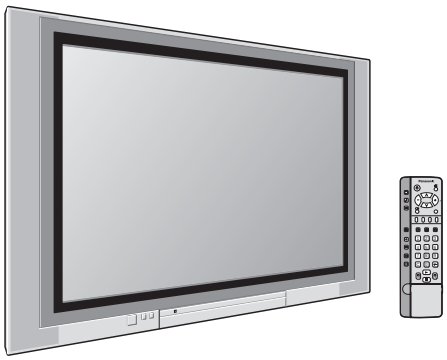

Panasonic®

Progressive Plasma Television
Operating Instructions

Model No. **TH-37PA20**
TH-42PA20

Pedestal stand shown above is optional extra.

OWNER I.D.

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

English

TQBC0627-2

Dear Panasonic Customer

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

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
- 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.

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Trademark Credits
- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Computer, USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.

Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.

CAUTION:

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

Important Safety Notice

WARNING

1) To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.
Do not place containers with water (flower vase, cups, cosmetics, etc.) above the set. (including on shelves above, etc.)

2) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

3) Do not remove the earthing pin on the mains plug. This apparatus is equipped with a three pin earthing-type mains plug. This plug will only fit an earthing-type mains outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the earthing plug.

CAUTION

This appliance is intended for use in environments which are relatively free of electromagnetic fields.
Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear.
To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.

To prevent electric shock, ensure the grounding pin on the mains plug is securely connected.

IMPORTANT: THE MOULDED PLUG

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.

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

If the plug contains 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
A replacement fuse cover can be purchased from your local Panasonic Dealer.

If the fitted moulded plug is unsuitable for the socket outlet in your home, then the fuse shall be removed and the plug cut off and disposed of safety. There is a 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.

WARNING: — THIS APPARATUS MUST BE EARTHED.

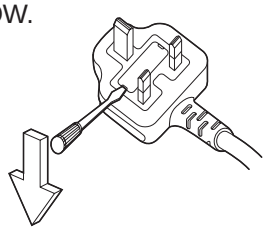
IMPORTANT: — The wires in this mains lead are coloured in accordance with the following code: —
Green-and-Yellow: Earth Blue: Neutral Brown: Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.



How to replace the fuse. Open the fuse compartment with a screwdriver and replace the fuse.

Safety Precautions

WARNING

Setup

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

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

- Pedestal TY-ST42PA20
- Display stand TY-S42PA20W (TH-42PA20), TY-S37PA20W (TH-37PA20)
- Wall-hanging bracket (vertical) TY-WK42PV2W

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

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

- The Plasma TV may fall off or tip over.

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

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

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

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

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

When using the Plasma TV

The Plasma TV is designed to operate on 220 - 240 V AC, 50/60 Hz.
Do not cover the ventilation holes.

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

Do not stick any foreign objects into the Plasma TV.

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

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

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

Securely insert the mains plug as far as it will go.

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

Do not handle the mains plug with wet hands.

- Doing so may cause electric shocks.

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

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

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

If problems occur during use

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

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

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

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

⚠ CAUTION

When using the Plasma TV

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

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

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

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

Disconnect the mains plug from the mains socket as a safety precaution before carrying out any cleaning.

- Electric shocks can result if this is not done.

Clean the mains lead regularly to prevent it becoming dusty.

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

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

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

Cleaning and maintenance

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

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

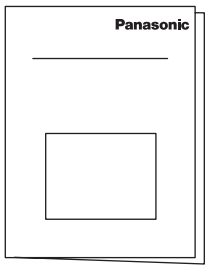
If the cabinet becomes dirty, wipe it with a soft, dry cloth.

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

Supplied Accessories

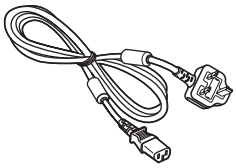
Check the accessories before installations.

