

TX-W28R3F/L Operating Instruction



Panasonic



TX-W28R3F/L

Quintrix
WIDE

King of Pictures

GAOO



Please read these instructions completely before use and retain them for future reference.

Dear Panasonic Customer,
Welcome to the Panasonic family of customers. We hope that you have many years of enjoyment from your new colour television. This is a very advanced television, however, the Quick Start Guide will tell you how to have the TV operating quickly; you can then read the following pages to fully utilise the advanced features.



This television has a low power consumption making it very cost effective to run.
To this end, the standby power consumption is merely 1 watt.

CONTENTS



Warnings and Precautions	3
Accessories	4
Quick Start Guide	5
Basic Controls	7
Using the On Screen Display Menus	8
Aspect Control	9
Main Menu	11
Sound Menu	12
Setup Menu	13
Tuning Menu	14
Tuning Menu – Programme edit	15
Tuning Menu – Auto Setup	20
Tuning Menu – Manual tuning	21
Tuning Menu – Shipping condition	22
AV Select and Setup	23
Teletext Operation	24
VCR and Satellite Receiver Installation	26
VCR Operation	27
Audio / Video (AV) Connections	28
Via the front AV3 S–Video, Audio / Video (RCA) and Headphone Sockets	28
SCART and S–Video Terminal Information	28
Via the rear AV1 / AV2(S) / AV4 21 Pin (SCART) and RCA Audio Out terminals	29
Trouble–shooting	30
For your guidance	31
Specifications	31

WARNINGS and PRECAUTIONS

- This TV set is designed to operate on 220 – 240V, 50Hz A.C.
- To prevent damage which might result in electric shock or fire, do not expose this TV set to rain or excessive moisture.
- **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.
- Avoid exposing the TV set to direct sunlight and other sources of heat.
- Remove the mains plug from the wall socket when the TV set is not used for a prolonged period of time.
- **CABINET AND PICTURE TUBE CARE**
Remove the mains plug from the wall socket. The cabinet and picture tube can be cleaned with a soft cloth moistened with mild detergent and water. Do not use solutions containing benzol or petroleum. TV sets can produce static electricity, care must be taken whenever touching the TV screen.
- Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 5cm is left all around this television receiver even when it is placed inside a cabinet or between shelves.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a fitted three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this plug. If the fuse is replaced then the replacement fuse must be 5 amp rated and should be approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the fitted plug has a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained. Replacement fuse covers can be purchased through your local Panasonic dealer.

The plug fitted to this appliance incorporates a mains filter circuit. If this is removed or replaced with a non-filtered plug this television will no longer meet the European standards for Electromagnetic Compatibility (EMC). If the fitted plug is unsuitable for the socket outlet in your home an appropriate adapter should be used.

Nonetheless, if the fitted plug is replaced, the fuse should be taken out and the cut-off plug disposed of safely. There is danger of severe electrical shock if the cut off plug is inserted into any 13 amp socket.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

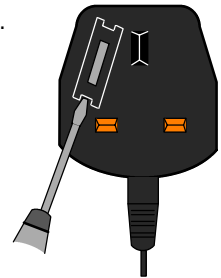
How to replace the fuse (for plug type shown in example 1) :

Lift out the removable fuse compartment with a screwdriver and replace the fuse, then refit securely into the mains plug (See example 1).

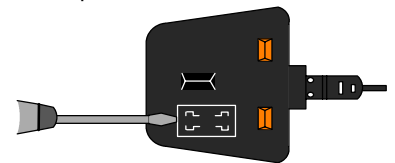
How to replace the fuse (for plug type shown in example 2) :

Lift open the fuse compartment, in the mains plug, with a screwdriver, and replace the fuse, then press the fuse cover down securely. (See example 2).

Example 1.



Example 2.




IMPORTANT :- The wires in the mains lead of this appliance are coloured in accordance with the following code :-

BLUE : NEUTRAL

BROWN : LIVE

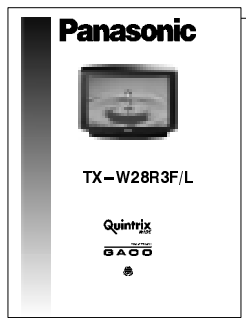
As the colours of the wires in the mains lead of this appliance may not correspond to the markings identifying the terminals in your plug, proceed as follows :-

1. The **BLUE** wire must be connected to the terminal marked 'N' or coloured black.
2. The **BROWN** wire must be connected to the terminal marked 'L' or coloured red.

IMPORTANT NOTE : Under no circumstances should either of these wires be connected to the Earth terminal of the three pin plug, marked with the letter 'E' or the earth symbol. 

ACCESSORIES

Check that you have the accessories and items shown

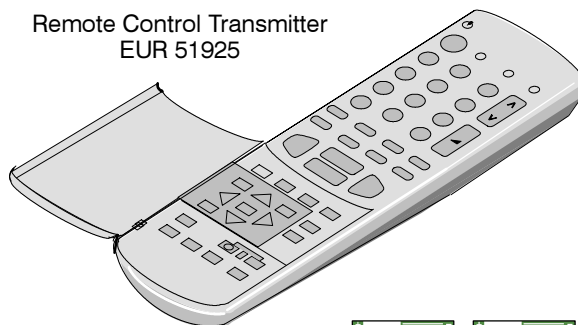


Operating Instruction book
TQB8E2462



TV Guarantee

Remote Control Transmitter
EUR 51925

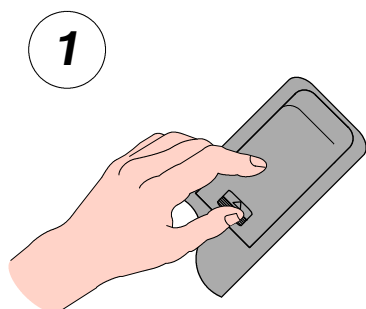


Batteries for the
Remote Control Transmitter.
(2 x R6 (UM3) size)

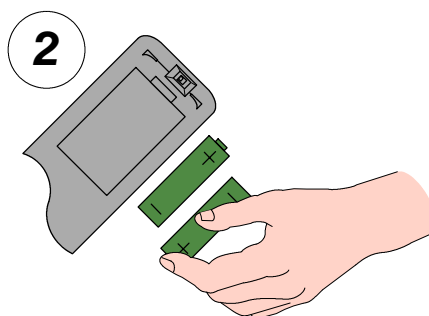


Video cabinet
VS-WR3

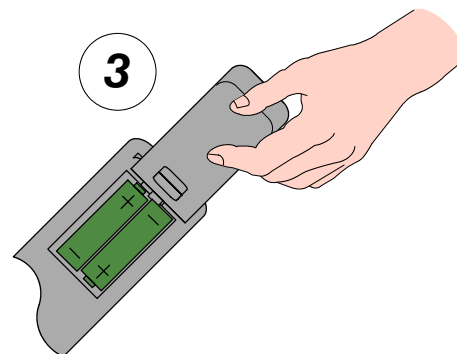
FITTING REMOTE CONTROL BATTERIES



Slide off the battery cover



Insert batteries – note correct polarity

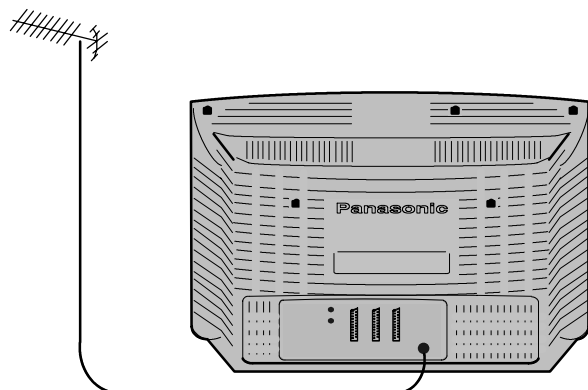


Replace the cover

Notes:

- Make sure that the batteries are fitted the correct way round.
- Do not mix old batteries with new batteries. Remove old, exhausted batteries immediately.
- Do not mix different battery types, i.e. Alkaline and Manganese. Do not use rechargeable (Ni-Cad) batteries.

1 . 2 . 3



1

TV only

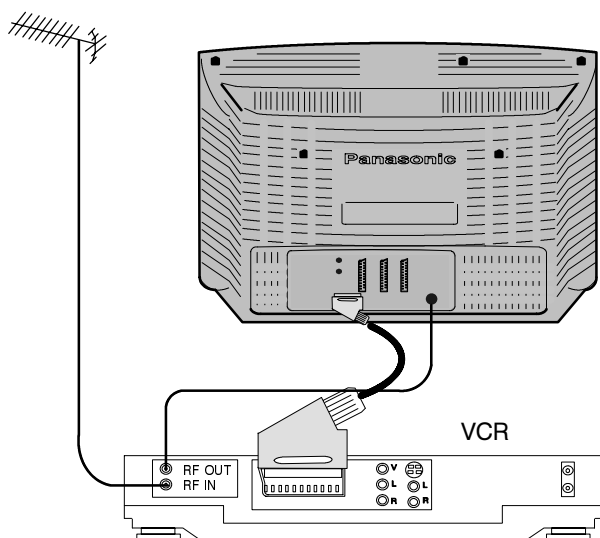
Connect Aerial co-axial cable direct to TV RF IN socket.

OR

USING A VCR

Connect Aerial co-axial cable to RF Input socket of VCR and a RF coaxial cable from VCR RF Out socket to TV RF IN socket.

The VCR can also be connected to the TV using a SCART to SCART lead if you are using a stereo VCR. Use the AV1 21 pin terminal for a VCR. To connect an S-Video VCR use the AV2S 21 pin terminal.



Further details of Audio/ Video connections can be found on pages 28 and 29.

OR

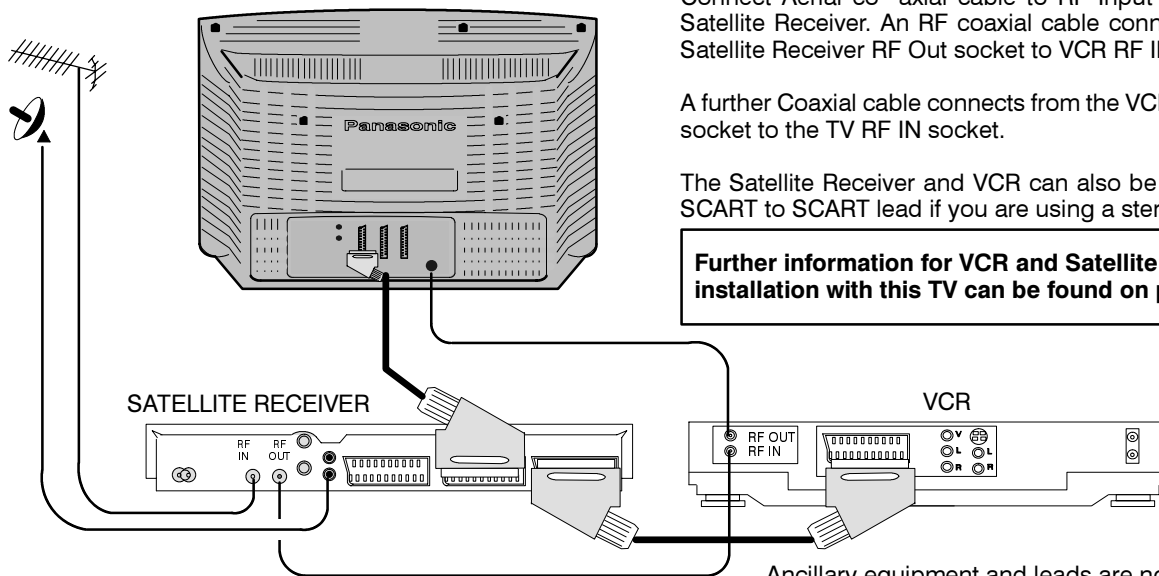
USING A VCR AND SATELLITE RECEIVER

Connect Aerial co-axial cable to RF Input socket of Satellite Receiver. An RF coaxial cable connects from Satellite Receiver RF Out socket to VCR RF IN socket.

