the headphones will relay the soundtrack for the programme in the main window, not the sub window.



SURROUND MENU

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.

- Helpful Hint (Normalization)

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

Normalization will not occur if the menu is not displayed when the "N" Button is pressed.

The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

Aspect Controls



The on screen selector keys (corresponding to the four coloured buttons on the remote control) appear for some Aspect functions and disappear after a few seconds. If you would like to select an operation when the keys are not shown, press ASPECT once more and the keys will reappear.

· ₩ Helpful Hint (Normalization)

By pressing the Normal "N" Button on the Remote Control while the Aspect 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".

Mode	Picture	Explanation
AUTO	Interview Interview 16:9 Signal 4:3 Signal	The AUTO position can be set to 4:3 or to JUST. When a wide screen signal is detected at the Video terminal the TV will select the 16:9 aspect ratio. Red 4:3 Select 4:3 mode Green JUST Select JUST mode
4 : 3		This option will display a standard 4:3 picture without any stretching or compression. There will be vertical gray lines down either side of the picture.
ZOOM		This option allows you to magnify or reducepart of the picture.RedV SIZE -Reduce the pictureGreenV SIZE +Magnify the pictureYellowV POS -Move picture Up
S-ZOOM	IS-ZOÓM () H POS-H POS+[V POS-]V POS+	S-Zoom displays part of the picture at a greater magnification than the Zoom mode does. The coloured buttons let you change the position of the magnified area. Red H POS – Move picture Left Green H POS + Move picture Right Yellow V POS – Move picture Down Blue V POS + Move picture Up
16 : 9	O O O O O O I6:9 Signal 4:3 Signal	The 16:9 option will display the picture at its maximum size. Signals in the 4:3 format will be stretched to fit the picture.
14 : 9		The 14:9 option will display a 4:3 signal in simulated wide screen. The picture is slightly stretched. It is also slightly cropped top and bottom. The colour buttons let you change the position of the stretched area. Yellow V POS – Move picture Down Blue V POS + Move picture Up
JUST		JUST gives you a best fit option when showing 4:3 on wide screen. The centre of the picture is not affected but there is some stretching at the edges.

Note:

ASPECT operations cannot be made during progressive (Y, PB, PR) or 1080i signal input.

Multi Screen

Multi PIP



Each time the location of the sub picture is changed.

Each time the main picture and the sub picture are swapped.

Press the Blue button to exit from the PIP mode.

Picture and Picture



Note:

Blue

MULTI PIP operations cannot be made during progressive (Y, PB, PR) or 1080i signal input.



Multi Screen

Picture and text TELETEXT TV/TEXT Press to select watching the current programme, the teletext or the picture and text feature.



Note:

TELETEXT mode

Picture and text mode

The remote control affects the teletext page; so select watching the current programme before making any changes to the programme.

Still



Channel Search



Strobe

Lets you take a series of freeze-frame photos of a piece of action (for example: the finish of a race).

(Access **Strobe** via the **Setup** menu, see page 25). Takes a series of up to twelve freeze-frame images (one second delay between each image being taken) from the current programme watched.

)

STILL

Blue

	EXIT

🔳 Setup Menu (-	
TELETEXT	ТОР
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	ACCESS
CH COLOUR SET	
(VCR / GAME	OFF
(TEXT SELECT	ENGLISH



Press to pause (freeze) the Strobe, press again to continue taking the freeze-frames.

Press to exit from the **Strobe** feature and return to watching the current programme.

TELE TEXT

Teletext features may vary depending on the Broadcasting Companies and are only available when the channel selected is transmitting Teletext.

TEXT SELECT

Select character set, so that all characters needed are available for text on teletext pages (eg: cyrillic characters, etc).

