

Panasonic



TX-32PS500 TX-28PS500

Colour Television
(U.K. Standard)

Quintrix F

DOLBY DIGITAL

QLink



Operating Instructions

Dolby, Pro Logic and the **DD** are trademarks of Dolby Laboratories.
Manufactured under license from Dolby Laboratories.

TQB0E0037-M

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 allow you to use the TV as quickly as possible. You can then read the instructions completely and retain them for future reference.

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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.
This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

■ 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. To prevent fire, never place any type of candle or naked flame on top of, or near the TV set.
- Ensure that the mains plug is easily accessible.
- The On/Off switch on this model does not fully disconnect the TV from the mains supply. Remove the mains plug from the wall socket 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.
- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths and curtains.



■ ENVIRONMENT

Batteries, packaging and old equipment should not be disposed of as domestic waste, but in accordance with the applicable regulations.

WARNINGS AND PRECAUTIONS

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).

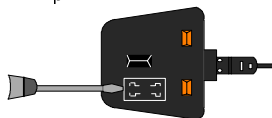
How to replace the fuse (for plug type shown in example 2) :

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




Remote Control Transmitter EUR51 1320



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



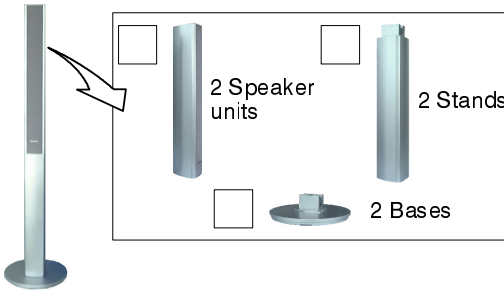
Video cabinet: VS-32PS2 for model TX-32PS500, VS-28PS2 for model TX-28PS500


 1 Year Guarantee Registration


 Pan European Guarantee Card

Speakers TS-500DD

Rear surround speakers (x2)

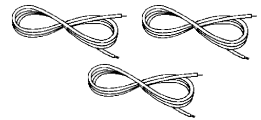


4 x Screw 16mm 

2 x Screw 10mm 

 Centre speaker

Wire kit
Speaker cables:
(1 x 4m, 2 x 10m)



2 Clips 

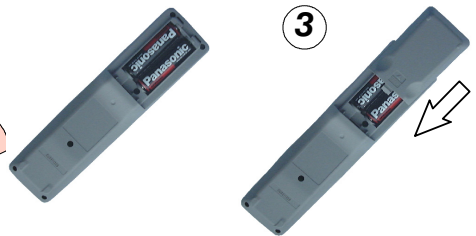
INSERTING THE REMOTE CONTROL BATTERIES



Slide off the battery cover



Insert batteries - note correct polarity (+ and -)



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-Cd, Ni-MH) batteries.

BASIC CONTROLS : FRONT PANEL AND REMOTE CONTROL

Press here and open flap to expose TV controls, front AV3 and headphone terminals



- MAINS Power On/Off switch
- Red light indicates Standby mode. Use Standby switch, -, + or 0-9 buttons to switch TV On
- STR (Normalisation store) Used to store tuning and other function settings
- F (Function select) Displays the On Screen Display functions, use repeatedly to select from the available functions – Volume, Contrast, Brightness, Colour, Sharpness, Tint (in NTSC mode), Bass, Treble, Balance, Tuning mode and Geomagnetic correction
- TV/AV switch (see page 33) Increases or decreases the programme position by one. When a function is already displayed, press to increase or decrease the selected function
- RCA Audio/Video sockets (page 47)
- S-VHS socket (see page 47)
- Headphone socket (see page 47)

-
- Standby On/Off switch Switches TV On or Off standby
 - Status button Press to display programme position, programme name, channel number, time, NICAM mode and programme table (see page 28)
 - Menu button Press to access the Picture, Sound and Setup menus (see page 17)
 - The N button will recall settings stored with TV/AV
 - Direct channel access During normal TV viewing or when in the Tuning, Programme edit or Manual tuning menus, press and then enter channel number using the numeric buttons
 - Teletext buttons (see page 44)
 - Sound mute On/Off
 - Direct TV Record button (see page 35)
 - Cursor buttons to make selections and adjustments
 - Switch between viewing TV or AV input (see page 33)
 - Programme / channel change buttons (0-9) and Teletext page buttons (see page 44) When in Standby mode, switches TV on
 - Programme position for selection of two digit programmes (10-99) using numeric buttons
 - Coloured buttons used for Programme Edit functions (see page 25)
 - Teletext functions (see page 44)
 - AV selection (see page 33)
 - Surround on/off
 - Aspect control button (see page 18)
 - VCR / DVD buttons (see page 43)

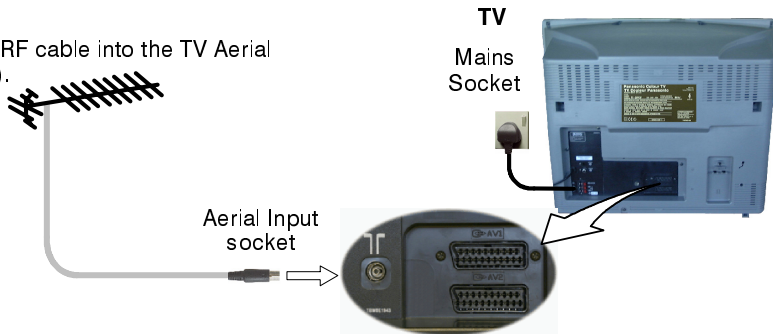
Connection and setting up options

1. If connecting the TV using an RF cable only, proceed to option 1.
2. If connecting the TV using Scart and RF cables, proceed to option 2.
3. If connecting the TV to a Q-Link (or Q-Link compatible) VCR (DVD/R), proceed to option 3 on page 9.
4. If connecting the TV to a Q-Link (or Q-Link compatible) VCR (DVD/R) and a Satellite Receiver, proceed to option 4 on page 10.

1. Connection of TV using an RF cable only

RF Connection

- Connect the RF cable into the TV Aerial socket (Υ).



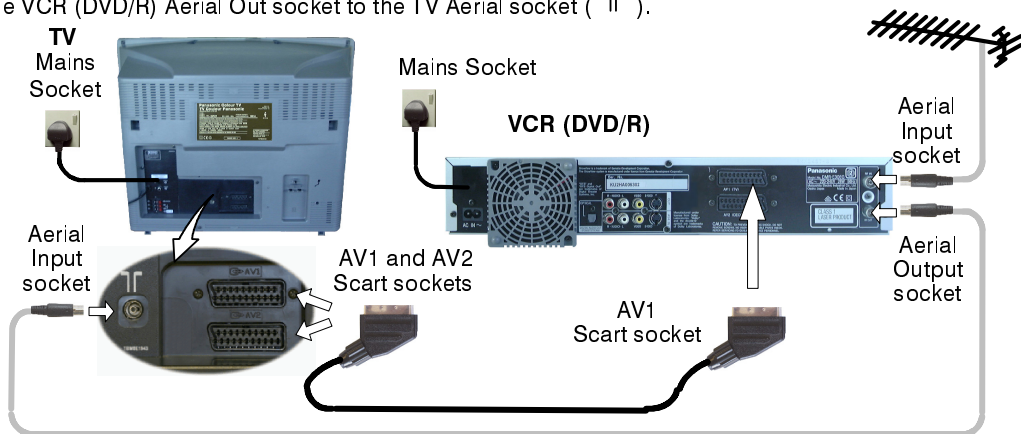
2. Connection of TV and VCR (DVD/R) using Scart and RF cables

Scart Connections

- The VCR (DVD/R) can also be connected to the TV using a Scart cable if you are using a Scart equipped VCR (DVD/R).
- Use the TV's AV1 Scart socket for a VCR (DVD/R).
- Use the TV's AV2S Scart socket for an S-Video VCR.

RF Connection

- Connect the RF cable to the Aerial In socket of the VCR (DVD/R) and an RF cable from the VCR (DVD/R) Aerial Out socket to the TV Aerial socket (Υ).



Notes :

In this instructions book DVD/R refers to DVD player and DVD recorder.
Additional equipment and cables are not supplied.
Further details of Audio/Video connections can be found on pages 47 to 49.

What is Q-Link ?

Q-Link allows direct communication between the TV and a Q-Link (or Q-Link compatible) VCR (DVD/R), this will enable features such as downloading of tuning information from the TV to the VCR (DVD/R).

When using a "NEXTVIEWLINK" VCR (DVD/R) the main features possible are the following :

- *Preset Download* - Downloading of tuning information from the TV to the VCR (DVD/R).
- *Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).

When using a "Q-Link" VCR (DVD/R) the main features possible are the following :

- *Preset Download* - Downloading of tuning information from the TV to the VCR (DVD/R).
- *Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).
- *TV/VCR Auto Power On* - When the VCR (DVD/R) plays a tape the TV will automatically switch On and select the AV2 input.
- *VCR Auto Power Standby* - When the TV is switched into Standby, the VCR (DVD/R) will also switch into Standby.
- *VCR Image view On* - If the TV is in Standby mode and the VCR (DVD/R) sends a menu to be displayed on the TV screen (e.g. Main menu), the TV will automatically switch On and the menu will be displayed.

This TV will also communicate with other VCR (DVD/R)'s that bear the following logos :

- "DATA LOGIC" (a trademark of Metz Corporation).
- "Easy Link" (a trademark of Philips Corporation).
- "Megalogic" (a trademark of Grundig Corporation).
- "SMARTLINK" (a trademark of Sony Corporation).

These VCR (DVD/R)'s may support some or all of the above functions. Refer to the VCR (DVD/R) operating instruction book.

Further information on Q-Link can be found on page 34.

In order for Q-Link to function correctly, the Scart cables must be connected in a certain way, dependent on whether the TV is being connected to a VCR (DVD/R) (option 3, below) or to a VCR (DVD/R) and Satellite Receiver (option 4, overleaf).

3. Q-Link connection of TV and VCR (DVD/R) using Scart and RF cables

Scart Connection

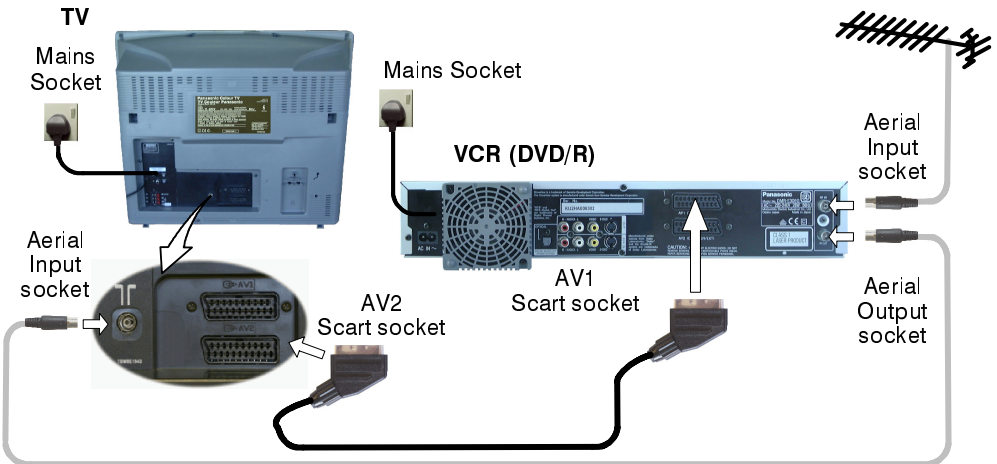
- The VCR (DVD/R) must be connected to the AV2 Scart socket of this TV using a 'fully wired' Scart cable.