- Operating Instruction book

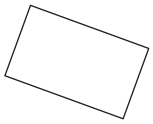


- Remote Control Transmitter (N2QAJB000081)

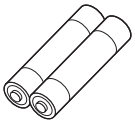
- Mains lead K2CT3DH00017



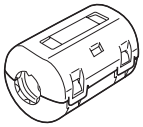
- Warranty Card



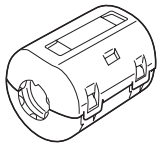
- Batteries for the Remote Control Transmitter (2 × R6 (UM3) size)



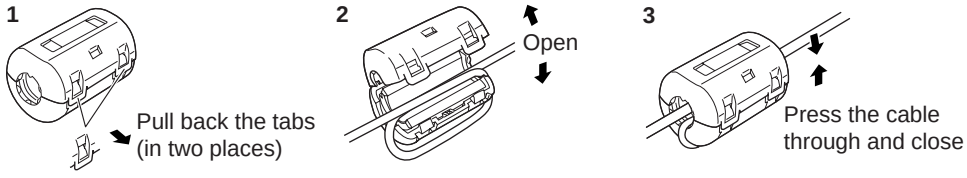
- Ferrite core J0KG00000018 × 5 (small size)



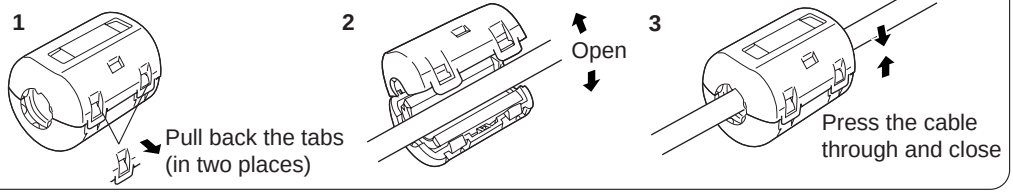
- Ferrite core J0KG00000054 × 3 (large size)



Installing the ferrite core (Small size)

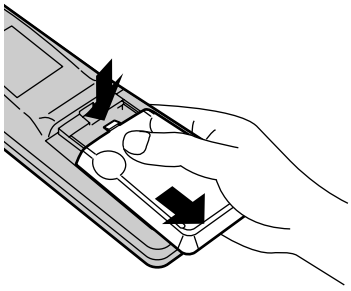


Installing the ferrite core (Large size)



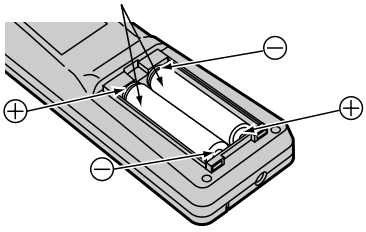
Fitting remote control batteries

1



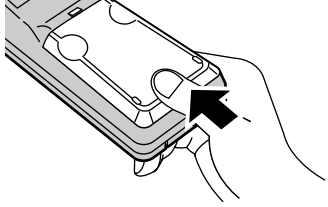
Slide off the battery cover

2 Two “R6 (UM3)” size



Insert batteries - note correct polarity (+ and -)

3



Replace the cover

- 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 or use rechargeable (Ni - Cad) batteries.