 \rightarrow ENGLISH \iff CIS \iff E.EUROPE \iff

) 🗉 SETUP MENU (*	
TELETEXT	ТОР
OFF TIMER	OFF
(FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
(VCR/GAME	OFF)
TEXT SELECT	ENGLISH

TV / Teletext mode

TV/TEXT	 Press to select the current programme, the teletex feature. 	tt and the picture or the teletext		
	Press to display the contrast function with a cyan bar.			
SOUND	Press to display the volume function with a green	n bar.		
	Press to alter the setting as required.			
	CONTRAST			
	VOLUME			
SET UP	 Press to display special function options at the bottom 	n of the screen.		
Red Green Yellow Blue	Press to select the desired function.			
LIST / TOP mode	Choose 2 modes. LIST <> TOP			
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.	TELETEXT TOP OFF TIMER OFF FLICKER REDUC. DYNAMIC STROBE OFF CH COLOUR SET OFF		
TOP mode:	In TOPTEXT mode, the red button moves to the previous page number and the green button moves to the next page number. The yellow and blue buttons correspond to different subjects. These subjects can be accessed by pushing the coloured button. This is the current preferred method of operation in Australia.	VCR/GAME OFF		

Note:

Characters will be illegible unless you select the Text Language which matches the text being received. Select the correct LANGUAGE (Refer to page 25).

Page Selection

(Two ways)



Press to increase or decrease the page number by one.

PROGRE	123	
SURROUND	456	
	789	
PIP	-	

Enter the page number directly using 0-9 on the remote control.

Full / Top / Bottom



	Teletext page	News Flash	Update
	Press to display special functions to view the TV picture whilst searching for a Teletext	Press to view the TV picture When a news flash page has been selected.	Press to see the update of information on certain pages.
SET UP	P100 When found a page.	TV picture viewing	P ¹⁰⁰ When an update is received.
Yellow	Press to view the page.	Press to display the News Flash.	Press to view the page.
N	Return to normal TV operation.		

Index

INDEX CH SEARCH	Press 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.				
Sub Coded Page Access	When Teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. It is possible to enter your required sub page and continue watching the normal programme until the correct sub page is found.				
0-9	Select the required page number using buttons 0 - 9. If the top of the page indicates that sub pages are being transmitted yet the page does not change, then the number at the top of the page is there to indicate that the broadcaster has updated the page's contents, there are no sub pages.				
SET UP	T**** T0006				
	Enter desired sub page number before the T**** disappears. To select page 6 enter 0, 0, 0 and 6.				
Yellow	Viewing a normal TV programme. $\leftarrow \rightarrow$ Viewing the Teletext page.				
0-9	Select a new page number.				
TV/AV	• Press to return to normal TV operation.				

Advanced Remoto Control Operation

Stereo Bilingual Sound Selection

I/∏

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	\bigcirc	Ι	П	\bigtriangledown

NICAMUsed in New Zealand, Malaysia, Thailand, Indonesia 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 \leftrightarrow	$I \leftrightarrow \nabla$	$\bigcirc \nleftrightarrow \bigtriangledown$	

A2(German)Used in Australia, Malaysia, Singapore, China.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator $\longleftrightarrow \nabla$	I ↔ II	$\bigcirc \nleftrightarrow \bigtriangledown$

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.

VCR / LD / DVD Control

The Remote Control is capable of operating some functions of selected Panasonic VCRs, LD and DVD (Digital Versatile Disc) equipment. Some VCR, LD 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		
Bullon		VCR	LD/DVD	
1	Ø	Power Switch		
2		REC (Record)		
3		VCR/LD, DVD Select button		
4	 	Pause/Still		
5	₹ ₹ ₹	Programme Number Up and Down Programme Skip		
6		DISC SIDE A Selection		
7	SIDE B	Still Advance	DISC SIDE B Selection	

Manufacturer setting

Remote Control Operation is possible for the VCR's, LD's and DVD's of the various manufacturers. After completion of setting, execute the various operations .



Note:

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

· 🗑 Helpful Hint

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

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

Symptoms		Chaska		
Pictu	ıre	Sou	und	Checks
	Snowy Picture		Noisy Sound	Aerial Location, direction or Connections
	Multiple Image		Normal Sound	Aerial Location, direction or Connections
	Interference		Noisy Sound	Electrical Appliances Cars/Motorcycles Fluorescent Lamps
	Normal Picture		No Sound	Volume (Refer to page 12, 13) (Check whether the mute function has been activated on the Remote Control.)
?	No Picture		No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness/Volume setting (Check by pressing the Power Switch or Stand-by Button on the Remote Control.)
	No Colour		Normal Sound	Colour Control (Refer to page 26, 27) Colour System (Refer to page 24)
	Scrambled		Normal or Weak Sound	Retune Channels (Refer to page 19)
	Coloured Patches		Normal Sound	Magnetic interference from unshielded equipment; TV set moved while "ON". Turn the TV set off for 30 minutes, using the "Power" Switch on the TV set.
	No Colour		Noisy Sound	Sound System (Refer to page 24) Colour System (Refer to page 24)

Projection TV screen

Symptoms	Checks				
	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Wide Projection TV screen. Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.				
After-images appear	Note: The permanent after-image on the Wide Projection TV screen resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.				