A further Coaxial cable connects from the VCR RF OUT socket to the TV RF IN socket.

The Satellite Receiver and VCR can also be linked by SCART to SCART lead if you are using a stereo VCR.

Further information for VCR and Satellite Receiver installation with this TV can be found on page 26.



Ancillary equipment and leads are not supplied.

QUICK START GUIDE

2

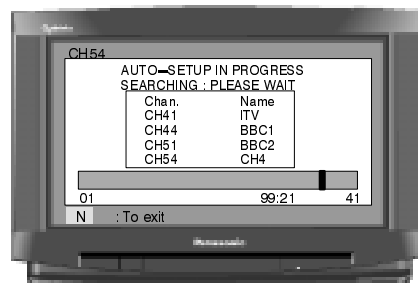
Switch ON your VCR *1.
Switch ON your Satellite Receiver*2.
Plug the TV into mains socket and switch on .
Programmes will appear immediately if your dealer has programmed the TV for you.



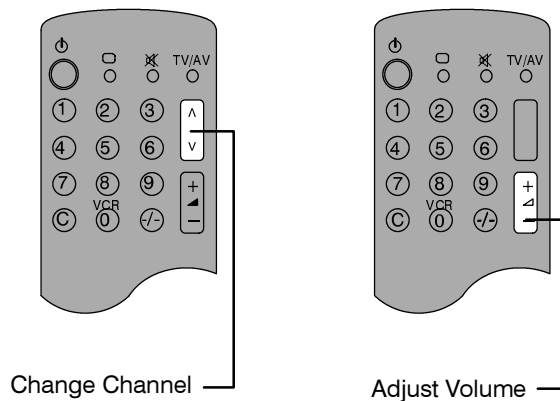
3

If the TV has not been programmed for you then **Auto setup** will begin. TV stations will be located, sorted into order and stored ready for use*3.

Switch the VCR Test Signal 'off'*4.

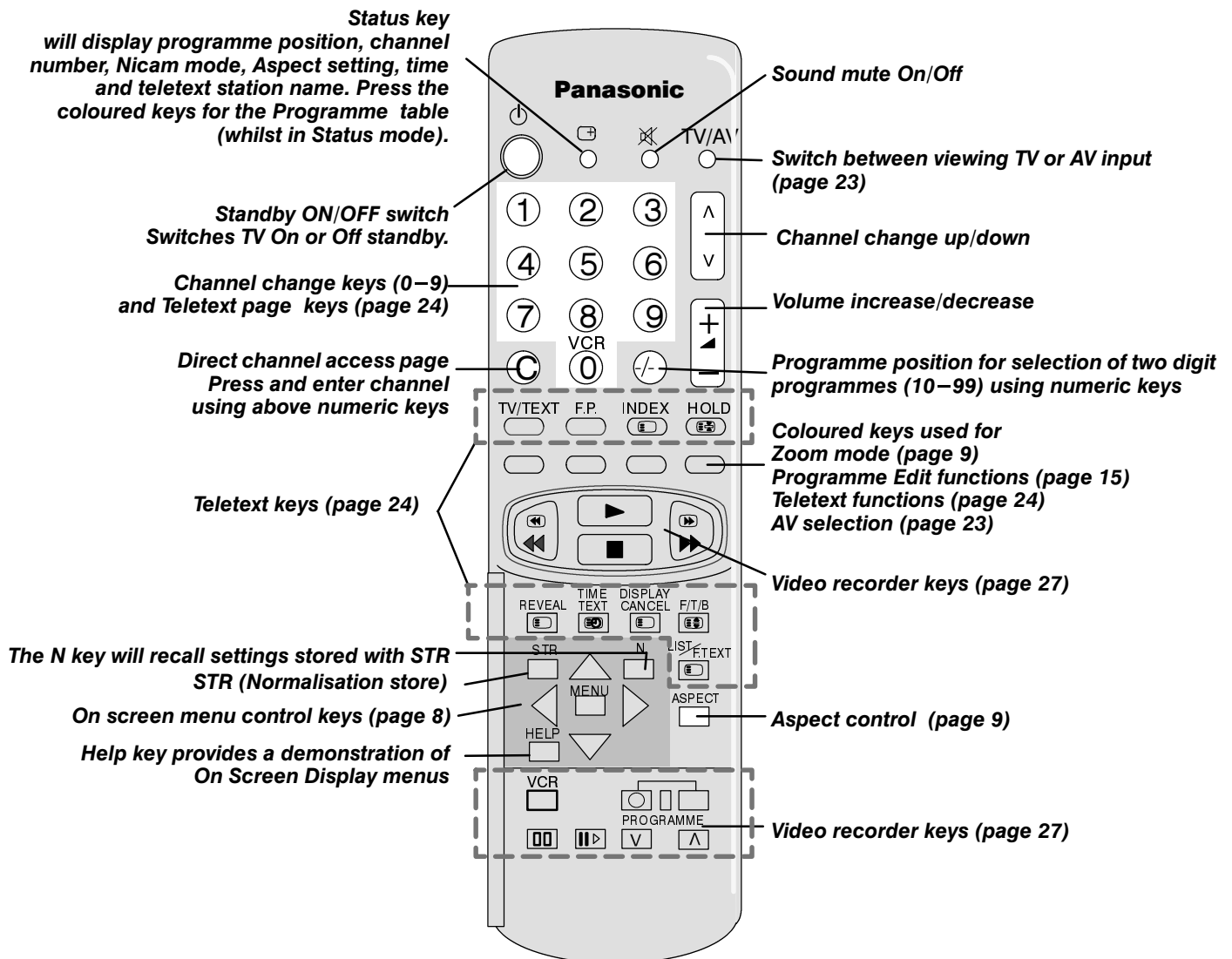
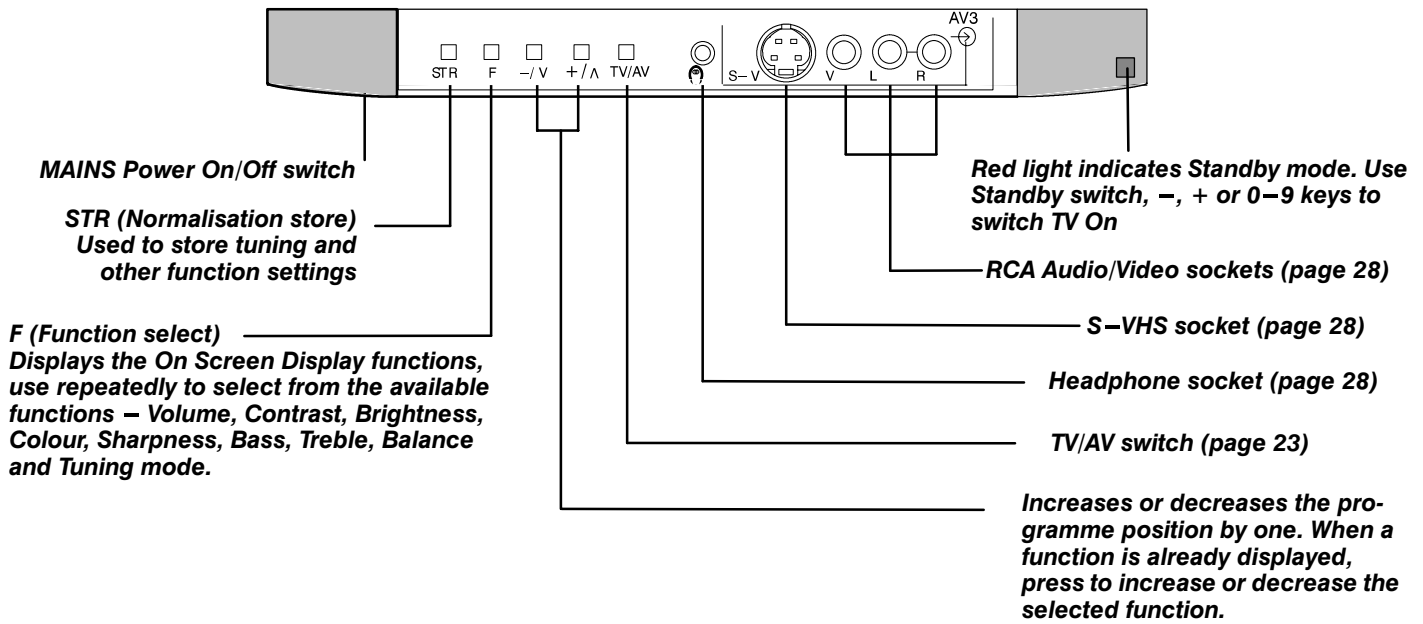


... READY TO GO!



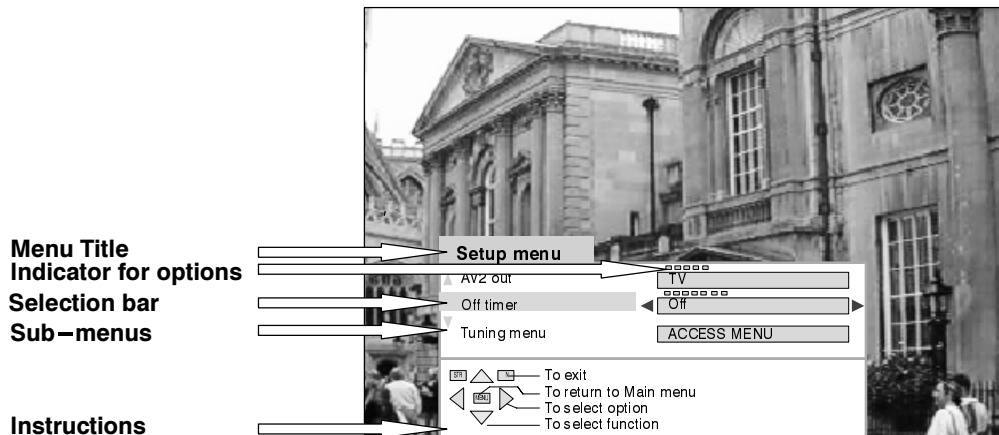
- *1. We recommend that you have the VCR's test signal 'on' – refer to your VCR instruction book to locate the VCR Test Signal switch (usually on the rear of the VCR).
- *2. The Satellite Receiver must be tuned to either SKY ONE or SKY NEWS before starting Auto Setup. When Auto Setup has finished, the satellite position that has been stored will be listed as 'SAT'.
- *3. The sorting order depends upon the TV signal, the broadcasting system, and reception conditions. If the order is not to your preference it can be rearranged. Refer to the Programme Edit menu – see page 15 for details.
- *4. If your VCR Test Signal appears as a programme position it can be deleted using the Programme Edit menu.
IT IS IMPORTANT THAT you use only programme position '0' for your VCR. If your VCR does not appear to operate on programme position '0' (the VCR position), refer to page 26 for guidance.

BASIC CONTROLS – FRONT PANEL AND REMOTE CONTROL



USING THE ON SCREEN MENUS

This TV has a comprehensive system of On Screen Display menus to access adjustments and options.



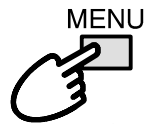
The following remote control keys are used to access and adjust settings for the On Screen Display menus.

Some selections, for example, **Contrast, Brightness, Colour** and **Sharpness** will allow you to increase or decrease their level.

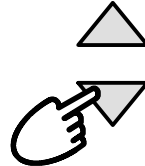
Some selections, for example, **Off timer**, allow a choice to be made.

Some selections, for example **Tuning menu**, will lead to a further menu.

The **'MENU'** key is used to open the Main menu and also to return to either the Main menu or a previous menu.



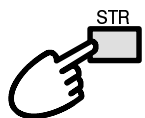
The **▲▼** keys are used to move the selector up or down the menus.



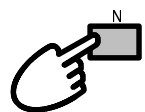
The **◀▶** keys are used to access menus, adjust levels or to select from a range of options.