Note :

If using a "Q-Link" VCR (DVD/R) then the AV1 Scart of the VCR (DVD/R) must be connected to the AV2 socket of the TV. If your VCR (DVD/R) is not a "Q-Link" VCR (DVD/R), please consult your VCR (DVD/R) operating instruction book.

RF Connection

- Connect the RF cable to the Aerial In socket of the VCR (DVD/R) and an RF cable from the VCR (DVD/R) Aerial Out socket to the TV Aerial socket (Υ).



Notes :

Additional equipment and cables are not supplied.

Further details of Audio/ Video connections can be found on pages 47 to 49.

Further information for VCR (DVD/R) and Satellite Receiver installation with this TV can be found on page 42.

4. Q-Link connection of TV, VCR (DVD/R) and Satellite Receiver using Scart and RF cables

For Q-Link to function correctly the TV, VCR (DVD/R) and Satellite Receiver must be connected as shown in the diagram below.

Scart Connections

'Fully wired' Scart cables should be used for all of the Scart connections.

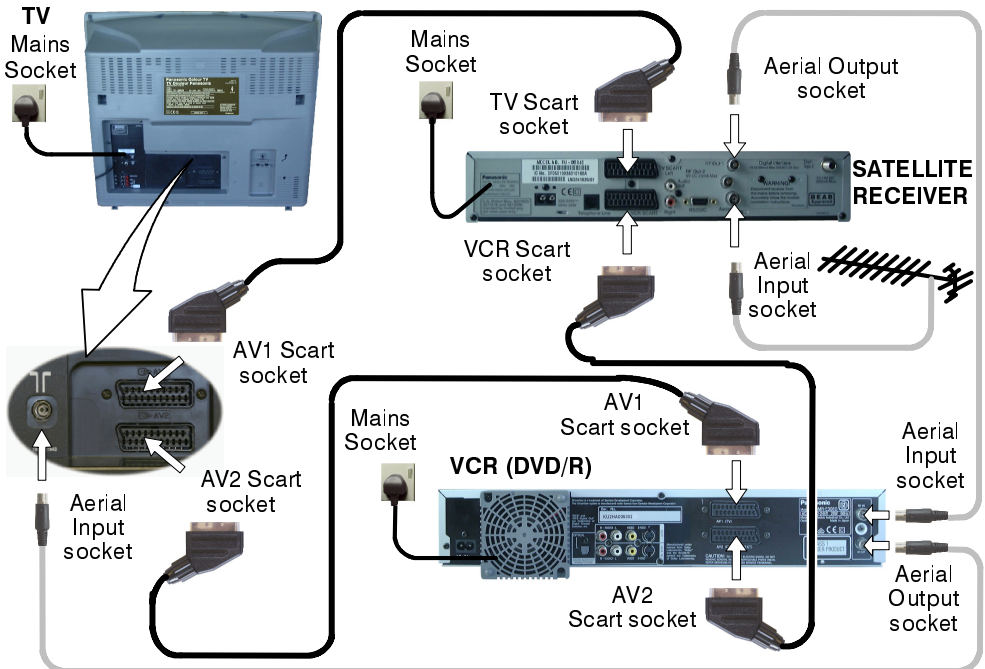
- The AV2 Scart of the VCR (DVD/R) must be connected to the VCR (DVD/R) socket of the Satellite Receiver.
- The TV Scart socket of the Satellite Receiver must be connected to the AV1 Scart socket of the TV.

Note :

If using a "Q-Link" VCR (DVD/R) then the AV1 Scart of the VCR (DVD/R) must be connected to the AV2 socket of the TV. If your VCR (DVD/R) is not a "Q-Link" VCR (DVD/R), please consult your VCR (DVD/R) operating instruction book.

RF Connections

- Connect an RF cable to the Aerial In socket of the Satellite Receiver.
- Connect an RF cable from the RF Out socket of the Satellite Receiver to the RF In socket of the VCR (DVD/R).
- Connect an RF cable from the RF Out socket of the VCR (DVD/R) to the TV Aerial In socket (Γ).



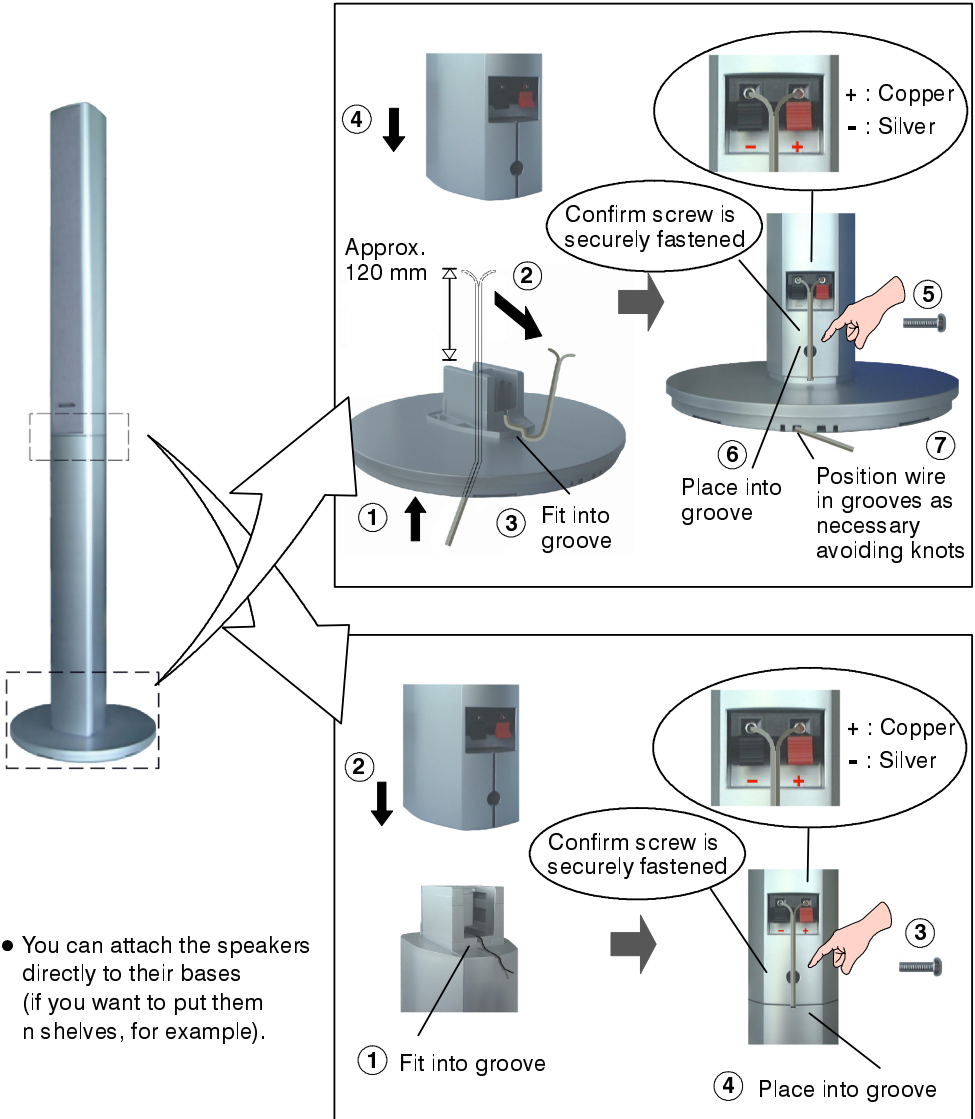
Notes :

Additional equipment and cables are not supplied.

Further details of Audio/ Video connections can be found on pages 47 to 49.

Further information for VCR (DVD/R) and Satellite Receiver installation with this TV can be found on page 42.

Assembly and connection of front and surround speakers



- You can attach the speakers directly to their bases (if you want to put them on shelves, for example).

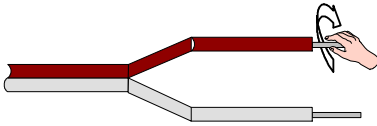
Note:

- Never short-circuit positive (+) and negative (-) speaker wires.
- Be sure connect only positive (copper) wires to positive (+) terminals and negative (silver) wires to negative (-) terminals. Incorrect connection can damage the speakers.

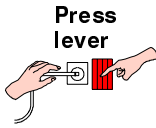
Connect the speakers

The TV must be switched Off.

1. Twist the wire ends before inserting.



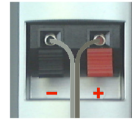
2. Insert into terminals.
Ensure that bare speaker wires are not touching.



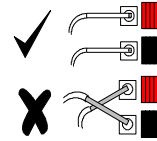
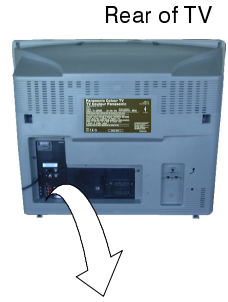
Insert wire

Connect Copper to Red (+)
Connect Silver to Black (-)

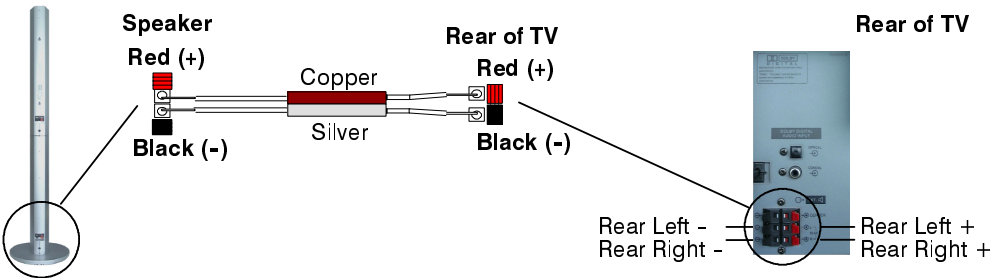
Rear of speaker



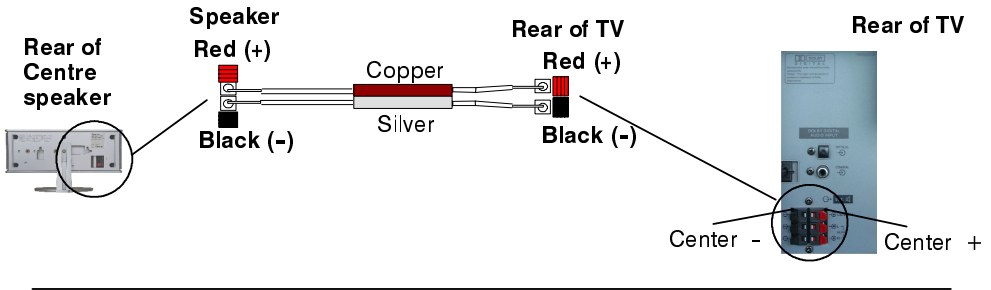
+ : Copper
- : Silver



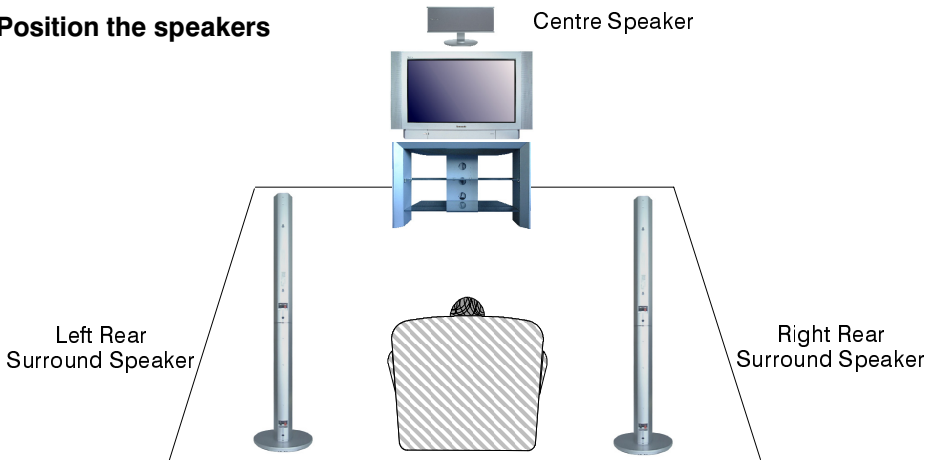
The REAR speakers can be connected in following way:



Centre speaker:



Position the speakers



Use only supplied speakers

- Set the speakers up on an even surface to prevent them from falling. Take proper precautions to prevent the speakers from falling if you cannot set them up on an even surface.