Quick start Guide

Choose Your Connection Type

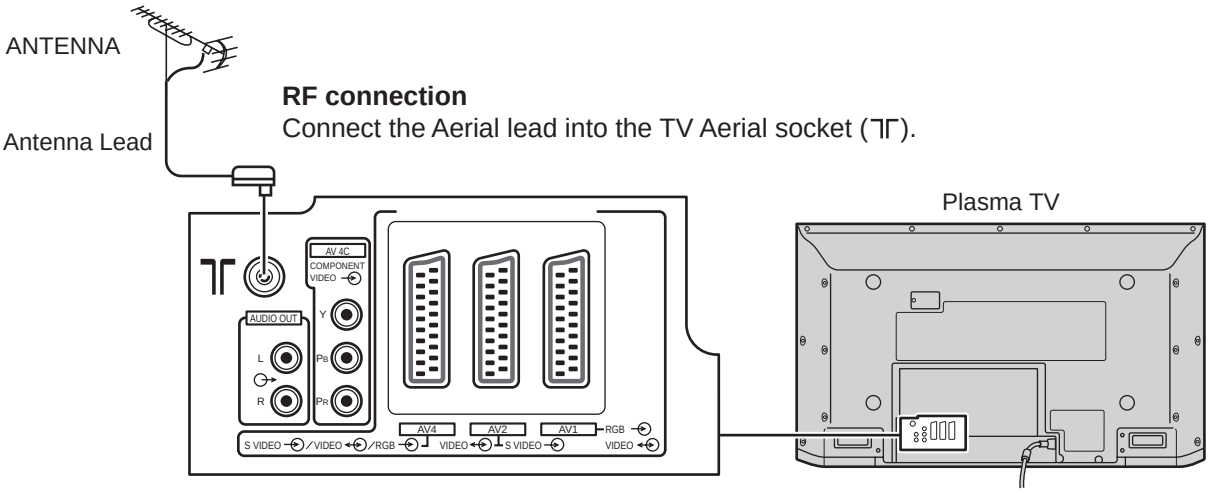
Connection and setting up options

- If connecting the TV using an RF cable only, see below.
- If connecting the TV using Scart and RF cables, see page 9.
- If connecting the TV to a Q-Link (or Q-Link compatible) VCR, see page 9.
- If connecting the TV to a Q-Link (or Q-Link compatible) VCR and a satellite receiver, see page 10.

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

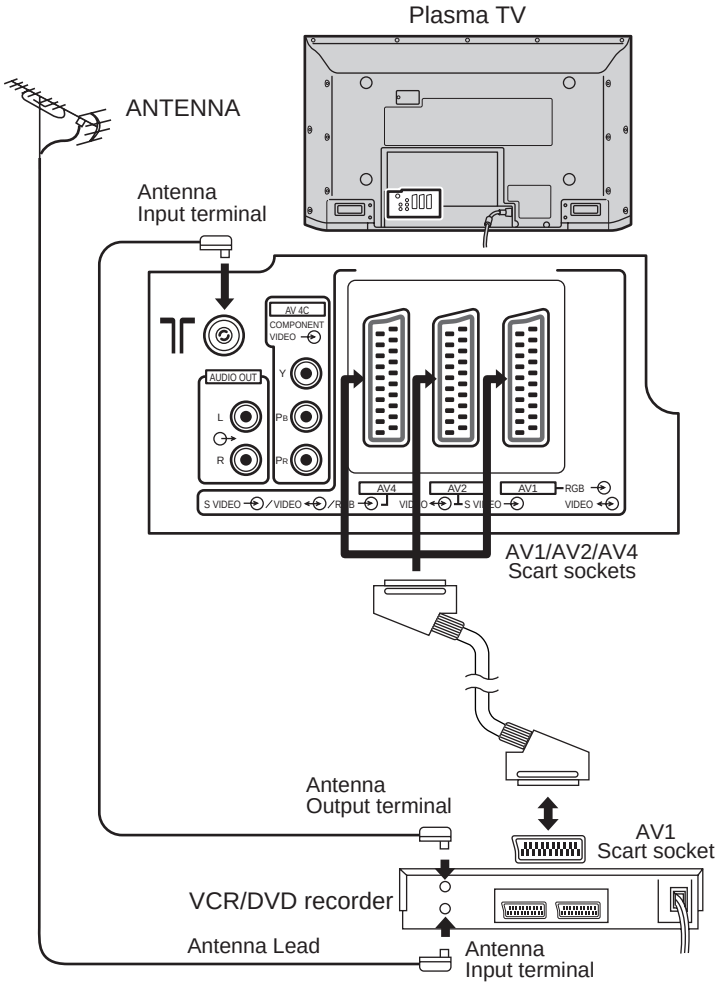
Further information on Q-Link can be found on page 18.
In order for Q-Link to function correctly, the Scart cables must be connected as shown in connection diagram, dependent on whether the TV is being connected to a VCR or to a VCR and Satellite Receiver.

1. Connecting the TV directly to an ANTENNA only



Note: Additional equipment and cables shown are not supplied with this set.