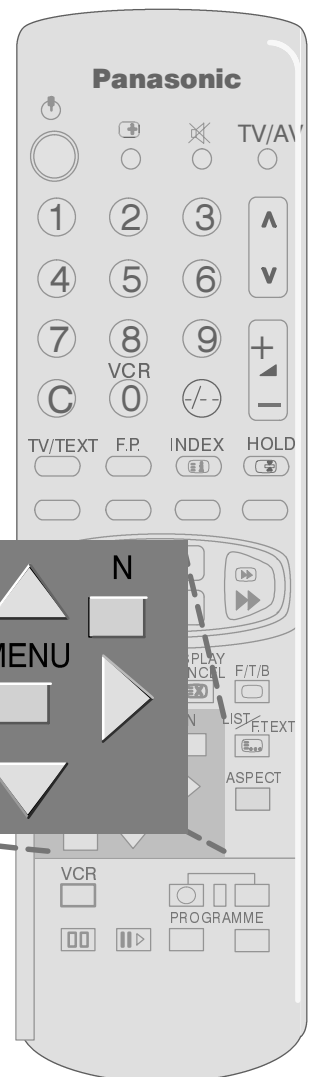
The **'STR'** key is used to store settings after your adjustment or choice has been made.



The **'N'** key is used to leave the menu system and return to the normal viewing screen.



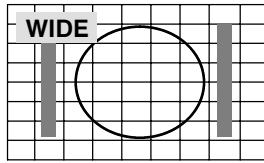
The **'HELP'** key will run a demonstration of the menus available.



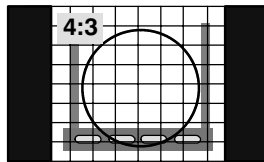
ASPECT CONTROLS

The widescreen TV will allow you to enjoy viewing the picture at its maximum size, including widescreen 'cinema format' pictures.

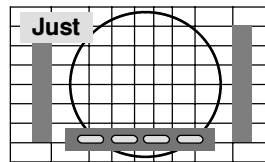
ASPECT
WIDE /
PANASONIC
AUTO



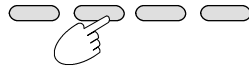
Some broadcasts are transmitted together with a wide screen identification signal (WSS). If the TV receives this signal then it will automatically switch to wide screen 16:9 mode, maximum display. The automatic widescreen switching depends upon reception conditions and the strength of the signal. If the signal is poor and therefore the WSS is weak then it is possible that the picture may not expand to full size and that the TV will display black areas around the edges.



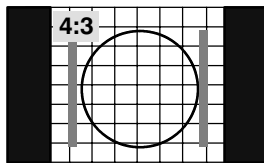
A 4:3 picture set to 4:3



A 4:3 picture switched to Just mode



If the original source signal was a standard 4:3 aspect ratio then you might prefer to view in its original size; the red and green keys, that appear, will allow you to choose between viewing at standard 4:3 size or expanded in **Just** mode.



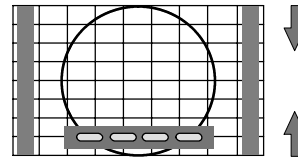
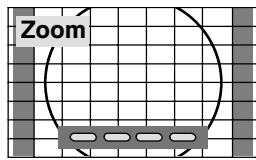
A 4:3 picture switched to its normal 4:3 viewing mode

4:3 will display a 4:3 picture at its standard 4:3 size and can be selected if you wish to view in this format.

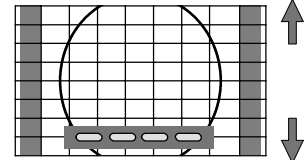
4:3

ASPECT CONTROLS

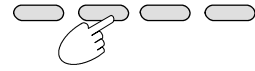
Zoom



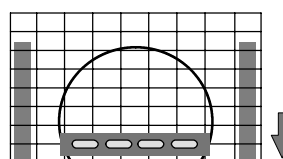
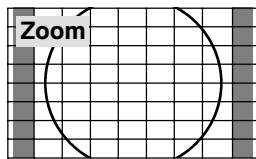
The red key will reduce the picture size vertically



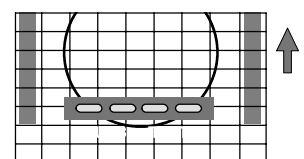
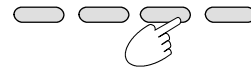
The green key will enlarge the picture vertically



In **Zoom** mode the size of the visible picture may vary according to the aspect ratio of the original picture. The red and green keys allow you to adjust the size.



The yellow key will move the picture vertically downwards

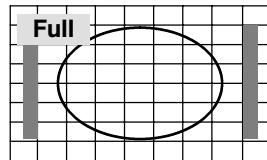


The blue key will move the picture vertically upwards



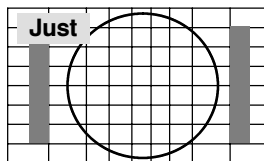
The picture can be moved vertically using the blue and yellow keys.

Full



Full will display the picture at its maximum size but with slight elongation.

Just



Just mode will display a 4:3 picture at maximum size but with aspect correction applied to the centre of the screen so that elongation is only apparent at the left and right edges of the screen. The size of the picture will depend upon the original signal.

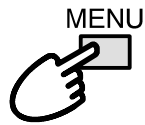
NOTES:

- The on screen selector keys that appear for some aspect functions will clear after a few seconds. If you subsequently wish to select an operation then press the Aspect key once more for the keys to reappear.
- The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.
- If, in WIDE mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control of your VCR requires adjustment (your VCR instruction book will contain adjustment details).

MAIN MENU

All menus start from the Main menu (except AV select and Tuning procedure (Front panel)).
You will also find the basic picture quality adjustments within this menu.

Open the Main menu



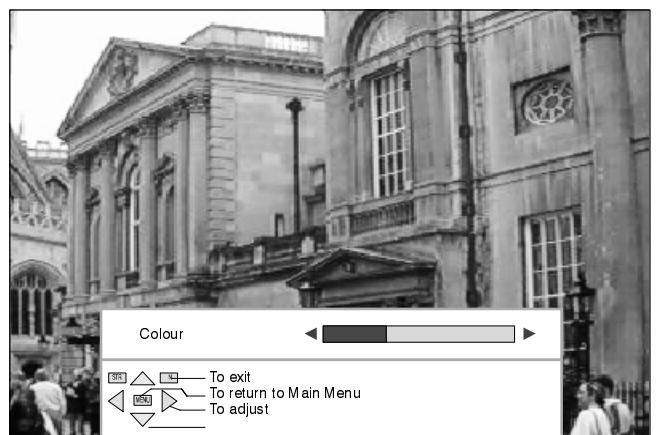
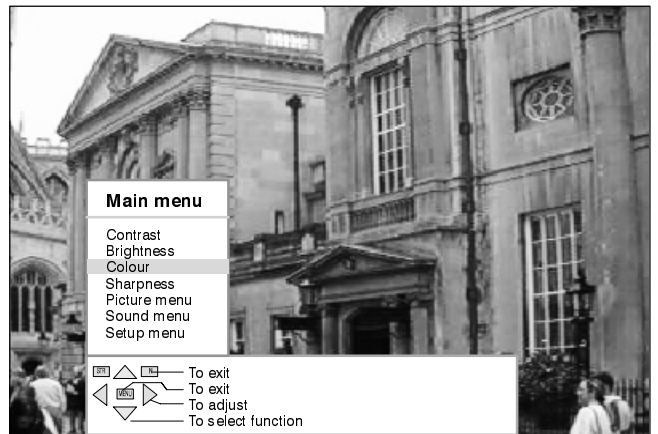
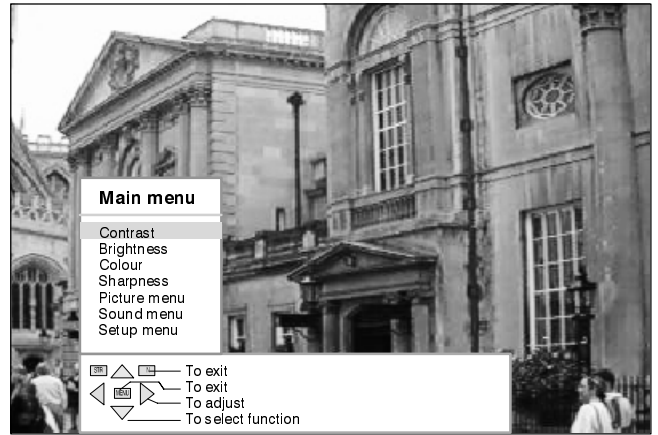
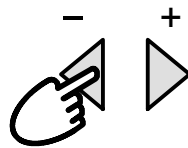
Move to your choice



Access your choice



Increase or decrease levels or move to the Picture, Sound or Setup menus.



Contrast

The Contrast level of the TV can be adjusted, to suit the lighting conditions of the room, as necessary.

Brightness

The Brightness level can be adjusted to suit your viewing conditions.

Colour

The Colour level can be adjusted to your own preference.

Sharpness

The picture can be softened or sharpened to your own preference.

Tint

The Tint adjustment will only appear as a menu item if you have an NTSC signal source connected to the TV and will allow adjustment of the hue.

Picture Menu

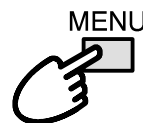
Choosing the Picture menu will take you to that menu and allow adjustments to the AI.

Sound Menu

Choosing the Sound menu will take you to that menu and allow adjustments to the sound quality.

Setup Menu

Choosing the Setup menu will lead to the Setup menu for various feature adjustments.

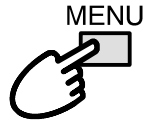


To close Main menu

SOUND MENU

The Sound menu will allow you to set your personal preferences for all aspects of sound quality

Open the Main menu



Move to Sound menu



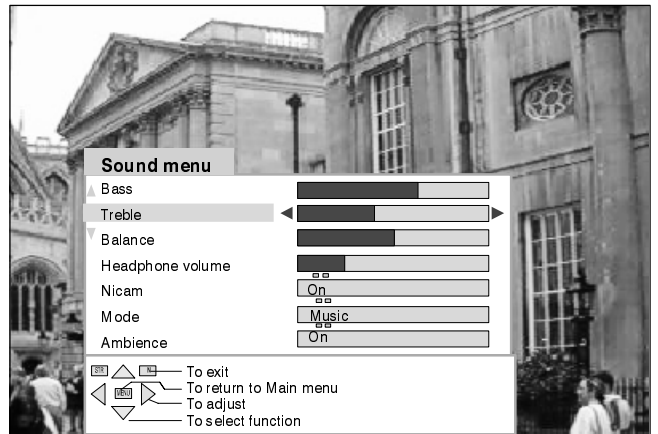
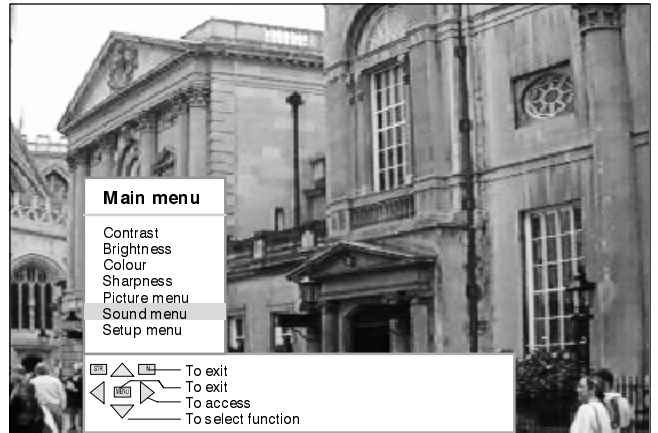
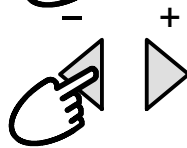
Access Sound menu



Move to your choice



Increase or decrease levels or choose from options of Nicam, Mode or ambience.



Bass

Bass adjustment will emphasise the lower, deeper frequencies and can be increased or decreased.



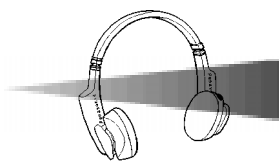
Treble

Treble adjustment will emphasise the sharper, higher frequencies and can be increased or decreased.



Balance

Balance affects the levels of sound between the left and right speakers. Adjustment can be made so that the level from between speakers will suit your listening position.



The headphone volume can be adjusted independently of the TV speakers so that everyone can enjoy listening at their own comfort level.