Positioning for best effect

- Place speakers on flat secure bases.
- Placing speakers too close to floors, walls, and corners can result in excessive bass. Cover walls and windows with thick curtain.

Center speaker

- You can also put this speaker directly under the television.
- Vibration caused by the center speaker can disrupt the picture if it is placed directly on the television. If this occurs, place the center speaker on a shelf of the video cabinet.

Caution

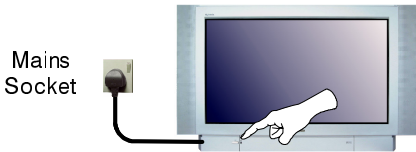
- Hold the speakers by the sides.
- Applying pressure to the front net can damage the speaker.

QUICK START GUIDE

- 1** Ensure that the **VCR (DVD/R)** is in **Standby mode**.

Switch ON your Satellite Receiver.

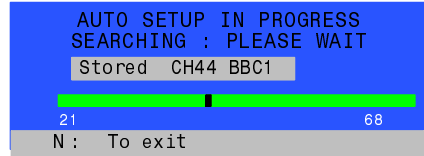
Plug the TV into mains socket and switch ON.



- 2** Programmes will appear immediately if your dealer has programmed the TV for you.

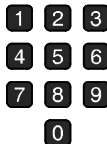
If the TV has not been programmed for you then **Auto setup** will begin. TV stations will be located, sorted into order and stored ready for use. *2

CH44

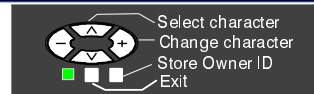


- 3** **Owner ID**
As an added feature, this TV has the option of adding a security code (Owner ID) and personal details into its memory, so that in the unfortunate event of theft it will help the Police to trace the owner.

Enter required 4 digit Owner ID **PIN NUMBER**. (using 0 to 9 on the remote control).



You now have the opportunity to enter your details and help the police crack crime see instruction book



Owner ID



- 4** Enter **NAME**, **HOUSE NUMBER** and **POSTCODE**.

If a 4 digit **PIN NUMBER** was entered above, you will be taken automatically to the **NAME** line.

If not, move to the **NAME** line.

Change character.

Select character position.

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

Press **TV/AV** to store the details.

Press **TV/AV** again, when you are asked "Are you sure ?"



You now have the opportunity to enter your details and help the police crack crime see instruction book



Owner ID



For further information on Owner I.D., see page 32.
A space is provided on page 32 to write down the **PIN NUMBER** for future reference.

5 TV to VCR (DVD/R) Download

TV > VCR DOWNLOAD IN PROGRESS
PLEASE WAIT
PROGRAMME : 48
REMOTE CONTROL UNAVAILABLE

If a “Q-Link”, “NEXTVIEWLINK” or compatible VCR (DVD/R) has been connected to the AV2 socket before starting

Step 1, programme information will be downloaded to the VCR (DVD/R).

Downloaded tuning information will match the television’s.

Not all VCR (DVD/R)s support this download of programme information, some may require to be started manually.

Refer to the VCR (DVD/R) operating instruction book.

If a VCR (DVD/R) other than those described above has been connected, then there will be no download operation, the TV is now ready for use.

Notes :

If the VCR (DVD/R) has not accepted download data from the TV, you may need to select the Download option from the VCR (DVD/R)’s menu system.

Refer to the VCR (DVD/R) operating instruction book.

If Q-Link is not operating correctly, check the following :

- The Scart cable is connected to the TV’s AV2 Scart socket.
- The Scart cable is connected to the VCR (DVD/R)’s compatible (Q-Link, NEXTVIEWLINK or similar technology) Scart socket.
- The Scart cable is a “fully wired” type.

For further information on Q-Link and connecting equipment, see pages 34, 47 to 49.

*1. If, after Auto Setup is complete, the programme position of the digital satellite receiver is not to your preference, or programme name is not indicated, you can re–arrange the position and input a name manually.

Refer to the Programme edit menu – see page 25 for details.

*2. The sorting order depends upon the TV signal, the broadcasting system, and reception conditions. If either BBC1, BBC2 or ITV are not located, then their respective pre–allocated programme positions will remain unused.

| Pro–gramme Position | All stations available | No Channel 5 | No Channel 5 / S4C | No Channel 4 / Channel 5 | No S4C | No Channel 4 / S4C | No Channel 4 / S4C / Channel 5 |
|---------------------|------------------------|--------------|--------------------|--------------------------|-----------|--------------------|--------------------------------|
| 1 | BBC1 | BBC1 | BBC1 | BBC1 | BBC1 | BBC1 | BBC1 |
| 2 | BBC2 | BBC2 | BBC2 | BBC2 | BBC2 | BBC2 | BBC2 |
| 3 | ITV | ITV | ITV | ITV | ITV | ITV | ITV |
| 4 | Channel 4 | Channel 4 | Channel 4 | S4C | Channel 4 | Channel 5 | ● |
| 5 | S4C | S4C | ● | ● | Channel 5 | ● | ● |
| 6 | Channel 5 | ● | ● | ● | ● | ● | ● |

Note :

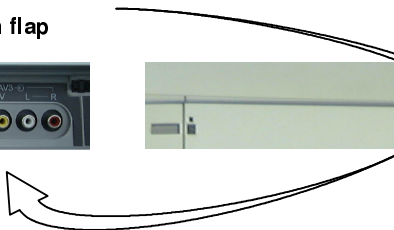
● The next available channel will appear, if no other stations are available then the Programme position will remain unused.

- 6** Slight tilting of the picture may be noticeable or coloured patches may sometimes appear at the corners of the screen (colour purity). The Geomagnetic Correction feature can be used to eliminate them, if necessary:

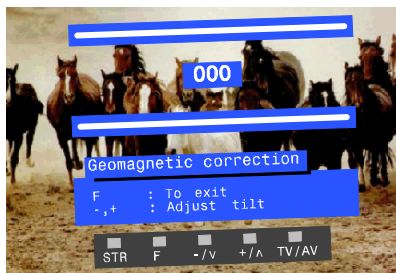
First, ensure the Auto setup and Q-Link download procedures are complete. The screen should not be showing any On-Screen Display menus.

Open the flap on the television's front panel

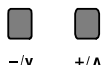
Press and release here to open flap



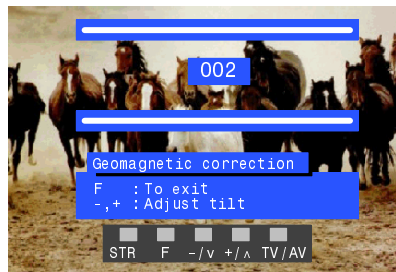
Press the **F** button repeatedly until the Geomagnetic Correction feature is displayed



Press the **+** or **-** buttons repeatedly until the picture appears to be level

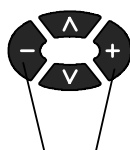


Press the **F** button again to return to normal viewing
Close the flap to prevent damage

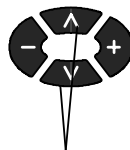


- 7** You are now ready to begin viewing programmes

The cursor controls provide the two basic functions:

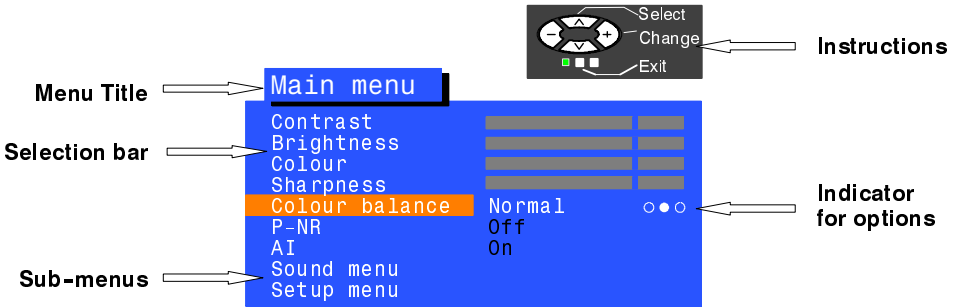


Adjust Volume



Change Programme

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



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 change of setting to be made.

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

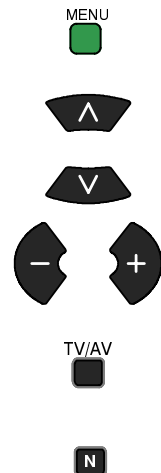
The **MENU** button is used to open the main menu and also to return to the previous menu.

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

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

The **TV/AV** button is used to store settings after adjustments have been made or options have been set.

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



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

Press the ASPECT button to move through the six aspect options in following order: Panasonic Auto, 16:9 (Full), 14:9, 4:3, Zoom 1, Zoom 2.

ASPECT



OR

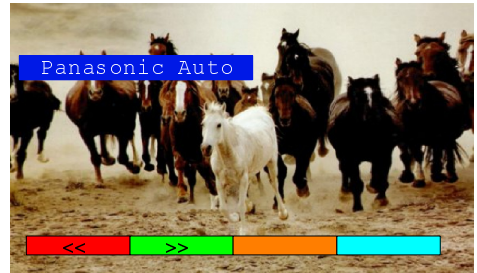
Press the ASPECT button then use the RED or GREEN buttons to move in either direction through the seven aspect options.



Panasonic Auto

Panasonic Auto determines the best aspect ratio to use to display the picture you are viewing. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If **Panasonic Auto** detects a widescreen signal it switches into **16:9** widescreen mode. If **Panasonic Auto** does not detect a widescreen signal then this advanced TV set enhances the picture for optimum viewing pleasure.



The text shown on the screen indicates how **Panasonic Auto** determined which ratio to use: 'WIDE' appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal is found through a Scart socket. **Panasonic Auto** switches into **16:9** widescreen ratio.

'Panasonic Auto' appears in the top left of the screen if black stripes above and below the picture are detected. **Panasonic Auto** chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending how dark the picture is.

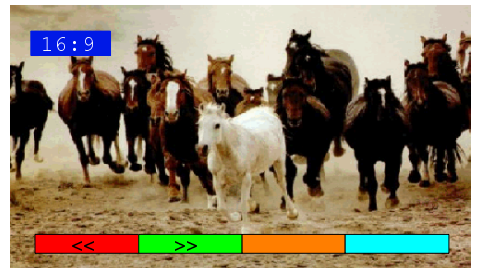
Equally, you may prefer to select one of the other modes available to view the picture.

Notes:

- In the RGB mode the 14:9 and Zoom 2 aspect modes are not available.
- If, in Panasonic Auto mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR (DVD/R) then it is possible that the tracking control of your VCR (DVD/R) requires adjustment (your VCR (DVD/R) instruction book will contain adjustment details).
- 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.

16:9 (Full)

16:9 (Full) will display the picture at its maximum size but with slight elongation for 4:3 signal. If 16:9 signal is received then picture is displayed correctly realistic.