2. Connection of Plasma TV and VCR/DVD recorder using Scart and RF cables

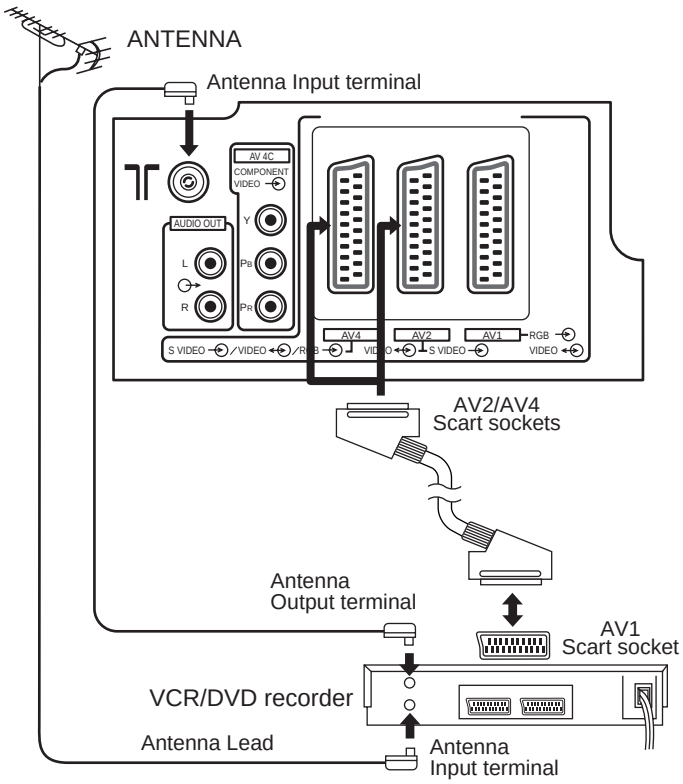


RF connection
Connect the ANTENNA to the Antenna Input terminal of the VCR and an RF cable from the VCR Antenna Output terminal to this set Antenna Input terminal (ℸ).

Scart Connections
The VCR can also be connected to this set using a Scart cable if you are using a Scart equipped VCR.
- Use this set's AV1 Scart socket for a VCR.
- Use this set's AV2 Scart socket for an S Video VCR.
- Use this set's AV4 Scart socket for an S Video VCR.

Notes:
- Additional equipment and cables are not supplied.
- Further details of audio / video connections can be found on pages 45 and 46.