Nicam

Select On to provide stereo sound reproduction. Select Off for FM Mono sound output.

If Nicam Mono is being transmitted select either FM Mono (Off), Nicam Mono I (M1) or Nicam Mono II (M2). The options depend upon the signal being transmitted.

If reception deteriorates it is advisable to switch to FM Mono (Off).

When Nicam transmissions are not being received the sound will be FM Mono (Off) only.

Mode

The sound can be improved during Music or Speech mode by selecting the appropriate function.

Ambience

Ambience provides a dynamic enhancer to give a greater depth of sound, you can choose to switch On or Off.

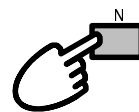
Volume correction

Volume Correction (in AV mode only) allows different volume levels to be set for TV and AV signals. See page 23.



Return to Main menu

OR

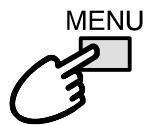


To exit menu system

SETUP MENU

The Setup menu provides access to various advanced features and also to the Tuning menu

Open the Main menu



Move to Setup menu



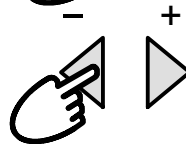
Access Setup menu



Move to your choice



Choose from options or access the Tuning menu.



□□□□□
AV2 out

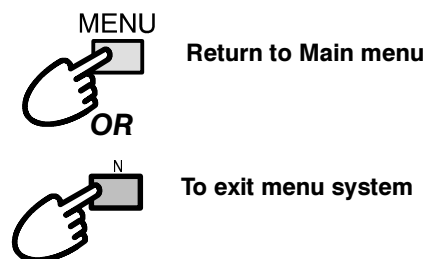
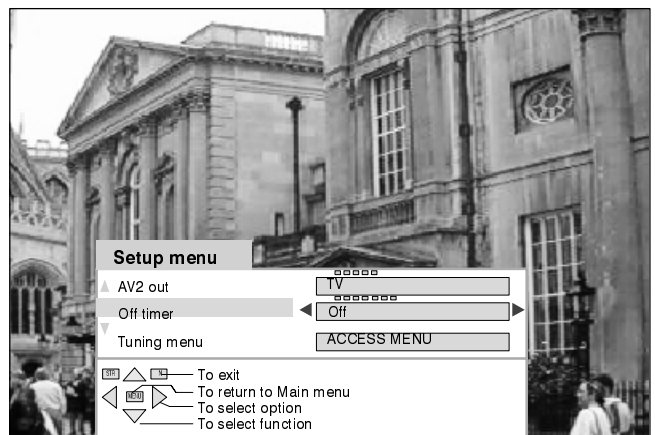
AV2 offers you a choice of signals to send to the AV2 SCART socket. You can choose from the current TV programme position, the signal entering AV1/AV3/AV4 or **Monitor** – the picture displayed on screen.

□□□□□□□□
Off timer

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

Tuning menu

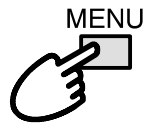
The Tuning menu provides an entry to many other features including Programme edit, ATP and Fine tuning.



TUNING MENU – Programme edit

The Programme edit menu allows you to delete, add, move, retune, name and lock channels

Open the Main menu



Move to Setup menu



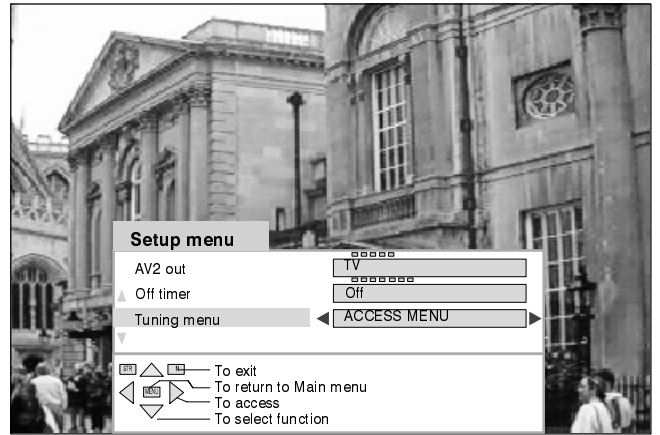
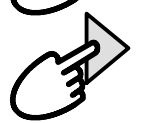
Access Setup menu



Move to Tuning menu



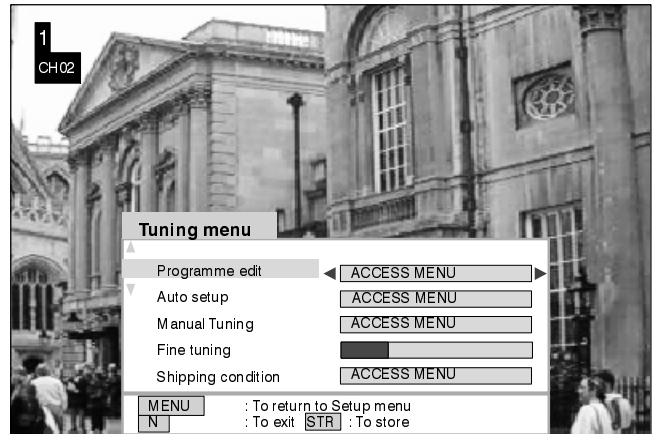
Access Tuning menu



Move to Programme edit



Access Programme edit



To delete an unwanted programme position

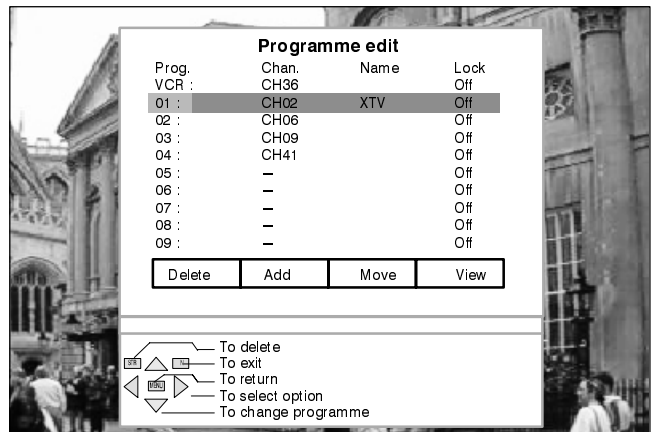
Choose the programme position



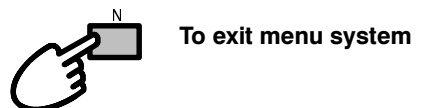
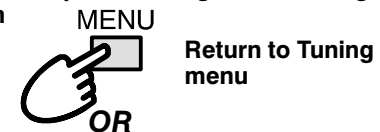
Press the red key on remote control



Press STR to delete



If you have completed changes to the Programme edit menu then



TUNING MENU – Programme edit

To add a programme position

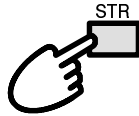
Choose the programme position



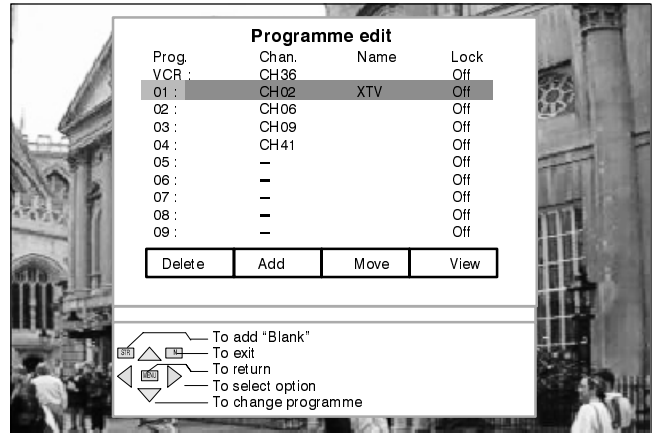
Press the green key



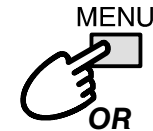
Press STR to add



This blank programme can then be tuned, named, or locked.

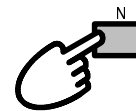


If you have completed changes to the Programme edit menu then



Return to Tuning menu

OR



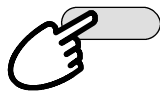
To exit menu system

To move a programme to another position

Choose the programme position



Press the yellow key on remote control



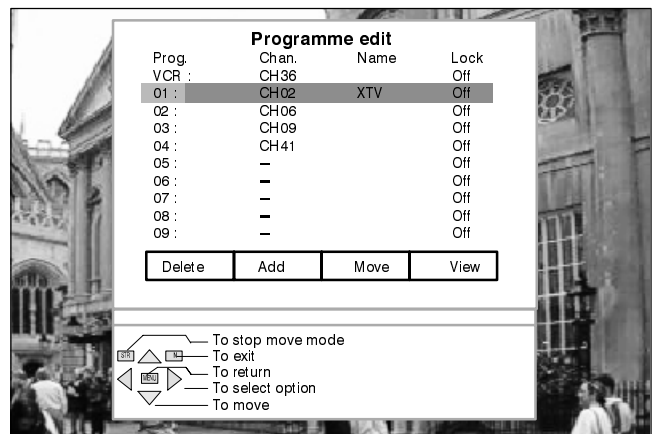
Choose new position



To action new position



Press STR to store



If you have completed changes to the Programme edit menu then

MENU



Return to Tuning menu

OR



To exit menu system

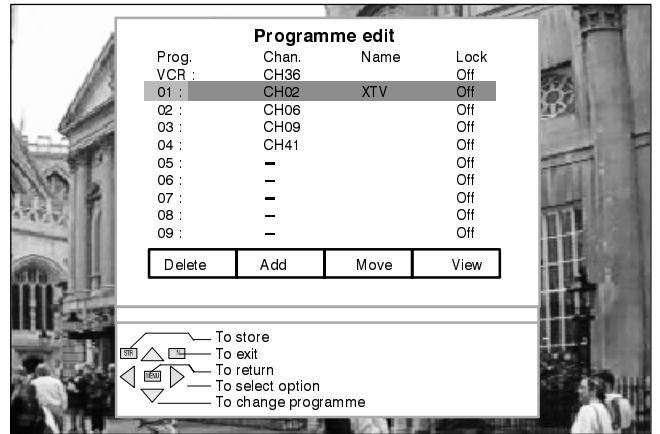
TUNING MENU – Programme edit

To view a programme position

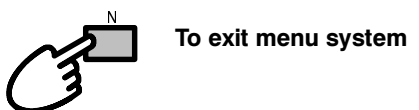
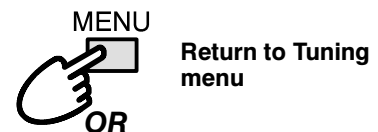
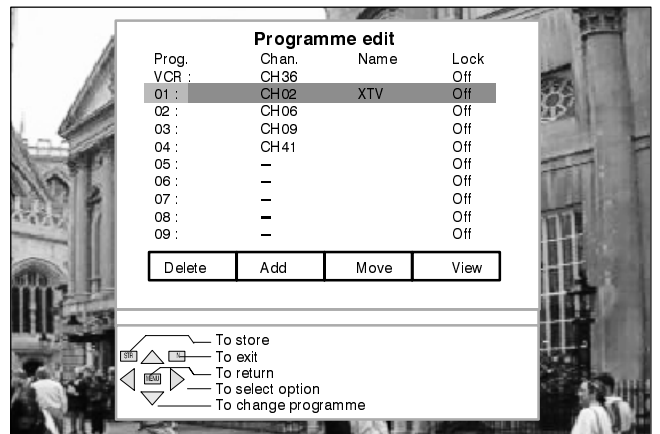
Choose the programme position