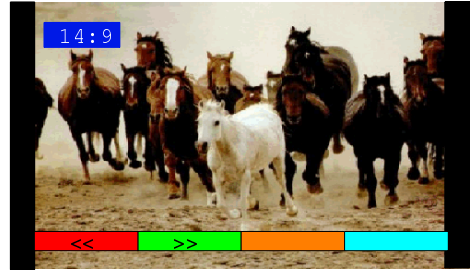


16:9 (Full)

ASPECT CONTROLS

14:9

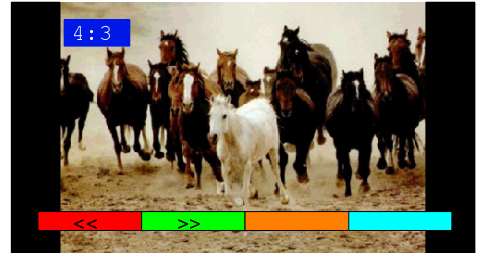
14:9 will display the picture at its maximum size without any elongation.



14:9

4:3

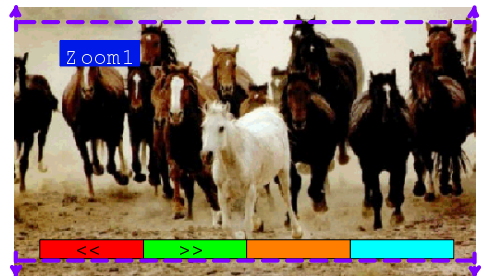
4:3 will display a 4:3 picture at its standard 4:3 size without any elongation.



4:3

Zoom 1

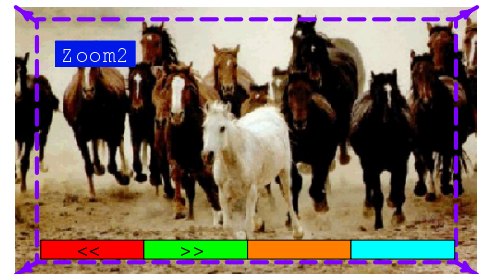
Zoom 1 mode magnifies vertical size of the picture.



Zoom 1

Zoom 2

Zoom 2 mode magnifies vertical and horizontal size of the picture.



Zoom 2

MAIN MENU

Open the Main menu



Move to your choice



Increase or decrease levels or set options



Press the N button to exit the Main menu



Contrast

Brightness

Colour

Sharpness

Tint

The Contrast, Brightness, Colour and Sharpness levels can be adjusted to suit your own preferences.

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.

Colour balance



The Colour balance setting allows you to set the overall colour tone of the picture.

P-NR



P-NR will automatically reduce unwanted picture noise.

AI



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

Sound menu

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

Setup menu

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

Main menu

| | |
|-----------------|--------|
| Contrast | |
| Brightness | |
| Colour | |
| Sharpness | |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | |
| Setup menu | |



Main menu

| | |
|------------------|--------|
| Contrast | |
| Brightness | |
| Colour | |
| Sharpness | |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | |
| Setup menu | |

Sharpness



SOUND MENU

Open the Main menu



Move to Sound menu



Access Sound menu



Move to your choice



Increase or decrease levels or set options



Press the N button to exit the Sound menu



Main menu

| | |
|-------------------|--------|
| Contrast | _____ |
| Brightness | _____ |
| Colour | _____ |
| Sharpness | _____ |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | Access |
| Setup menu | |

Volume

The Volume adjustment sets the overall output volume.

Bass

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

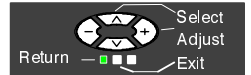
Treble

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 the speakers will suit your listening position.

(This function will only operate with the Surround feature switched Off - see page 38).



Sound menu

| | |
|------------------|-------|
| Volume | _____ |
| Bass | _____ |
| Treble | _____ |
| Balance | _____ |
| Headphone volume | _____ |
| Subwoofer | Low |
| NICAM | On |
| Mode | Music |
| Digital audio → | Off |
| Surround menu | |



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

Subwoofer

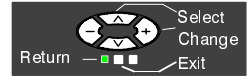


Choose from LOW, NORMAL and FULL. Low minimises subwoofer output, NORMAL provides a mid-level bass output and FULL provides an enhanced bass effect.

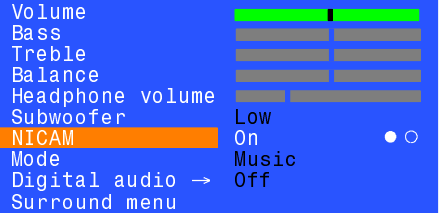
NICAM



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.



Sound menu



Mode



This function will only operate with the Surround feature switched Off (see page 38). The sound can be improved when watching Music or Speech mode by selecting the appropriate function.



Sound menu



Digital audio



If you do not have any digital audio input connected to AV1, AV2 or AV3, set to Off. If you do have a digital audio input connected to the AV1, AV2Scart or AV3 socket from external equipment such as a DVD player, Digital Audio lets you turn off the sound input from the respective socket. Sound is then provided via the shared optical/coaxial digital audio input. (eg: if you have a DVD player connected to the AV1 socket, with a coaxial or an optical cable connected to provide digital audio input, select AV1). See pages 47 to 49 for connection details.

Surround menu

Leads to the Surround menu for Dolby Pro Logic and simulated modes of operation, as described on page 38.

SETUP MENU

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

Open the Main menu

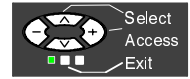
Move to Setup menu

Access Setup menu

Move to your choice

Increase or decrease levels, set options or access further menus

Press the N button to exit the Setup menu



Main menu

| | |
|----------------|--------|
| Contrast | _____ |
| Brightness | _____ |
| Colour | _____ |
| Sharpness | _____ |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | |
| Setup menu | Access |

AV2 out



Offers 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** or **Monitor** – the picture displayed on screen.

Teletext



The Teletext option allows you to choose between FASTEXT or List mode. See page 44.

Off timer



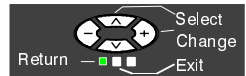
Off timer will switch the TV off within a preset time which you can choose from between 0 to 90 minutes in 15 minute intervals.

Tuning menu

The Tuning menu provides an entry to many other features including Programme edit and Auto setup. See page 24.

Volume correc.

Volume correction (in AV mode only) allows you to adjust the volume level of individual stations.



Setup menu

| | | |
|-------------|---------|-----|
| AV2 out | Monitor | |
| Teletext | List | ○ ● |
| Off timer | Off | |
| Tuning menu | | |



Setup menu

| | | |
|-------------|---------|-----|
| AV2 out | Monitor | |
| Teletext | FASTEXT | ● ○ |
| Off timer | Off | |
| Tuning menu | | |

TUNING MENU - overview

Open the Main menu

MENU



Move to Setup menu



Access Setup menu



Move to Tuning menu



Access Tuning menu



Move to your choice



Increase or decrease levels, set options or access further menus



Press the N button to exit

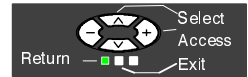


Main menu

| | |
|-------------------|---------------|
| Contrast | _____ |
| Brightness | _____ |
| Colour | _____ |
| Sharpness | _____ |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | |
| Setup menu | Access |

Programme edit

Accessing the Programme edit menu will allow stations to be moved, added, deleted, named or locked. See page 25.



Auto setup

The Auto setup menu allows you to automatically retune the TV. See page 29.

Setup menu

| | |
|--------------------|---------------|
| AV2 out | Monitor |
| Teletext | FASTEXT |
| Off timer | Off |
| Tuning menu | Access |

Manual tuning

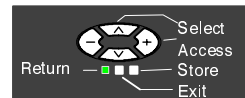
The Manual tuning menu allows individual programme positions to be tuned manually. See page 30.

Decoder (AV2)



This option is used when a decoder is connected via AV2. Set to On if a scrambled signal is to be processed by the decoder. Set to Off after use.

1
CH44



Tuning menu

| | |
|-----------------------|---------------|
| Programme edit | Access |
| Auto setup | |
| Manual tuning | |
| Decoder (AV2) | Off |
| Shipping condition | |
| Owner ID | |












Shipping condition

Allows you to clear all tuning information and reset all control levels back to factory settings. See page 31.





Owner ID

Allows you to enter a security code and address information. See page 32.

The Programme edit menu allows you to edit the programme position settings

- Open the Main menu 
- Move to Setup menu 
- Access Setup menu 
- Move to Tuning menu 
- Access Tuning menu 
- Move to Programme edit menu 
- Access Programme edit menu 
- Make required changes (see sections below) 
- 
- Press TV/AV button to store changes 
- If you have finished in the Programme edit menu, press the N button to exit 

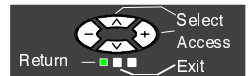
To delete an unwanted programme position

- Ensure that the cursor is in the Prog. Column 
- Choose the programme position 
- Press the Red button on remote control 
- Press the Red button again to confirm 



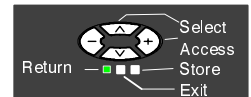
Main menu

| | |
|-------------------|--------|
| Contrast | _____ |
| Brightness | _____ |
| Colour | _____ |
| Sharpness | _____ |
| Colour balance | Normal |
| P-NR | Off |
| AI | On |
| Sound menu | |
| Setup menu | Access |



Setup menu

| | |
|--------------------|---------|
| AV2 out | Monitor |
| Teletext | FASTEXT |
| Off timer | Off |
| Tuning menu | Access |



1
CH44

Tuning menu

| | |
|-----------------------|--------|
| Programme edit | Access |
| Auto setup | |
| Manual tuning | |
| Decoder (AV2) | Off |
| Shipping condition | |
| Owner ID | |



Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | CH41 | ITV | Off |
| 4: | - | - | Off |
| 5: | - | - | Off |

Delete **Add** **Move** **TV > VCR**

TUNING MENU - PROGRAMME EDIT

To add a programme position

Choose the programme position where the new programme is to be inserted



Press the Green button



Press the Green button again to confirm



This blank programme can then be tuned (see page 30), named (see page 27) or locked (see page 27).

Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | CH41 | ITV | Off |
| 4: | - | - | Off |
| 5: | - | - | Off |

Delete Add Move TV > VCR



Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | CH41 | ITV | Off |
| 4: | - | - | Off |
| 5: | - | - | Off |

Delete Add Move TV > VCR



To move a programme to another position

Choose the programme position to be moved



Press the Yellow button on remote control



Choose new position



Press the Yellow button again to confirm



Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | CH41 | ITV | Off |
| 4: | - | - | Off |
| 5: | - | - | Off |

Delete Add Move TV > VCR

To rename a programme position

Choose the programme position



Move to the Name column



Choose the new character



Move to the next character position



Continue until renaming is done



Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | - | - | Off |
| 4: | CH54 | CH4 | Off |
| 5: | CH41 | ITV | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| + | - | . | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

To lock a programme position to prevent access

Choose the programme position



Move to the Lock column

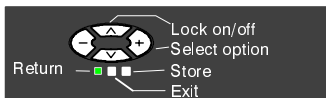


Choose between Lock On or Lock Off



Note :

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



Programme edit

| Prog. | Chan. | Name | Lock |
|-------|-------|------|------|
| 1: | CH44 | BBC1 | Off |
| 2: | CH51 | BBC2 | Off |
| 3: | - | - | Off |
| 4: | CH54 | CH4 | Off |
| 5: | CH41 | ITV | Off |

To copy programme information to a compatible VCR (DVD/R) connected to AV2

Move to the Prog. column



Press the Blue button on the remote control.



Programme data will now be sent to the VCR (DVD/R). This might take a while, depending on the number of stations stored. If the message "Unable to download, check your VCR (DVD/R)" appears on the screen, the television is unable to send programme information to the VCR (DVD/R). See the VCR (DVD/R) handbook for further information.

TV>VCR IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

The programme table allows you easy to select tuned programme positions.