Cleaning

To ensure continued excellent performance by this product, periodic cleaning is recommended.

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

Specifications

	ТХ-47Р600Н							
Power Source	AC 220-240 V, 50/60 Hz							
Power Consumption	218 W Stand-by condition 3.0 W							
Remote control Transmitter	EUR511229 R6 (AA) Battery × 2							
Dimensions ($W \times H \times D$)	1095 mm × 1190 mm × 540 mm							
Mass (Weight)				59 kg (Net)				
Receiving System	n							
21 Systems		Function		21 Systems		Function		
1 PAL B, G, H 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)	Reception of broadcast transmis-sions and Playback from Video Cassette Tape Recorders.	15 16 17 18 19 20 21	PAL 60 Hz/5.5 MHz PAL 60 Hz/6.0 MHz PAL 60 Hz/6.5 MHz SECAM 60 Hz/5.5 MI SECAM 60 Hz/6.0 MI SECAM 60 Hz/6.5 MI NTSC 50 Hz/4.5 MHz	Hz Hz Hz	Playback from Special Disc Players and Special VCR's		
8 NTSC 4.43/5.5 MHz 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		Playback from Special VCR's						
	Regular TV UHF BAND CATV 2-12 (PAL/SECAM B, K1) 21-69 (PAL G, H, I/SECAM G, S1-S20 (OSCAR) 0-12 (PAL B AUST.) K, K1) 1-125 (U.S.A CATV) 1-9 (PAL B N.Z) 28-69 (PAL B AUST.) C13-C49 (JAPAN) 1-12 (PAL/SECAM D) 13-57 (PAL D, K) S21-S41 (HYPER) 1-12 (NTSC M Japan) 13-62 (NTSC M Japan) Z1-Z37 (CHINA) 2-13 (NTSC M U S A) 14-69 (NTSC M U,S.A) 5A. 9A (AUST.)							
Receiving Stereo System	NICAM I, NICAM B/G, NICAM D, A2 (German)							
Tuning System	Frequency synthesizer Auto Search Tuning							
Audio Output	24 W [12 W + 12 W] (10 % THD), 30 W [15 W + 15 W] (MAX)							
Speaker System	Woofer (13 cm) × 2 + TWEETER (6 cm) × 2							
Headphones	3.5 mm Plug × 2							
Aerial Impedance	75 Ω Unbalanced coaxial							
Video/Audio/ Component Terminals	AV 1, 2,	, 3, 4 S Vi DVD Vide Audi	deo In) (Y/Pв/ ю In ю In	Pr)	Y:1 Vp-p C:0.3 Vp 1 Vp-p, 7 Approx.	o, 75 Ω o-p, 75 Ω 75 Ω 0.5 V 47 KΩ		
	AV1 IN AV2 IN AV3 IN	Monitor Out Video Out 1 Vp-p, 75 Ω Audio Out Approx. 0.5 V 1 KΩ AV1 IN (Rear) : S Video, Video, Audio L/R terminals AV2 IN (Rear) : Video or Y/PB/PR, Audio L/R terminals AV3 IN (Front) : S Video, Video, Audio L/R terminals						
	AV4 IN (Rear) : Video or Y/PB/PR, Audio L/R terminals Applicable signal to AV2, AV4 Y/PB/PR input terminals: 480i(525i), 576i(625i), 480P(525P), 576P(625P) and 1080i(1125i)/50							

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

Customer's Record

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

Model Number

Serial Number

Printed in Japan MBS0802O0 Matsushita Electric Industrial Co., Ltd. Web Site : http://www.panasonic.co.jp/global/