Press the blue key on remote control



The screen will return to Programme edit after a few seconds



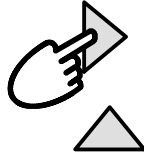
TUNING MENU – Programme edit

To tune a programme position

Choose the programme position



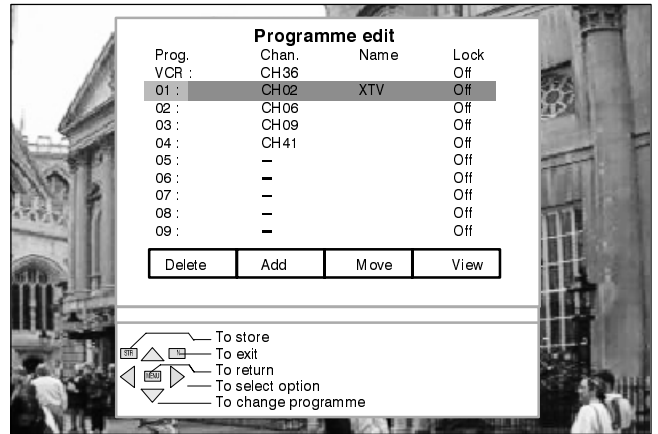
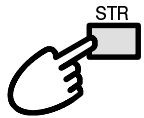
Move to the channel setting



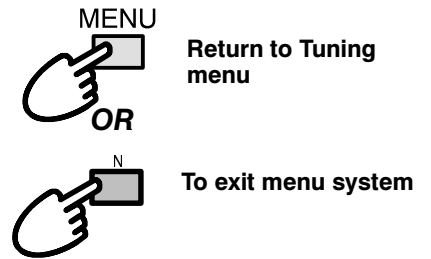
Increase or decrease channel number



Press STR to store



If you have completed changes to the Programme edit menu then



To rename a programme position

Choose the programme position



Move to the Name position



Choose the new character



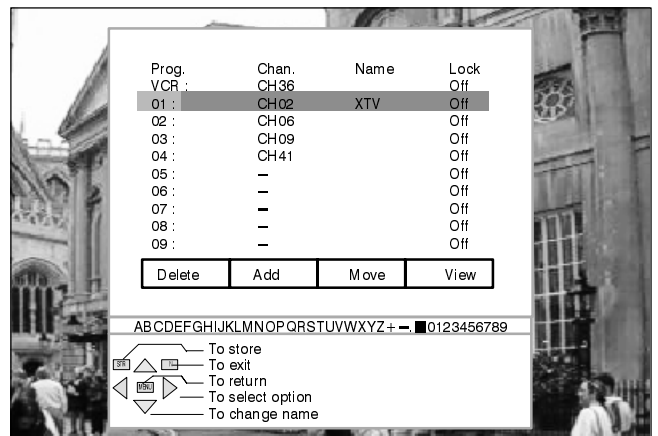
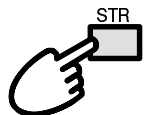
Move to the next character position



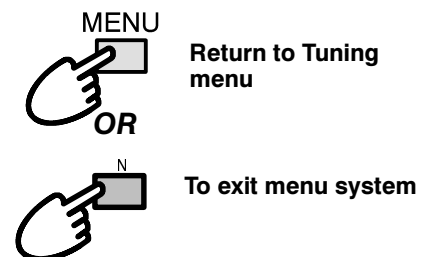
Continue until renaming is completed



Press STR to store



If you have completed changes to the Programme edit menu then



TUNING MENU – Programme edit

To lock a programme position to prevent access

Choose the programme position



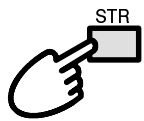
Move to the lock position



Choose between lock on or lock off

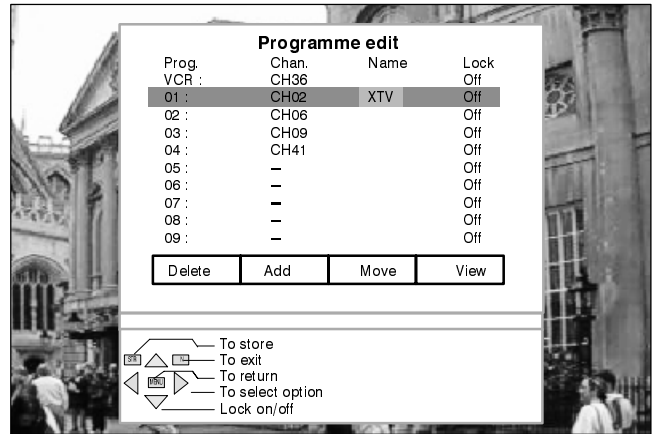


Press STR to store

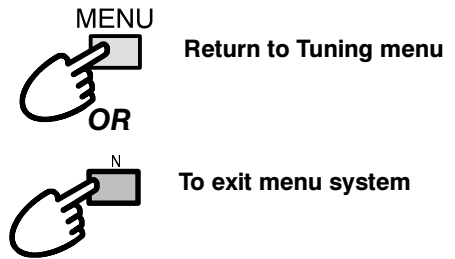


Access to the locked programme position is prevented.

When a programme position is locked, Direct Channel Access using the 'C' and numeric keys on the remote control is not available.



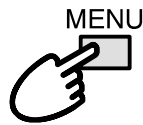
If you have completed changes to the Programme edit menu then



TUNING MENU – Auto setup

The Auto setup menu will allow you to automatically retune the TV to your local stations. It is useful if you move to a different region.

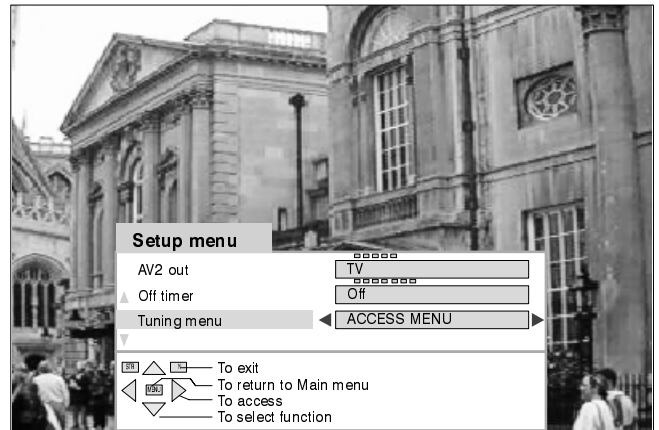
Open the Main menu



Move to Setup menu



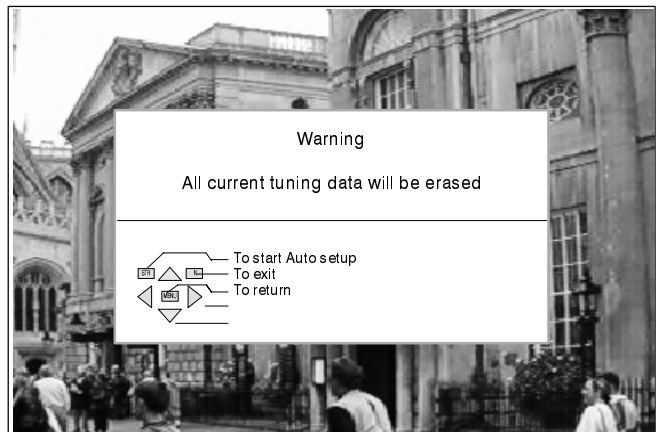
Access Setup menu



Move to Tuning menu



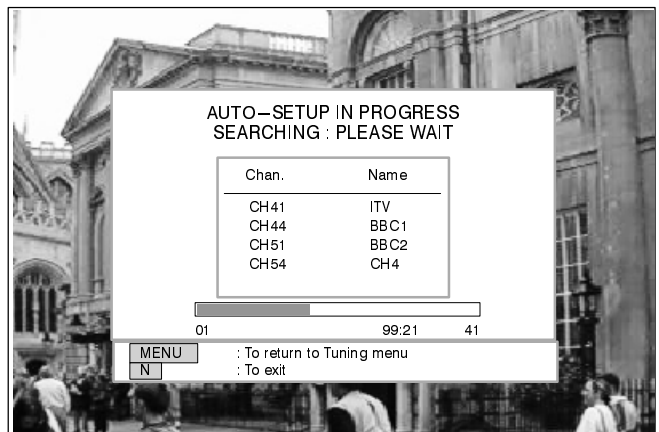
Access Tuning menu



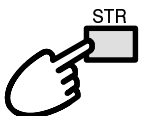
Move to Auto setup



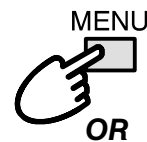
Access Auto setup menu



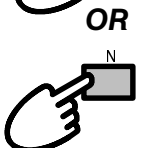
Press to start Auto setup



The TV will search for, locate and order your local stations.

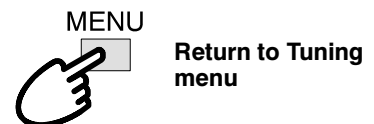


Once this operation is completed the TV will display programme position 1.



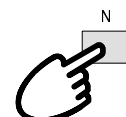
Note :

The sorting order depends upon the TV signal, the broadcasting system, and reception conditions. If the order is not to your preference it can be rearranged. Refer to the Programme Edit menu – see page 15 for details.



Return to Tuning menu

OR



To exit menu system

TUNING MENU – Manual tuning

Manual tuning of the Programme positions is available either from the on screen display menu or from the front panel controls

Manual tuning menu

Open the Main menu

Move to Setup menu

Access Setup menu

Move to Tuning menu

Access Tuning menu

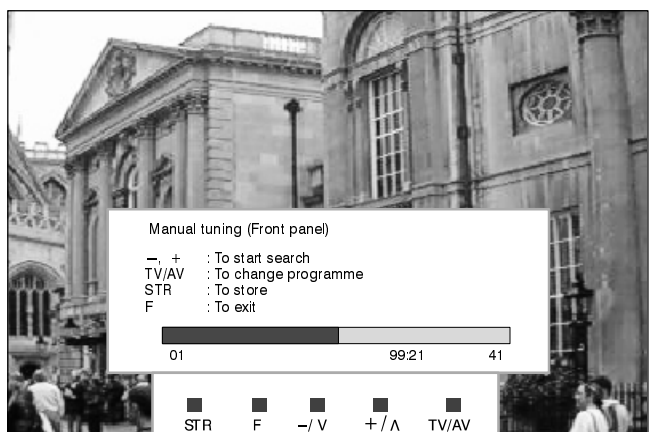
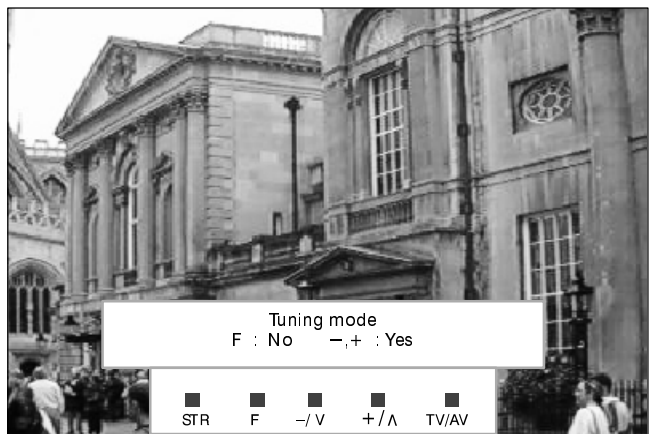
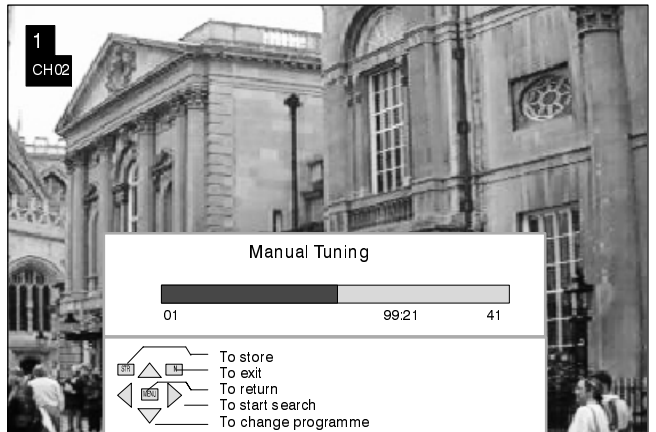
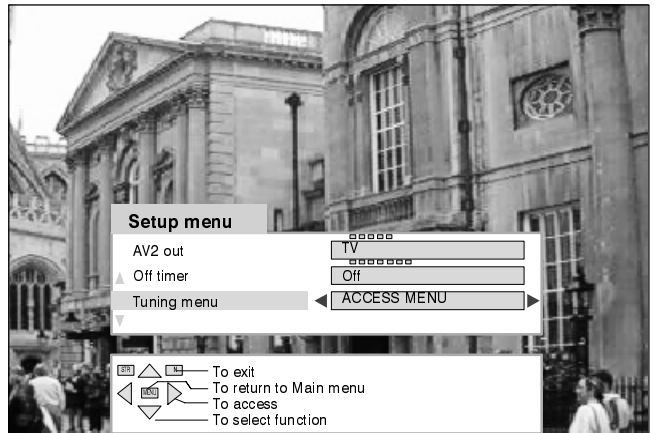
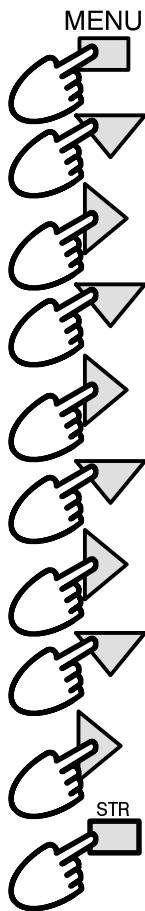
Move to Manual tuning