Press STATUS button



Use colour buttons to select desirable programme table



You can scroll within the programme tables by using red and green buttons



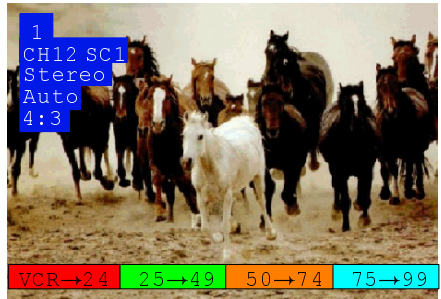
Select the chosen programme position by arrows



Confirm the programme position by the blue button.



Press STATUS button again to delete the programme number from the screen.



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



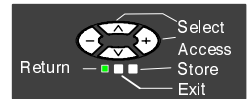
Setup menu

| | |
|--------------------|---------------|
| AV2 out | Monitor |
| Teletext | FASTEXT |
| Off timer | Off |
| Tuning menu | Access |

Access Setup menu



1
CH44



Move to Tuning menu



Tuning menu

| | |
|--------------------|---------------|
| Programme edit | |
| Auto setup | Access |
| Manual tuning | |
| Decoder (AV2) | Off |
| Shipping condition | |
| Owner ID | |

Access Tuning menu



Move to Auto setup



Access Auto setup



Press TV/AV to start Auto setup



WARNING

All current tuning data will be erased

| | |
|-------|-------------------------|
| TV/AV | : Start Auto setup |
| N | : To exit |
| MENU | : Return to tuning menu |

The TV will search for, locate and sort into order your local stations. If a compatible VCR (DVD/R) is connected via the AV2 socket, programme data will be sent to the VCR (DVD/R) via Q-Link (see page 34)

CH47

AUTO SETUP IN PROGRESS
SEARCHING : PLEASE WAIT

Stored CH47 BBC1

21 68

MENU : Return to tuning menu
N : To exit

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

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 Tuning menu



Access Tuning menu



Move to Manual tuning



Access Manual tuning



Select the programme position to be tuned



Press repeatedly until required station is found



When the desired station is found, press TV/AV to store. The programme position will flash



Press the N button to exit



Manual tuning (Front panel)

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



Press the - or + button to access Tuning mode



Press the TV/AV button to move between "Change programme" and "Search"



Press the - or + button to change programme position or start search



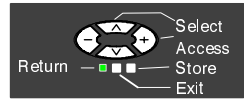
When the desired station is found, press STR to store. The programme position will flash



Repeat above procedure to tune additional programmes or press the F button to exit



1
CH44



Tuning menu

```

Programme edit
Auto setup
Manual tuning
Decoder (AV2) Access Off
Shipping condition
Owner ID
    
```

1
CH44



Manual tuning

21 68

Important note :

On passing channel 68, tuning will restart at channel 21.



1
CH44

Manual tuning (Front panel)

```

-, + : Search
TV/AV : Move cursor
STR : To store
F : To exit
    
```

21 68



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

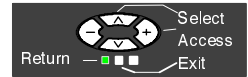
This is useful, for example, if you move to a different area when you will probably want the TV to tune itself to your new local stations.

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

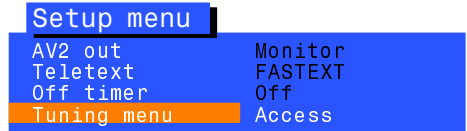
The **Shipping condition** menu will reset all data, clearing all tuning information and resetting all control levels back to factory settings.

You may need to adjust your VCR (DVD/R) or programme position '0' VCR (DVD/R) after operating the **Shipping condition** menu - refer to page 42.

Open the Main menu



Move to Setup menu



Access Setup menu



Move to Tuning menu



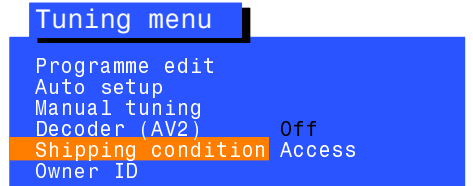
Access Tuning menu



Move to Shipping condition



Access Shipping condition



Press TV/AV to start



Press again, to confirm, each time that you are asked, "Are you sure ?"



Shipping condition

Switch TV off and wait for a few seconds.



Switch TV on again.

Auto setup will begin, stations will be located, sorted and stored ready for use.

See page 29

All tuning data will be erased

| | |
|-------|-------------------------|
| TV/AV | : Start |
| N | : To exit |
| MENU | : Return to tuning menu |

Owner I.D. allows you to enter a security code and address information so that in the unfortunate event of theft it will help the Police to determine the owner.

If the Owner I.D. information was not entered after Auto setup or it is necessary to alter some of the I.D. information it can be re-accessed via the Tuning menu.

Open the Main menu



Move to Setup menu



Access Setup menu



Move to Tuning menu



Access Tuning menu



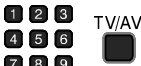
Move to Owner I.D.



Access Owner I.D.



If the Owner I.D. has previously been set, enter the **PIN NUMBER** (using 0 to 9 on the remote control) followed by **TV/AV** to proceed, this will take you to the **NAME** option



If no Owner I.D. has previously been set, enter the required 4 digit Owner I.D. **PIN NUMBER** (using 0 to 9 on the remote control)



If a 4 digit **PIN NUMBER** was entered above, you will be taken automatically to the **NAME** line



If not, move to the **NAME** line

Change character



Select character position



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



Press **TV/AV** to store the details. Press again, to confirm, when asked, "Are you sure?"



The Tuning menu will be displayed

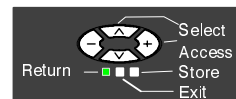
Press the **N** button to exit



Setup menu

| | |
|--------------------|---------|
| AV2 out | Monitor |
| Teletext | FASTEXT |
| Off timer | Off |
| Tuning menu | Access |

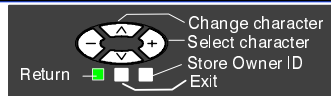
1
CH44



Tuning menu

| | |
|--------------------|--------|
| Programme edit | |
| Auto setup | |
| Manual tuning | |
| Decoder (AV2) | Off |
| Shipping condition | |
| Owner ID | Access |

You now have the opportunity to enter your details and help the police crack crime see instruction book



Owner ID

| | |
|--------------|------------|
| PIN NUMBER: | 1 2 3 4 |
| NAME: | * * * * * |
| HOUSE NO: | * * * * * |
| POSTCODE: | * * * * * |
| ABCDEFGHIJKL | MNOPQRST |
| UVWXYZ+-. | 0123456789 |

For future reference,
write your PIN Number here:

AV SELECT AND SETUP

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

Press the TV/AV button

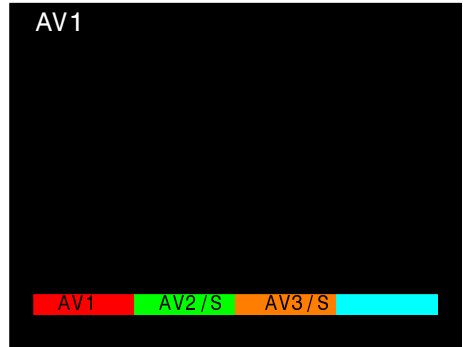


Press the appropriate coloured remote control button (whilst the options remain on screen)



The options will disappear

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



Setup menu

Open the Main menu

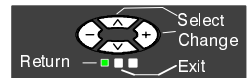
Move to Setup menu

Access Setup menu

Move to your choice

Access adjustments or options

Press the N button to exit



Setup menu



Notes:

- In the RGB mode the Colour, the Sharpness, the P-NR and AI controls are not available in the OSD.

Sound menu

Open the Main menu

Move to Sound menu

Access Sound menu

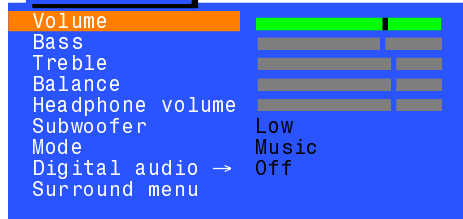
Move to your choice

Access adjustments or options

Press the N button to exit



Sound menu



Q-Link allows the television to communicate with a compatible VCR (DVD/R)

For Q-Link communication to work, the TV must be connected to a VCR (DVD/R) with the "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic" or "SMARTLINK" logo using a 'fully wired' Scart cable between the AV2 socket of the television and the appropriate socket on your VCR (DVD/R) .

For connection to the appropriate Scart socket on the VCR (DVD/R) , refer to the VCR (DVD/R) operating instruction book.

When using a "NEXTVIEWLINK" VCR (DVD/R) the main features possible are the following :

- *Preset Download* - Downloading of tuning information from the TV to the VCR (DVD/R) .
- *Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).

When using a "Q-Link" VCR (DVD/R) the main features possible are the following :

- *Preset Download* - Downloading of tuning information from the TV to the VCR (DVD/R) .
- *Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).
- *TV/VCR Auto Power On* - When the VCR (DVD/R) plays a tape the TV will automatically switch On and select the AV2 input.
- *VCR Auto Power Standby*- When the TV is switched into Standby, the VCR (DVD/R) will also switch into Standby.
- *VCR Image view* - When the VCR (DVD/R) plays a tape the TV will automatically switch On and select the AV2 input.

This TV will also communicate with other VCR (DVD/R) 's that bear the following logos :

- "DATA LOGIC" (a trademark of Metz Corporation).
- "Easy Link" (a trademark of Philips Corporation).
- "Megalogic" (a trademark of Grundig Corporation).
- "SMARTLINK" (a trademark of Sony Corporation).

These VCR (DVD/R) 's may support some or all of the above functions.
Refer to the VCR (DVD/R) operating instruction book.

Preset Download

This allows the programme order from the TV to be downloaded to the VCR (DVD/R), this helps to ensure that correct recordings are made, there are several ways to perform this operation :

1. During installation as explained in the 'Quick Start Guide' beginning on page 7.
2. When Auto setup is started from within the Tuning menu, see page 29.
3. When TV to VCR (DVD/R) manual download is started from within 'Programme edit', see page 27.
4. Preset download started from the VCR (DVD/R), refer to the VCR (DVD/R) operating instruction book.

Important Note:

Not all VCR (DVD/R)s support this type of data communication system. Some may support certain features, but not others. Refer to the VCR (DVD/R) operating instruction book.

If Q-Link is inoperative, first confirm that your Scart cable is a 'fully wired' type. Ask your dealer for further details.

What You See Is What You Record (DIRECT TV RECORDING)

This will allow the immediate recording of the program currently shown on the Television.

Press the DIRECT TV REC button on the remote control



If the VCR (DVD/R) is in Standby mode with a useable tape inserted, it will automatically switch on when you press the DIRECT TV REC button.

If a "Q-Link" VCR (DVD/R) is connected a message will appear on the TV screen showing what is being recorded, or if it is not possible to record.

Some "Q-Link" compatible VCR (DVD/R)'s will only display the message when on the VCR (DVD/R) programme position(0) or in AV mode. Refer to the VCR (DVD/R) operating instruction book.

VCR recording preset prog

Recording this programme now

VCR is recording the programme signal from its own tuner. If you wish you can switch off the TV and leave the VCR recording in the normal way.

VCR recording TV source

VCR is recording the programme signal from the television.

You must not change programme position or switch off the TV: if you do, the VCR will automatically stop recording and switch off.

No recording - TAPE IS PROTECTED

The write protection tab on the back of the cassette has been removed.

Examples of other messages that might be displayed are:

No recording - NO TAPE

No recording - ALREADY RECORDING!

No recording - VCR IS PLAYING

No recording - TAPE MAY BE DAMAGED

VCR Recording VCR external

No recording - NO SOURCE AVAILABLE

TV / VCR Auto Power On

(With a Panasonic Q-Link VCR (DVD/R) connected, this additional feature is available).

- If you insert a tape in the VCR (DVD/R) and press the Play button whilst the TV is in 'Standby' mode, the TV will automatically switch On and select the AV2 input so that you can view the tape.

Some other VCR (DVD/R)'s may support this feature. Refer to the VCR (DVD/R) operating instruction book.

VCR Auto Power Standby

(With a Panasonic Q-Link VCR (DVD/R) connected, this additional feature is available).

When the TV is switched into 'Standby' mode, the VCR (DVD/R) will also switch into 'Standby' mode if there is no tape in the VCR (DVD/R), or if there is a tape in and the VCR (DVD/R) is in 'Rewind' or 'Stop' mode (if the VCR (DVD/R) is rewinding a tape, it will not switch into 'Standby' mode until rewinding has finished).

Some other VCR (DVD/R)'s may support this feature. Refer to the VCR (DVD/R) operating instruction book.

VCR Image View On

(With a Panasonic Q-Link VCR (DVD/R) connected, this additional feature is available).

If the TV is in Standby mode and the VCR (DVD/R) sends a menu to be displayed on the TV screen (e.g. Main menu), the TV will automatically switch On and the menu will be displayed.

Some other VCR (DVD/R)'s may support this feature. Refer to the VCR (DVD/R) operating instruction book.

Stereo reproduction normally uses left and right speakers, but Dolby Digital and Dolby Pro Logic Surround go further, adding a centre and other channels so you are immersed in sound and special effects.

Dolby Digital

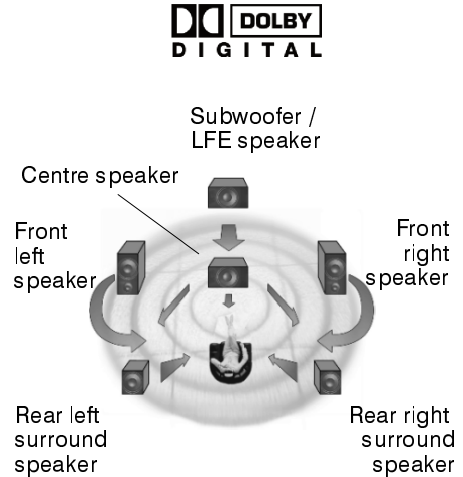
Dolby Digital splits soundtrack information into 6 separate channels of sound which are output through the speaker setup: five full range channels (left, centre, right, stereo left and right surround) and a '0.1' (ie: limited range) bass channel. This gives you superb sound quality from Dolby Digital encoded tracks when a compatible speaker system is connected to your TV.

Most dialogue comes from the centre channel, which enhances dialogue and focuses it so it seems to come from the action on screen. The separate rear left and right channels give a dramatic sense of space, with sounds travelling in all directions between front, centre and rear channel speakers (eg: a rocket going overhead starts behind you to the left and explodes in front of you to the right). The '0.1' Low Frequency Effects (LFE) channel gives impact to bass sounds and to special effects more felt than heard (eg: the thud of a dinosaur footfall or the rumble of thunder).

Dolby Digital has been developed to be backwardly compatible with Dolby Pro Logic and conventional stereo setups.

Note:

- External equipment is usually connected to the TV via one of the Scart sockets to provide pictures and sound (eg: a VCR player connected to AV2). To receive a Dolby Digital encoded soundtrack from compatible equipment (eg: a DVD player, a set top box), you will also need to connect an optical or coaxial cable to one of the TV's digital audio sockets. See pages 47 to 49 for connection details, also see the **Digital Audio** options in the **SOUND** menu, page 21.
- The subwoofer / LFE speaker on this model is internal.



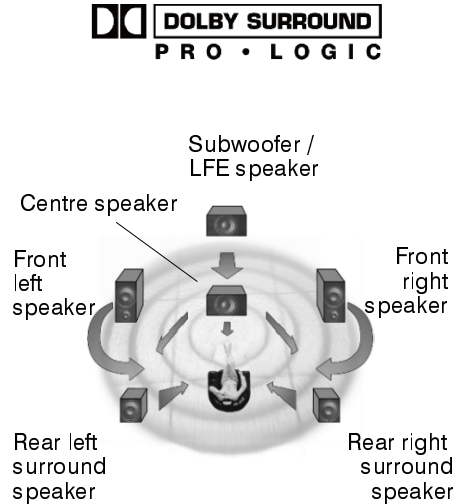
Dolby Pro Logic

Dolby Pro Logic Surround uses four channels of sound: left, right, centre and a mono rear channel, giving excellent reproduction of Pro Logic encoded tracks when a compatible speaker system is connected to your TV. Most dialogue comes from the centre channel, which enhances dialogue and focuses it so it seems to come from the action on screen. The rear channel is used to immerse you in atmosphere and special effects, the same output is sent to both rear speakers.

As with Dolby Digital, Pro Logic is backwardly compatible with a conventional stereo speaker setup.

Notes:

- To get Pro Logic information from Surround-encoded TV programmes, you must be able to receive stereo transmissions. If stereo transmissions are not transmitted in your area then the Pro Logic information will not be present on TV transmissions and Pro Logic decoding will only produce a centre channel output.
- In this DPL mode the internal subwoofer / LFE speaker can reproduce the bass channel (frequencies) decoded from the stereo signal.
- See pages 47 to 49 for connection details.



SURROUND MENU

Open the Main menu



Move to Sound menu



Access Sound menu



Move to Surround menu



Access Surround menu



Move to chosen menu option





Adjust chosen option or access chosen menu



Press the N button at any time to go back to watching TV



Pressing the Surround switch will switch the surround mode into 2 channel stereo only (and vice-versa).

When the Surround function is switched to the Off position, it will allow a Balance control and a Mode function as extra options in the sound menu.

If a Dolby Digital input is detected the **Surround menu** options instantly change – **Surround mode** is not available. Ensure that the **Digital Audio** option in the **SOUND** menu is set to the correct AV input (see page 21 for details). A message displayed in the centre of the screen shows if the signal is Dolby Digital, and gives a code indicating which channels are detected (see table above). Subwoofer output is not listed; if a subwoofer channel is detected then its contents are output. The subwoofer output level can be adjusted (or the subwoofer turned off) via the **Subwoofer** option in the **SOUND** menu (see page 21 for details).

| Code | Front outputs | | | Rear surround outputs | |
|------|------------------|-------|--------|-----------------------|-------------|
| | Left | Right | Centre | Left | Right |
| 1+1 | Dual mono output | | | | |
| 1/0 | Mono output | | | | |
| 2/0 | ✓ | ✓ | | | |
| 3/0 | ✓ | ✓ | ✓ | | |
| 2/1 | ✓ | ✓ | | | |
| 3/1 | ✓ | ✓ | ✓ | | |
| 2/2 | ✓ | ✓ | | | |
| 3/2 | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | | | Mono output | Mono output |

Volume The Volume adjustment sets the overall output volume.

Surround mode When a Dolby Digital input is not detected this option is shown. Choose between **Pro Logic** and **Simulated**. The mode chosen here dictates the next menu option.

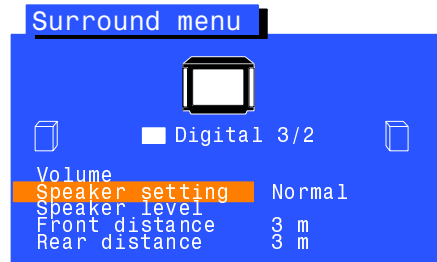
Speaker setting / Simulated setting If a Dolby Digital input is detected, this menu option is **Speaker setting** and if **Pro Logic** is selected in Surround mode, this menu option is **Pro Logic setting**, allowing selection of **Normal**, **Phantom** or **3 Stereo** modes, as described on page 40.

If **Simulated** is selected in **Surround mode**, this menu option is **Simulated setting**, allowing selection of **Disco**, **Movie** or **Stadium** modes, as described on page 40.

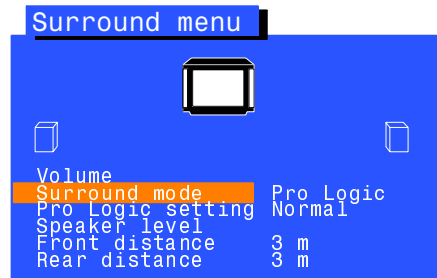
Speaker level Allows adjustment of the volume for each speaker, as described on page 40.

Front distance Allows setting of the distance from the listening position to the front speakers.

Rear distance Allows setting of the distance from the listening position to the rear speakers. If the rear surround speakers are closer to you than the centre speaker, you may hear dialogue “leakage” from the rear surround speakers. It may be necessary to reduce the volume of the rear speakers.



If a Dolby Digital input is detected, the **Surround menu** is as shown above (no **Surround mode** available).

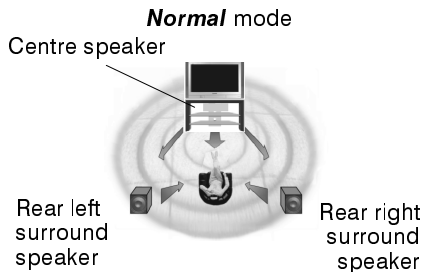


If no Dolby Digital input is detected, **Surround mode** appears as a menu option.

With a Dolby Digital input or if **Pro Logic** is selected in **Surround mode**, the following three modes of operation are available as the **Speaker setting: Normal, Phantom, 3 Stereo.**

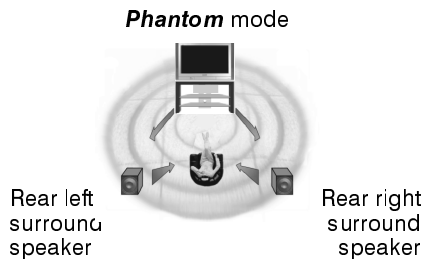
Normal

If external rear speakers and an external centre speaker are connected, use **Normal** mode. Left and right speaker information will be produced by the TV's internal left and right speakers. With a Dolby Digital 5.1 input, the subwoofer/LFE speaker information is produced by the TV's internal subwoofer.



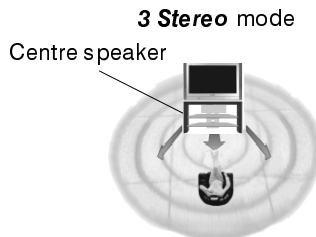
Phantom

If external centre speakers are not connected, use **Phantom** mode. Left, right, and centre information will now be produced by the TV speakers.



3 Stereo

This is the best mode to use if rear left and right speakers are not connected. When using this mode, the left, right and rear left and right surround information is produced by the TV's internal left and right speakers.



SIMULATED MODE

Simulated surround modes allow various types of surround effects to be produced by mimicking both the direct sound, as heard by the audience, and the sound reflected back from the surrounding walls e.g. ceiling and floor space in a space such as a disco. There are three different effects to choose from, each reflecting a different atmosphere:

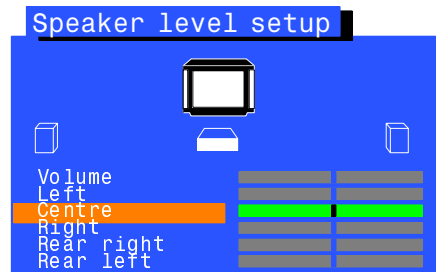
| Setting | Appropriate sources | Effect |
|---------|--|--------------------------------------|
| Disco | Disco, dance or jazz music | A crowded nightclub |
| Movie | All movies or music software recorded without Dolby Surround | Simulates a surround sound recording |
| Stadium | Any live sports occasion | A packed sports stadium |

SPEAKER LEVEL SETUP

The speaker output levels from the different options, eg: **Left**, **Centre**, **Right**, **Rear left** and **Rear right**, should be adjusted from your usual listening position, to obtain the best results. The level can be set using either the TV sound or the provided test signal.