Access Manual tuning

Select the programme position

Start tuning

Press STR to store



Manual tuning (Front panel)

Press the F button (Front panel) until the Tuning menu is reached

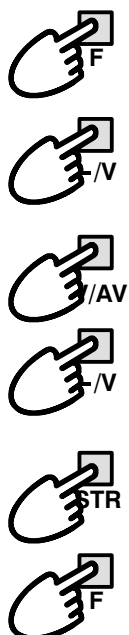
Press the - or + button to access Tuning menu

Press the TV/AV button to change to the required programme position

Press the - or + button to start the tuning search

Press STR to store changes

Press the F button to exit



TUNING MENU – Shipping condition

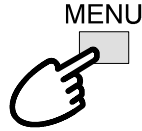
Shipping condition allows you to reset the TV to its original condition, i.e. no channels tuned in.

This is useful for example, if you move to a different area then you will probably want the TV to tune itself to your new local stations.

This can be done either through the **Shipping Condition** menu or through the **Auto setup** menu.

The **Shipping condition** menu will reset all data, clearing all tuning information and resetting all control levels back to factory settings. You may need to adjust your VCR or programme position '0' VCR after operating the **Shipping Condition** menu – refer to page 26.

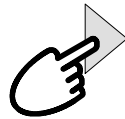
Open the Main menu



Move to Setup menu



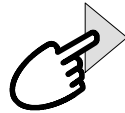
Access Setup menu



Move to Tuning menu



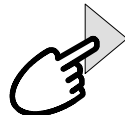
Access Tuning menu



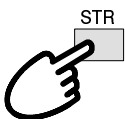
Move to Shipping condition



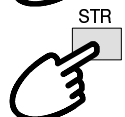
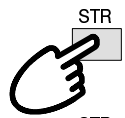
Access Shipping condition



Press STR to start



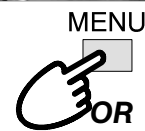
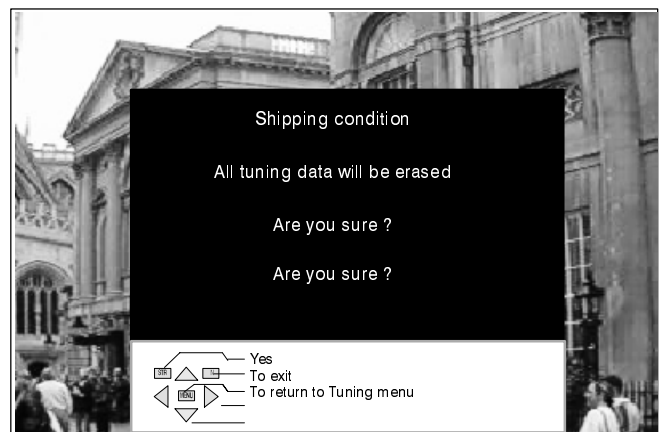
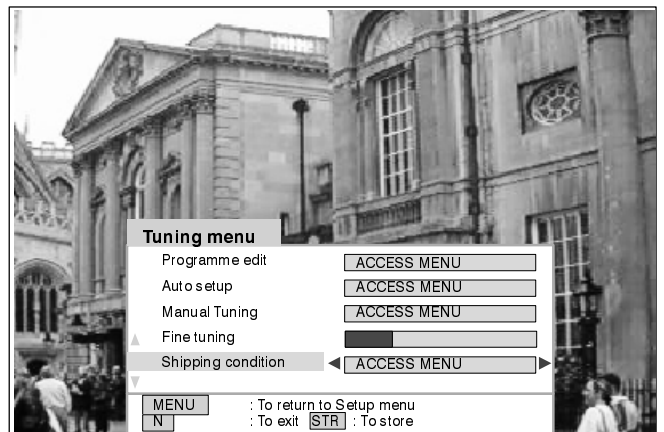
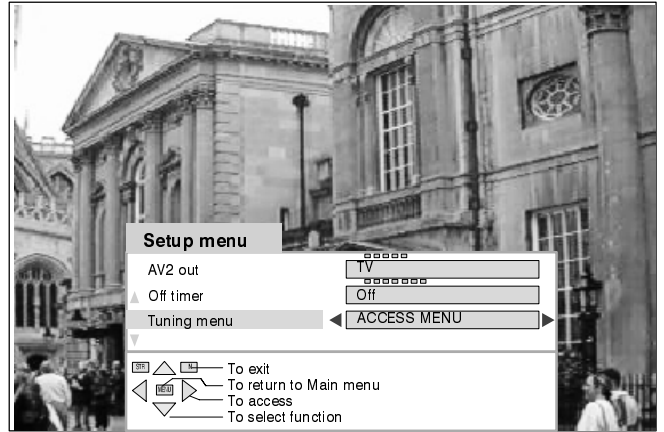
Press again, to confirm, when you are asked, "Are you sure?"



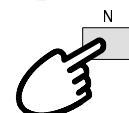
Switch TV off and wait for a few seconds.

Switch TV on again.

Auto setup tuning will begin, stations will be located, sorted and stored ready for use. See Page 20 for details.



Return to Tuning menu

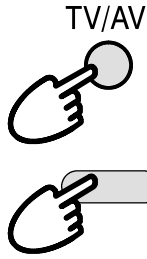


To exit menu system

AV SELECT and SETUP

The AV Select menu will allow you to choose which AV source to view.

Press the TV/AV key
(remote control or TV)

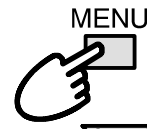


Press the appropriate coloured key of remote control (whilst the options remain on screen)

Press the green or yellow keys again to select S-Video input

You may wish to make adjustments to the Setup or Sound menus

Open the Main menu



Move to Setup menu



Access Setup menu



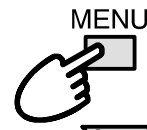
Move to your choice



Access adjustments or options



Open the Main menu



Move to Sound menu



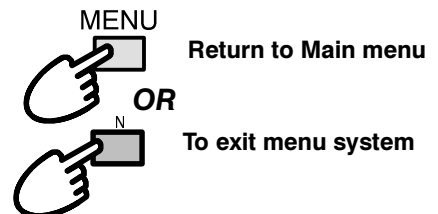
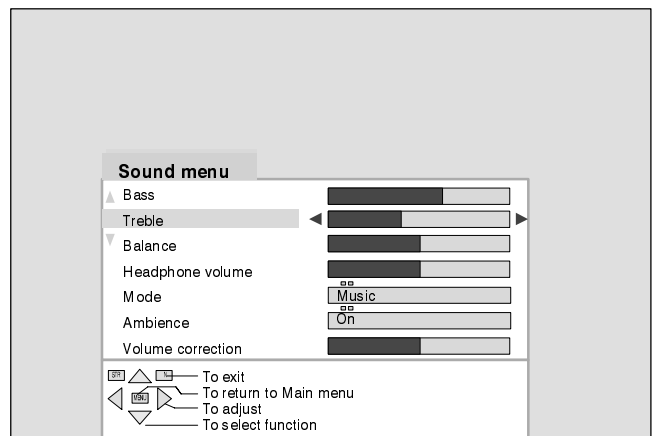
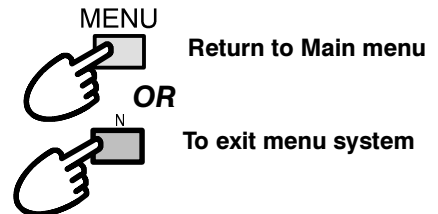
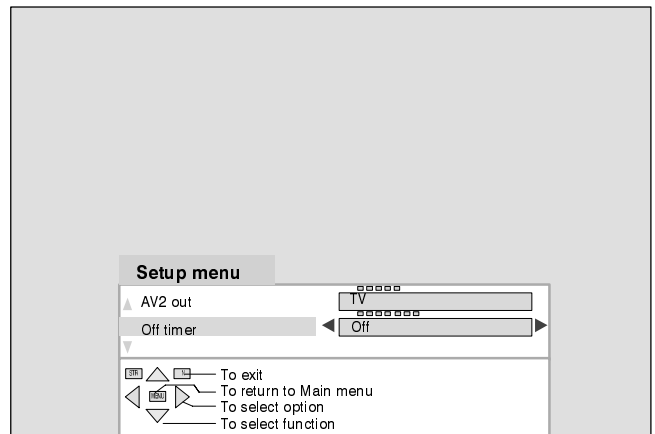
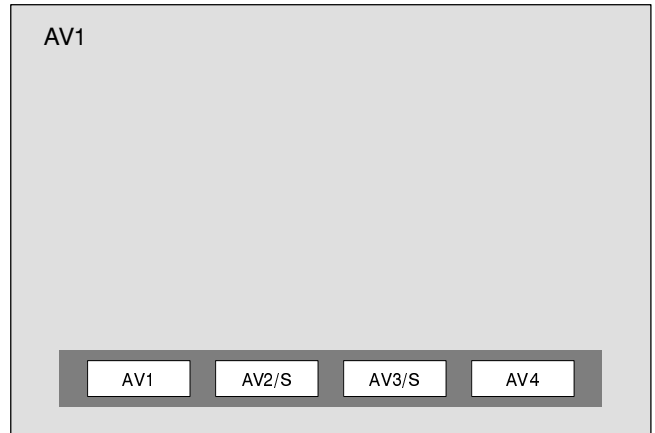
Access Sound menu



Move to your choice



Access adjustments or options



TELETEXT OPERATION

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- This TV set is capable of receiving German TOP Teletext transmissions, it will automatically switch to them if they are being received. This will be indicated in the display area at the bottom of the screen.
- Pressing the **MENU** key whilst in Teletext operation will display the contrast function with a cyan bar, press ◀ ▶ to alter the setting as required.
- When in teletext mode, the volume may still be altered to the desired listening level.

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.

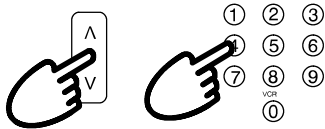
What is FASTEXT?

In FASTEXT 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 of the subjects shown.



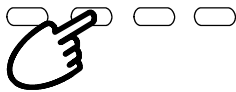
TV / Teletext mode

Press the **TV/TEXT** key.
The screen will display the Teletext page.
Press again when you wish to return to TV. mode.



Page Selection

Pages can be selected in two ways :
a. Press the Up / Down keys to increase or decrease the page number by one.
b. By entering the page number, using 0 –9 on the remote control.



Red / Green / Yellow / Blue keys

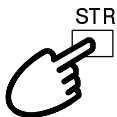
In TOP or FASTEXT mode these correspond to the differently coloured subjects.
In LIST mode they correspond to the differently coloured page numbers.



List / F.text

When in List / Fastext operation

Press to change from FASTEXT mode to LIST mode and vice versa.
In FASTEXT mode four differently coloured subjects are displayed at the bottom of the page. Press the appropriate coloured key to access more information about one of these subjects.