Notes:

- The adjustments available will vary according to the mode chosen.
- If you have a Dolby Digital 5.1 input, and are using the internal subwoofer to produce the subwoofer / LFE information, you can change the subwoofer / LFE volume by altering the **Subwoofer** setting in the **SOUND** menu. See page 21.



**Speaker level setup – Pro Logic,
Normal mode**

VCR (DVD/R) AND SATELLITE RECEIVER INSTALLATION

Your new TV is supplied with programme position '0' set to receive an RF signal from your VCR (DVD/R), although a Scart connection is preferable if the VCR (DVD/R) is so equipped. However, if for some reason your VCR (DVD/R) is tuned to a different RF channel then you will not receive any picture or sound from your VCR (DVD/R) on programme position '0' of the TV. It will be necessary to either adjust the RF channel of your VCR (DVD/R) (some VCR (DVD/R)'s allow adjustment of their RF channel via their remote control unit) or to adjust the tuning of the TV's programme position '0' or both until it receives the RF output channel of your VCR (DVD/R). It is intended that this advice is used in conjunction with the instruction books for your additional equipment.

Use the AV1 Scart terminal for a VCR (DVD/R).



Use the AV2S Scart terminal for an S-Video VCR (DVD/R).

Use the AV2S Scart terminal for a Q-Link, NEXTVIEWLINK or compatible VCR (DVD/R).

To tune your TV to the VCR (DVD/R)

Switch on the VCR (DVD/R), insert and play a pre-recorded tape with known content

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

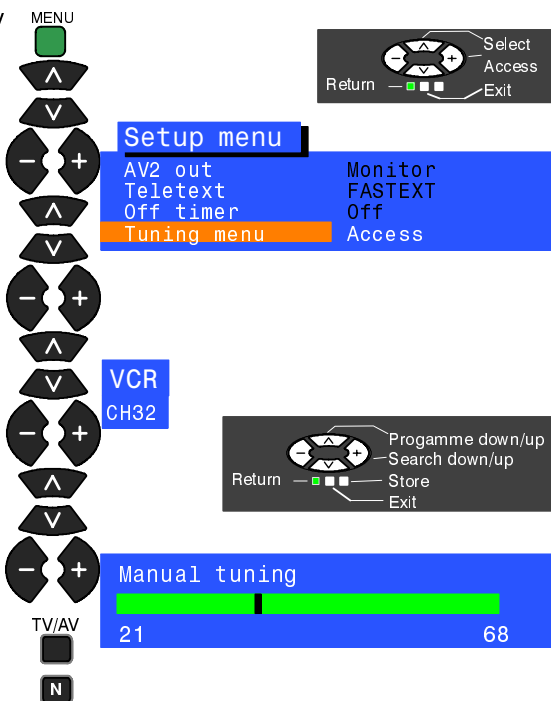
Select programme position '0'
VCR (DVD/R)

Start searching for the VCR (DVD/R)
playback of the known content tape

When the VCR (DVD/R) playback is found,
press TV/AV to store

Press the N button to exit

See below for installation of VCR (DVD/R)
and Satellite Receiver












Notes :

- If picture patterning occurs on programme position '0' it may be necessary to adjust the RF output channel of the VCR (DVD/R), refer to the VCR (DVD/R) instruction book.
- If a Satellite Receiver and a VCR (DVD/R) are going to be used with RF cable connections it is important to avoid both units being set on the same channel. Refer to the Satellite Receiver and VCR (DVD/R) instruction books for precise tuning information.

VCR (DVD/R) / DVD OPERATION

The Remote Control is capable of operating some functions of selected Panasonic VCRs and DVD (Digital Versatile Disc) equipment. Some VCR and DVD/R equipment have different functions, so to ensure compatibility please refer to the equipment's instruction book or consult your dealer for details.

| | |
|---|--|
|  | Standby Press to switch the VCR or DVD/R to standby mode. Press again to switch back on. |
|  | VCR / DVD switch Use this switch to select whether controls operate DVD/R equipment or your VCR. |
|  | Play Press to playback the tape or DVD. |
|  | Stop Press to stop the tape or DVD. |
|  | Skip / Fast Forward / Cue VCR: Press to fast forward the tape. In Play mode, press to view the picture rapidly forward (Cue). DVD/R: Press once to skip to the next track. In play mode press and hold to view the picture rapidly forward. |
|  | Skip / Rewind / Review VCR: Press to rewind the tape. In Play mode, press to view the picture rapidly in reverse (Review). DVD/R: Press once to skip to the previous track. In play mode press and hold to view the picture rapidly in reverse. |
|  | Pause / Still Press in playback mode, the picture will pause. Press again to restart play. (VCR (DVD/R) only) |
|  | Programme Up / Down Press to increase or decrease the VCR (DVD/R) programme position by one. |
|  | Record Press this button to start recording. (VCR (DVD/R) only) |

TELETEXT OPERATION

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- Pressing twice the **MENU** button whilst in Teletext operation will display the contrast function with a cyan bar, press ◀ ▶ to alter the setting as required.
Pressing once the **MENU** button whilst in Teletext operation will display special function options at the bottom of the screen.
- 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 on the subjects shown.

TV/TEXT



TV / Teletext mode

Press the **TV/TEXT** button.
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 buttons to increase or decrease the page number by one.
b. By entering the page number, using 0 -9 on the remote control.

MENU



Full / Top / Bottom

Press the **MENU** button to display special functions, followed by the **Green** button.
Press the **Green** button again to expand the BOTTOM half.
Press again to return to normal (FULL) size.

MENU



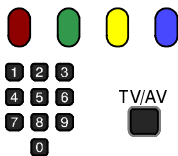
Reveal

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



Red / Green / Yellow / Blue buttons

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



List Store

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

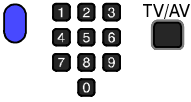
HOLD



Hold

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

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



Favourite Page (F.P.)

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

Press the **Blue** button, select the page number, then press and hold the **TV/AV** button.

The page number is now stored.

F.P.



Press **F.P.** to recall this page.

Update Display

Press the **MENU** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page.

When found, the screen will display the page number at the top left.

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

Press **TV/TEXT** again to return to normal TV operation.

MENU



News Flash

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

Press the **Yellow** button to display the News Flash

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

Update

Press **MENU, Yellow** to see the update of information on certain pages.

When an update is received, the page number will be displayed at the top left of the screen.

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

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

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

MENU



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 buttons 0 - 9.

Press the **MENU** button followed by the **Blue** button; T**** will be displayed at the top right of the screen.

Enter desired sub page number before the T**** 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 the **Yellow** button to view a normal TV programme.
(Press **MENU, Yellow** in LIST mode).

When the page is available, press the **Yellow** button to view the page.

To clear the page perform one of the following :

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

INDEX



Index

When in FASTEXT operation

Press **INDEX** 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.

AUDIO / VIDEO CONNECTIONS

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

Once your equipment is connected, use the following procedure to view the input:
Press the **TV/AV** button.



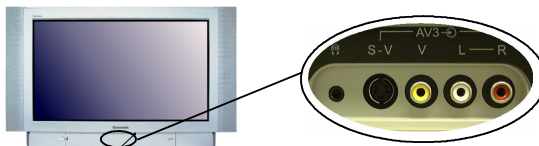
Press the relevant on screen selector key to select the AV source you wish to view. To select the S-VHS inputs on **AV2 (AV2/S)**, press the relevant coloured button to select either **AV2**, then press again to select the S-VHS input (for example: press the green button to select **AV2** if you have connected a VCR to the **AV2** Scart socket; if you have a S-VHS VCR, you should press the green button again to select **AV2/S**. Pressing the green button again switches back to **AV2**).

The on screen selector keys that appear clear after a few seconds. If you want to select an input when the keys are not shown, press the **TV/AV** key once more and the keys will reappear.

Notes:

- You can also select an AV source using the **TV/AV** button on the control panel on the front of your TV. Press the **TV/AV** button repeatedly until you reach the AV source you wish to view.
- When in **AV mode** a reduced number of options are available in the **SOUND** and **SETUP** menus (eg: in the Setup menu there is no **Tuning menu** option).

Front sockets



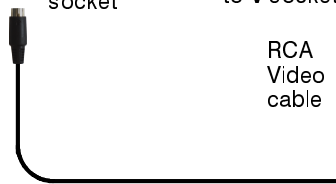
Press and release to open

Output from **Headphones** socket
3.5mm Stereo Plug



STEREO HEADPHONES
with 3.5mm Plug

Video input to **S-Video** socket
s-v



Video input to **V** socket

RCA
Video cable



Audio input to **L / R** sockets

2 x RCA
Audio cables



CAMCORDER

Notes:

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

■ Scart and S-Video socket information

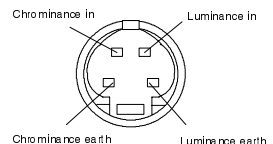
AV1 Scart socket

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

AV2 Scart socket (S-Video, Q-Link)

| | | | | |
|------------------|----|--|----|-----------------|
| 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 | Q-Link data |
| -- | 7 | | 6 | Status CVBS |
| Earth | 5 | | 4 | Audio in (L) |
| Audio out (L) | 3 | | 2 | Audio earth |
| Audio out (R) | 1 | | | Audio in (R) |

S-Video 4 pin socket

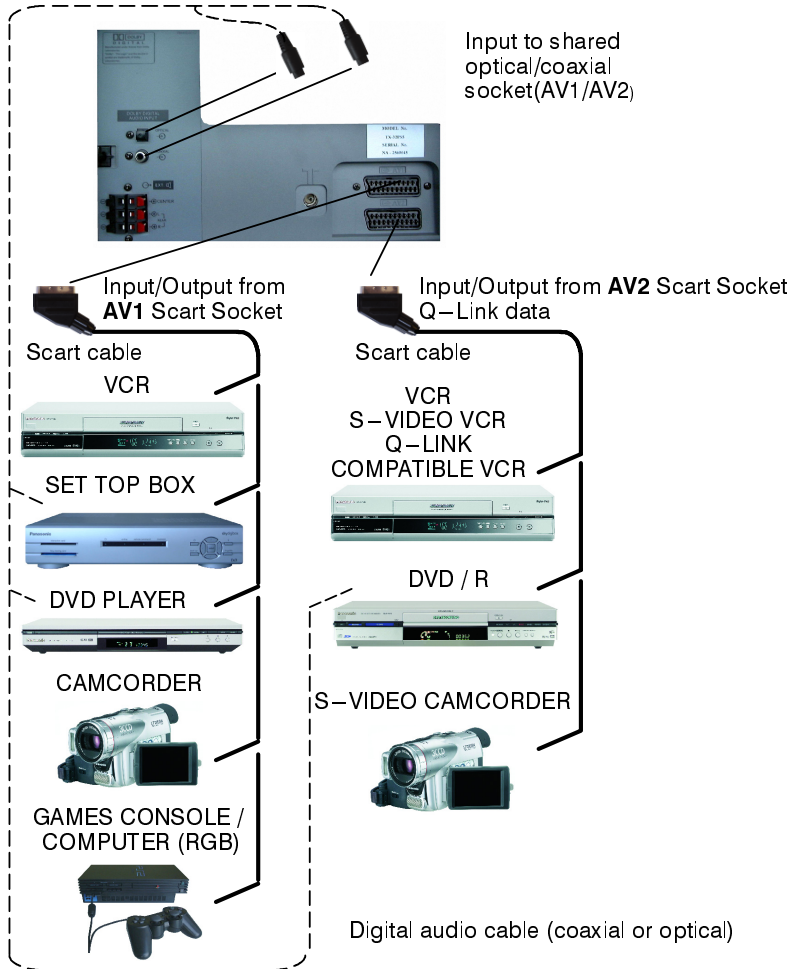


Suitable inputs for **AV1** include RGB (Red/Green/Blue)

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

Rear sockets

Additional equipment can be connected at the rear of the TV via two 21 pin Scart sockets, AV1 / AV2(S) and via one digital audio socket (shared optical/coaxial input for AV1, AV2).