List Store

In LIST mode the four page numbers can be altered for channel positions 1 – 25 only.
To do this, press one of the coloured keys and enter the new page number.
Press and hold **STR**, the page numbers will change colour.



Index

When in FASTEXT operation

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



Full / Top / Bottom

Press to expand the TOP half of the page.
Press again to expand the BOTTOM half.
Press again to return to normal (FULL) size.

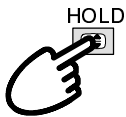


Reveal

Press to reveal hidden words e.g. quiz page answers.
Press again to hide.

TELETEXT OPERATION

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



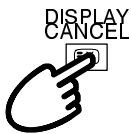
Hold

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



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** key, select the page number, then press **STR**. The page number is now stored. Press **F.P.** to recall this page.



Display Cancel

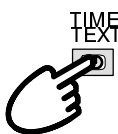
Press **DISPLAY CANCEL** to view the TV picture whilst searching for a Teletext page. When found, the screen will display the page number at the top left. Press **DISPLAY CANCEL** to view the page. Press **TV / TEXT** to return to normal TV operation.

News Flash

When a news flash page has been selected, press **DISPLAY CANCEL** to view the TV picture, when an update is received, it will be displayed on screen. Press **DISPLAY CANCEL** to remove updated news. Press **TV / TEXT** to return to normal TV operation.

Update

Press **DISPLAY CANCEL** 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 **DISPLAY CANCEL** to view the page. Press **TV / TEXT** to return to normal TV operation.



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. Select the required page number using keys 0 – 9.

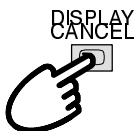


Press **TIME TEXT**, **** will be displayed (top right of the screen).

Enter desired sub page number before the **** disappears. To select page 6 enter 0, 0, 0 and 6.

If in LIST mode, a 'T' will appear in the current box at the bottom.

Press **DISPLAY CANCEL** to view a normal TV programme.



When the page is available, press **DISPLAY CANCEL** to view the page. To clear the page perform one of the following :

- Select a new page number.
 - Press **TV/TEXT** to return to normal TV operation.
-

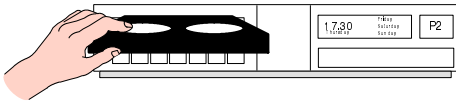
VCR AND SATELLITE RECEIVER INSTALLATION

Your new TV is supplied with programme position '0' set to receive an RF signal from your VCR.

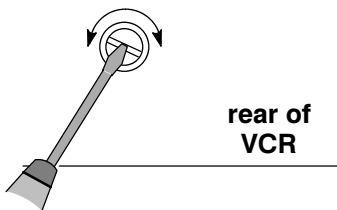
However, if for some reason your VCR is tuned to a different RF channel then you will not receive any picture or sound from your VCR on programme position '0' of the TV. It will be necessary to either adjust the RF channel of your VCR **or** to adjust the tuning of the TV's programme position '0' or both until it receives the RF output channel of your VCR.

It is intended that this advice is used in conjunction with the instruction books for your ancillary equipment.

TO TUNE YOUR VCR TO THE TV



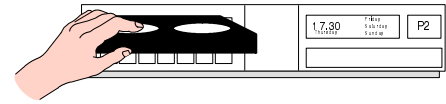
RF CHANNEL ADJUST



Note :
Some VCR's are capable of adjusting their RF channel via their remote control unit.

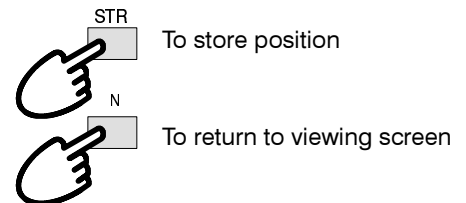
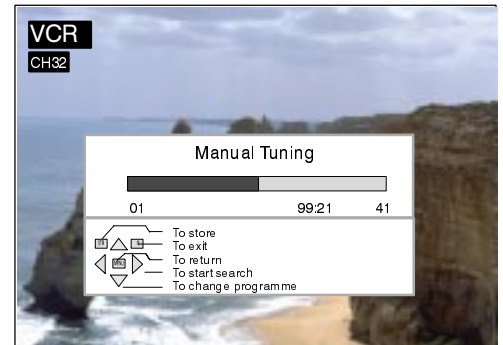


TO TUNE YOUR TV TO THE VCR



Access the Manual tuning menu as detailed on page 21.

▼ ▲ To select programme position '0'
◀ ▶ To start search for VCR playback
Programme position and current channel are displayed top left of screen



To store position

To return to viewing screen

Insert recorded tape and select playback

Set TV to programme position '0' VCR

Adjust tuning

Operation completed

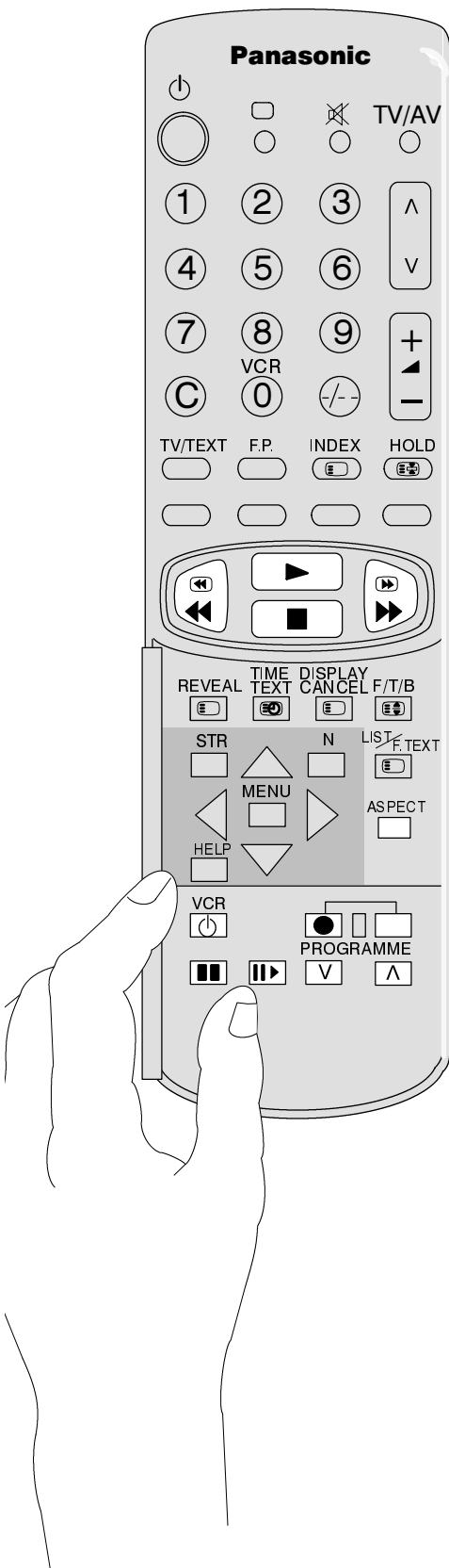
See below for installation of VCR and Satellite Receiver








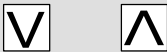

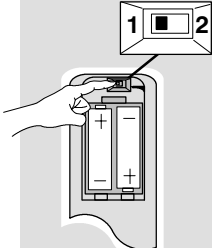


If you are going to use a Satellite Receiver and a VCR **it is important**, to avoid tuning problems, that they are both tuned to output their signals on differing channels. For example, if your VCR is tuned to output channel 32, your Satellite Receiver could be set to output channel 34. Refer to your Satellite Receiver and VCR instruction books for precise tuning information.

VCR CONTROL

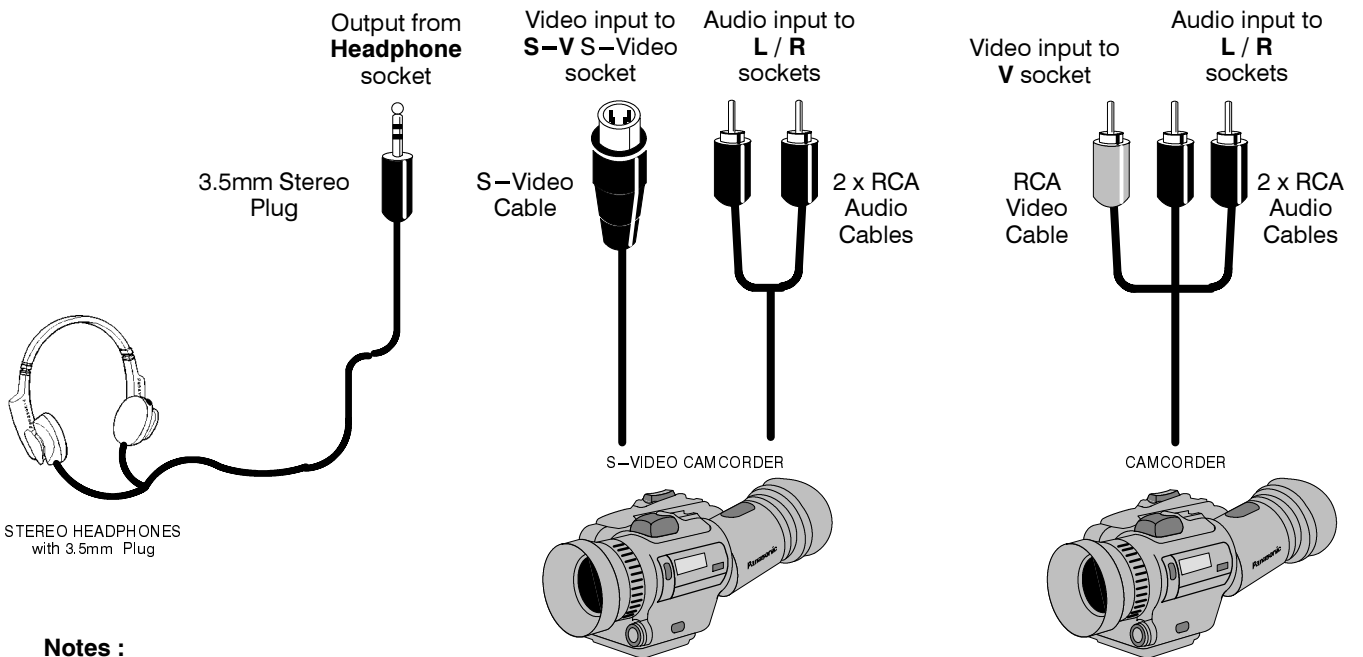
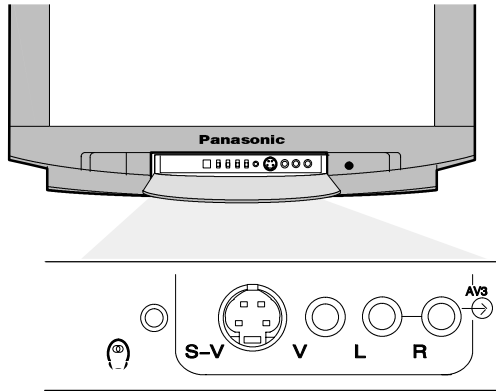
The Remote Control is capable of operating some functions of selected Panasonic VCRs, please consult your dealer for details. Some VCR have different functions, so to ensure compatibility, please refer to the VCR's instruction book. If any difficulty is encountered when using this remote control with Panasonic videorecorders please check the operation of the video recorder with the operating switch set at position one and again with the switch set at position two.



	<p>VCR</p> <p>Standby Press to switch the VCR to standby mode. Press again to switch back on.</p>
	<p>Play Press to playback the tape.</p>
	<p>Stop Press to stop the tape.</p>
	<p>Fast Forward / Cue Press to fast forward the tape. In Play mode, press to view the picture rapidly forward.</p>
	<p>Rewind / Review Press to rewind the tape. In Play mode, press to view the picture in reverse rapidly.</p>
	<p>Pause / Still Press in playback mode, the picture will pause.</p>
	<p>Still Advance While in PAUSE / STILL mode, press to advance the picture one frame at a time.</p>
	<p>Programme Up / Down Press to increase or decrease the VCR programme position by one.</p>
	<p>Record Press these together to record.</p>
	<p>Operating Switch If any difficulty is encountered when using this remote control with Panasonic video cassette recorders please check the operation of the video recorder with the operating switch set at position one and again with the switch set at position two.</p>

AUDIO/VIDEO CONNECTIONS

Front AV3 4 Pin S-Video, RCA Audio /Video and Headphone Sockets



Notes :

Ancillary equipment and cables shown are not supplied with this TV set.

■ SCART and S-Video Terminal Information

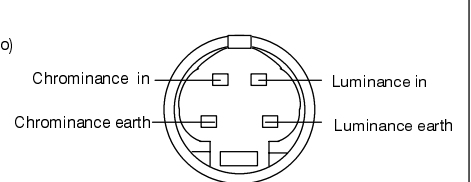
AV1 and AV4 21 pin SCART terminals

Socket Earth	21		20	CVBS in (video)
CVBS out (video)	19		18	RGB status earth
CVBS earth	17		16	Status RGB-AV1
Red in-AV1	15		14	Earth
Red earth-AV1	13		12	--
Green in-AV1	11		10	--
Green earth-AV1	9		8	Status CVBS
Blue in-AV1	7		6	Audio in (L)
Blue earth-AV1	5		4	Audio earth
Audio out (L)	3		2	Audio in (R)
Audio out (R)	1			

AV2 21 pin SCART terminal

Socket Earth	21		20	CVBS in (video)
CVBS out (video)	19		18	Earth
CVBS earth	17		16	--
S.C. - In	15		14	Earth
Earth	13		12	--
--	11		10	--
Earth	9		8	Status CVBS
--	7		6	Audio in (L)
Earth	5		4	Audio earth
Audio out (L)	3		2	Audio in (R)
Audio out (R)	1			

S-Video 4 pin terminal



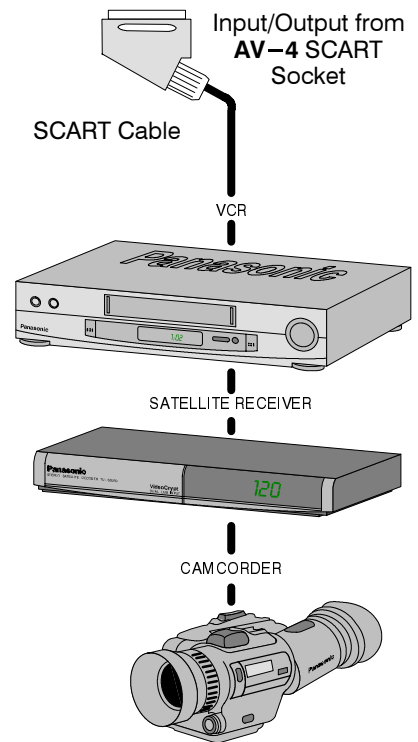
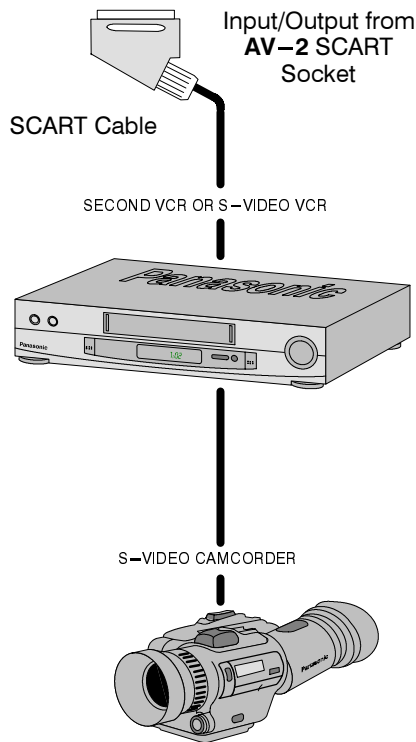
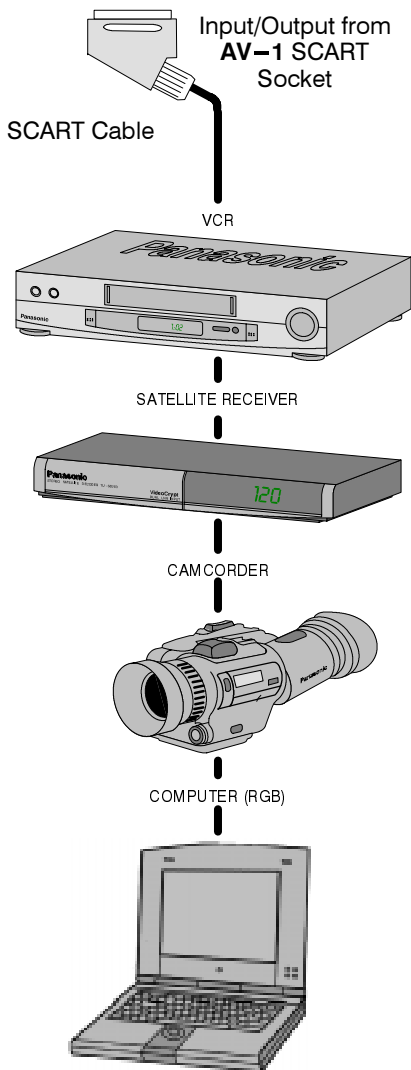
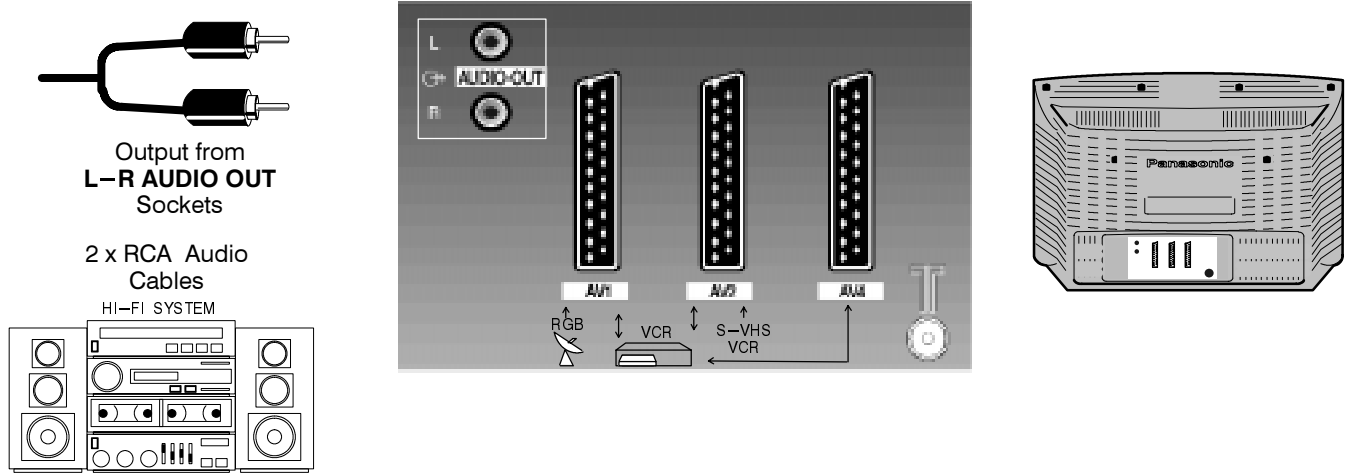
Suitable inputs for AV1 include RGB (Red/Green/Blue).

AV4 does not have RGB input capability.

AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

AUDIO/VIDEO CONNECTIONS

Rear AV1/AV2 (S)/AV4 21 Pin SCART and RCA Audio Out Terminals



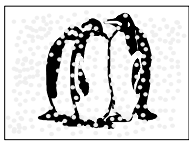
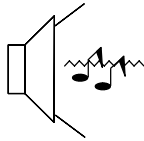

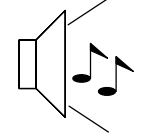
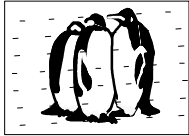
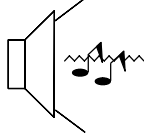

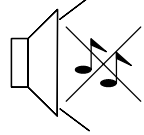

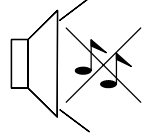
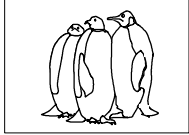
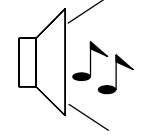
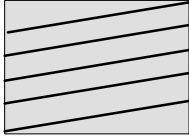
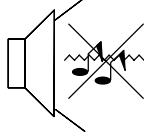

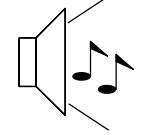
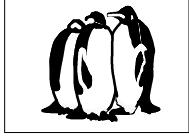
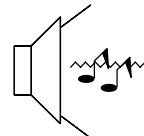
NOTES:

Ancillary equipment and cables shown are not supplied with this TV set.

Do not connect a computer with TTL output (5V) to this set.

The AV2 21 pin terminal can also be used as an Output to Audio / Video Equipment (refer to page 13 for details).

TROUBLE-SHOOTING

Symptoms		Checks
Picture	Sound	
 Snowy Picture	 Noisy Sound	Aerial location, direction or connection
 Multiple Images	 Normal Sound	Aerial location, direction or connection
 Interference	 Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lights
 Normal Picture	 No Sound	Volume level Sound mute switched on
 No Picture	 No Sound	TV set to AV mode Not plugged into A.C. 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
 Poor or Distorted Picture	 Weak or No Sound	Retune Channel(s)
 Coloured Patches	 Normal Sound	Magnetic Interference from unshielded equipment Receiver moved while switched ON, switch TV off for 30 minutes.
 Normal Picture	 Weak or distorted sound	Sound reception may have deteriorated. Switch Nicam setting (Sound menu) to Off until reception improves.

FOR YOUR GUIDANCE

■ Service

Before requesting service, please refer to the trouble—shooting guide on previous page to determine the symptoms. To obtain service please contact your local Panasonic dealer quoting the model number and serial number (both are located at the rear of the TV).

■ TV Games / Home Computers

Extended use of TV games or home computers with any television set can cause a permanent 'shadow' on the screen. This type of irreversible picture tube damage, can be limited by observing the following points:

- Reduce the brightness and contrast levels to a minimum viewing level.
- Do not operate the television set for a continuous period of time while using TV games or home computers.
- This type of picture tube damage, is not an operating defect, and as such is not covered by the Panasonic warranty.

■ Sleep Feature


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

■ Last Position Memory

Certain functions have a last position memory, i.e. the setting at the time of switch—off will be the setting used when the receiver is switched on again:—

Programme	Tint (M.NTSC / NTSC only)
Ambience	Contrast
AV Position	Sharpness
Volume	Aspect
Nicam On/Off	Standby
Bass	Colour
Treble	Brightness
Balance	Headphone volume
AV2 OUT selection	Colour system
Status	Mode
Volume correction (in AV mode only)	

SPECIFICATIONS

		TX—W28R3F/L
Power Source		220 – 240V 50Hz A.C.
Power consumption		135W
Standby consumption		1W
Picture Tube		66cm visible diagonal
Audio Output (Music)		2 x 20W, 8Ω impedance
Dimensions	H W D	496.8 mm 760 mm 518 mm
Weight (Kg)		37
Receiving Systems/ Band name	PAL I PAL 525/60 M.NTSC NTSC (AV input only)	(UHF E21—69), VHF A1—S20, S21—S41 (Hyperband) Playback of NTSC tape from PAL Video recorders (VCR) Playback from M.NTSC Videorecorders (VCR) Playback from NTSC Videorecorders (VCR)
Aerial – Rear		UHF / VHF
Headphones – Front		3,5mm, 8Ω impedance
AV – Rear		AV1 – 21 pin terminal – Audio / Video in / out, RGB in. AV2 – 21 pin terminal – Audio / Video in / out, S—Video in, Selectable output. AV4 – 21 pin terminal – Audio / Video in / out 2 x RCA Audio Monitor Out
AV – Front		AV3 – S—Video in, 2 x RCA Audio in, 1 x RCA Video in

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