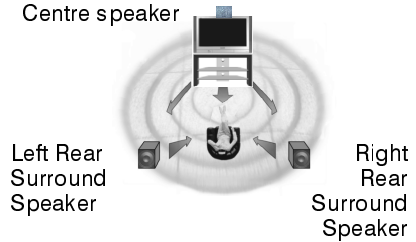
Notes:

- Additional 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 socket can also be used as an output to Audio/Video equipment; see page 23 for details.
- For Scart socket wiring information see page 47.
- When connecting an optical cable to an optical socket, remove the socket cover before inserting the cable plug.
- We recommend that only one Digital Audio Input (either coaxial or optical) be connected to the shared optical/coaxial input of the TV at a time. If there is a coaxial and an optical input connected at the same time, the coaxial input will override the optical input – the sound from the coaxial input will be heard.

AUDIO / VIDEO CONNECTIONS

The external speaker connections (**EXT**) on the rear of the TV allow you to create your own system using external speakers. Connections are provided for a centre speaker and rear left and right surround speakers.

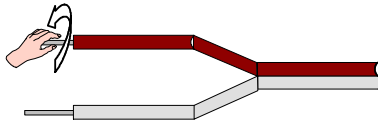
You may decide, for example, to connect the external rear left and right surround speakers and centre speaker provided, as shown here:



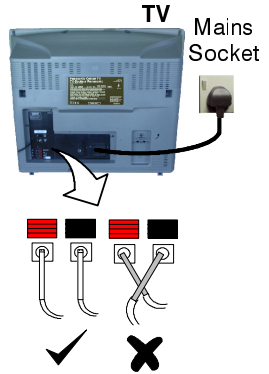
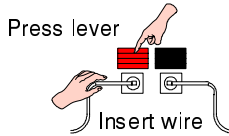
Connecting external speakers

The TV must be switched **Off** before connecting external equipment.

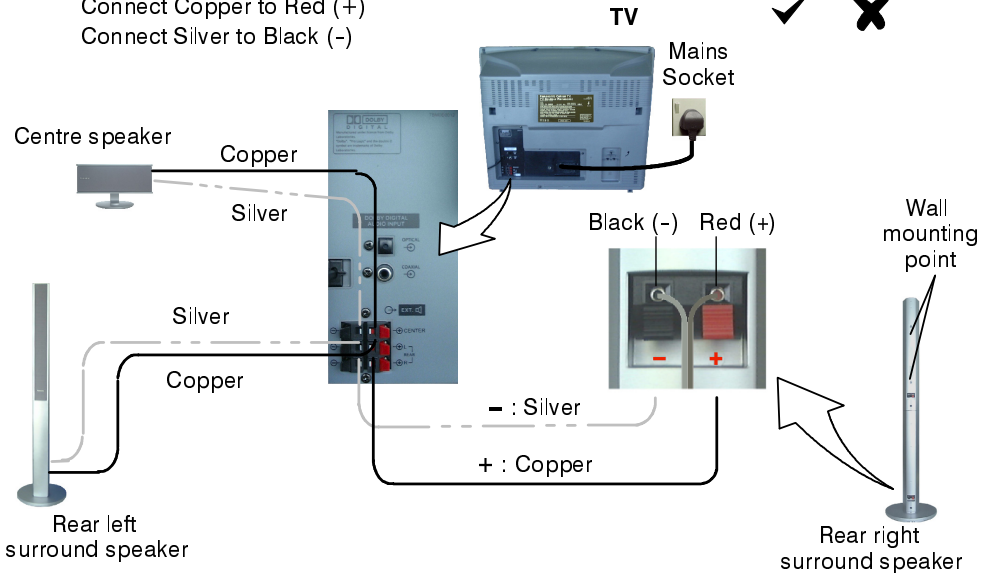
- 1 Twist the wire ends before inserting.





- 2 Insert into terminals. Ensure that bare speaker wires are not touching.

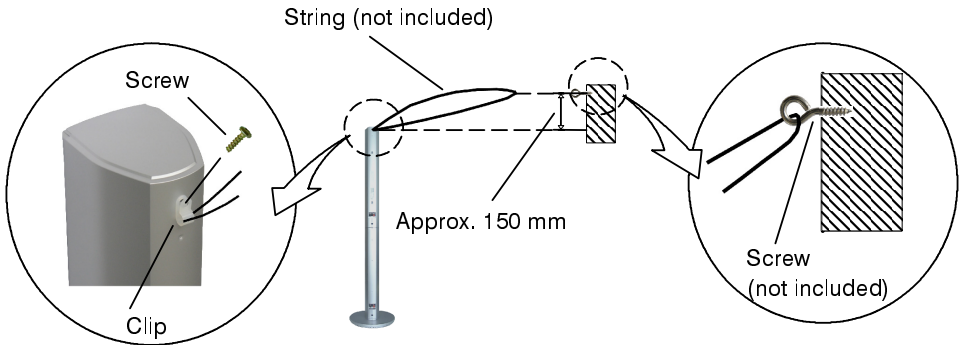


Connect Copper to Red (+)
Connect Silver to Black (-)



Preventing the speakers from falling over

Accessories: 2 x Screw 10mm  2 Clips 

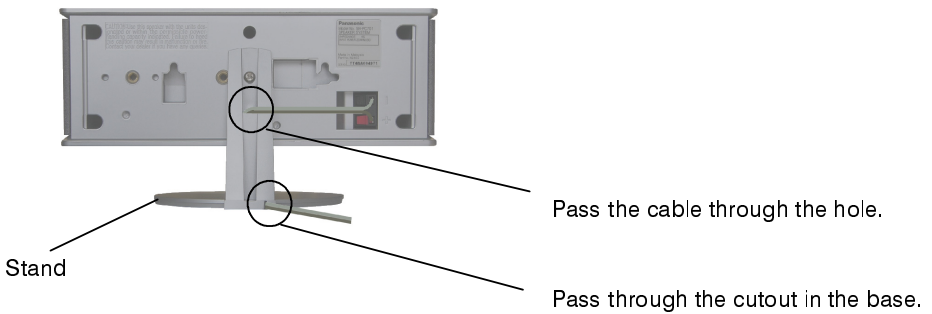


Note:

- Consult a qualified building contractor when attaching the speakers to wall. Improper attachment may result in damage to the wall and speakers.

Keeping the cables out of the way

Pass the cables through the holes in the stand to keep them out of the way.



Attaching to a wall (Center speaker only)

Note:

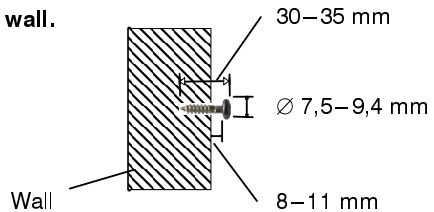
- The wall or pillar on which the speakers are to be attached should be capable of supporting 10 kg per screw.

1 Remove the stand.
BEFORE REMOVING THE STAND

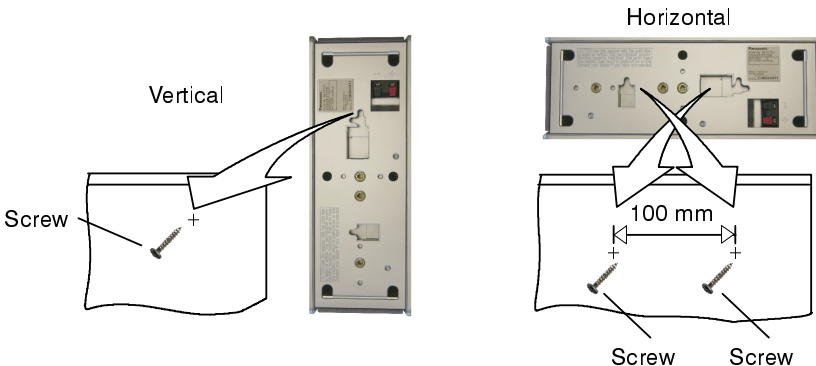
- Take the speaker cable out of the stand's hole if it is threaded through.
- Lay the speaker on a soft cloth.


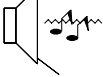



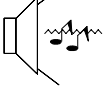







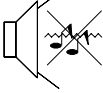



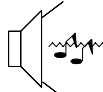


2 Screw a screw (not included) into the wall.



3 Fit the speaker securely into the screw with the hole or holes.



| 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 Switch on P-NR in Picture menu to reduce picture noise. |
|  Normal Picture |  No Sound | Volume level Sound mute switched on |
|  No Picture |  No Sound | TV set to AV mode Not plugged into 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. If picture is also tilted, use Geomagnetic Correction feature (see Quick Start Guide, page 16) |
|  Normal Picture |  Weak or distorted sound | Sound reception may have deteriorated. Switch NICAM setting (Sound menu) to Off until reception improves. |

■ Service

Before requesting service, please refer to the troubleshooting 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.

■ 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) |
| Headphone | |
| volume | Volume cor. (in AV mode only) |
| AV Position | Contrast |
| Volume | Sharpness |
| NICAM | AV2 out |
| Bass | Standby |
| Treble | Artificial Intelligence (AI) |
| Balance | Colour |
| Colour Balance | Brightness |
| Status | P-NR |
| Teletext mode | Decoder (AV2) |
| Surround mode | Speaker level setting |
| Speaker | |
| distance | Geomagnetic correction |

■ 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.

SPECIFICATIONS

| | | TX-32PS500 | TX-28PS500 |
|---|---|---|-------------------|
| Power Source | | 220 - 240V 50Hz A.C. | |
| Power Consumption | | 107 W | 101 W |
| Standby Consumption | | 1,4 W | 1,4 W |
| Picture Tube Visible Diagonal | | 76 cm | 66 cm |
| Audio Output Music Power | | Front Left / Right 20 W x 2, Surround 20W x 2, External Centre 20W, 8 Ω impedance Subwoofer 24W, 6 Ω impedance | |
| Dimensions | H | 567 mm | 510 mm |
| | W | 902 mm | 805 mm |
| | D | 551 mm | 533 mm |
| Weight | | 58 kg | 45,5 kg |
| Receiving Systems/ Band name | | PAL I UHF E21 -68 PAL 525/60 Playback of NTSC tape from some PAL Video recorders (VCR (DVD/R)) M.NTSC Playback from NTSC 4,43MHz devices NTSC (AV input only) Playback from NTSC devices | |
| Number of programme positions | | 99+ VCR | |
| Aerial - Rear | | UHF | |
| Headphones - Front | | 3.5mm, 8 Ω impedance | |
| AV - Rear | | AV1 - 21 pin terminal - Audio / Video in / out, RGB in AV2 - 21 pin terminal - Audio / Video in/out, S-Video in, Q-Link DIGITAL AUDIO INPUTS - Coaxial / Optical in | |
| Dolby Surround Out - Rear | | External Speaker connections - 2 x Rear, 1 x Centre | |
| AV - Front | | AV3 - S-Video in, RCA Audio / Video in | |

Specifications are subject to change without notice. Weight and dimensions shown are approximate. Dolby, Pro Logic and the  are trademarks of Dolby Laboratories.

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Panasonic

Sales and Support Information

Customer Care Centre

- For UK customers: **08705 357357**.
- For Republic of Ireland customers: **01 289 8333**.
- Visit our website for product information
www.panasonic.co.uk.
- E-mail: **customer.care@panasonic.co.uk**.

Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday–Friday 9:00am–5:30pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at **www.panasonic.co.uk**.
- Most major credit and debit cards accepted.
- All enquiries, transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.