3. Q-Link connection of Plasma TV and VCR/DVD recorder using Scart and RF cables

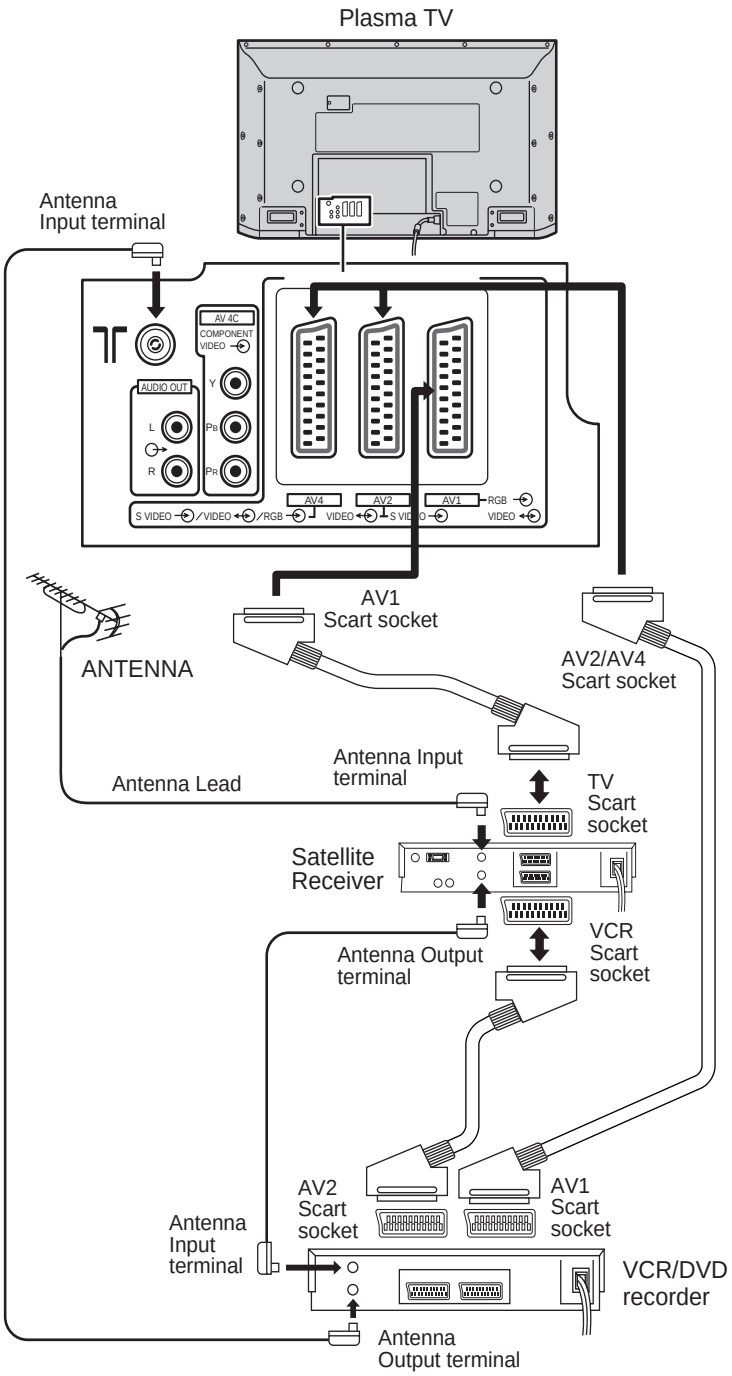


RF connection
Connect the ANTENNA to the Antenna Input terminal of the VCR and an RF cable from the VCR Antenna Output terminal to this set Antenna Input terminal (ℸ).

Scart connection
The VCR must be connected to the AV2/AV4 Scart socket of this set using a 'fully wired' Scart cable.
Note:
If using a 'Q-Link' VCR then the AV1 Scart socket of the VCR must be connected to the AV2/AV4 Scart socket of this set. If your VCR is not a 'Q-Link' VCR, please consult your VCR operating instruction book.

Notes:
- Additional equipment and cables are not supplied.
- Further details of audio/ video connections can be found on page 45 and 46.
- Further information for VCR and Satellite Receiver installation with this set can be found on page 10.

4. Q-Link connection of Plasma TV, VCR/DVD recorder and Satellite Receiver using Scart and RF cables



For Q-Link to function correctly this set, VCR and Satellite Receiver must be connected as shown in the diagram below.

RF connections

- Connect an RF cable to the Antenna Input terminal of the Satellite Receiver.
- Connect an RF cable from the Antenna Output terminal of the Satellite Receiver to the Antenna Input terminal of the VCR.
- Connect an RF cable from the Antenna Output terminal of the VCR to this set Antenna Input terminal (ℸ).

Scart connections

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

- The AV2 Scart socket of the VCR must be connected to the VCR Scart socket of the Satellite Receiver.
- The TV Scart socket of the Satellite Receiver must be connected to the AV1 Scart socket of this set.

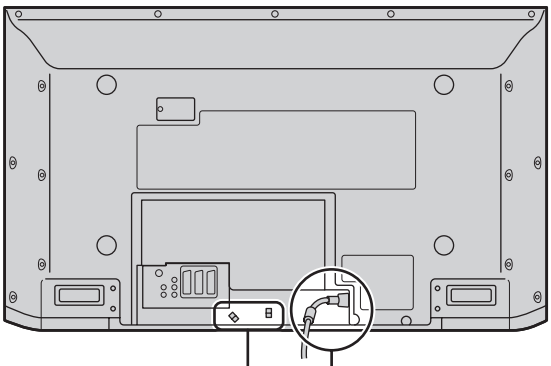
Note:

If using a 'Q-Link' VCR then the AV1 Scart socket of the VCR must be connected to the AV2/AV4 Scart socket of this set. If your VCR is not a 'Q-Link' VCR, please consult your VCR operating instruction book.

Notes:

- Additional equipment and cables are not supplied.
- Further details of audio/ video connections can be found on pages 45 and 46.

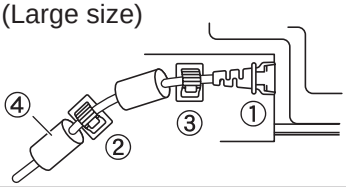
Cable fixing band



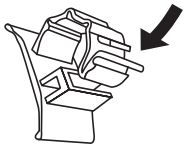
– Mains lead fixing

① Connect power plug to the socket of the main body.
② Fix the left clamper.
③ Fix the right clamper.
④ Install the ferrite core.

Ferrite core (Large size) supplied.

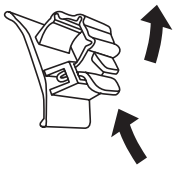


How to fix:



Fix by pushing in till a clicking sound is heard.

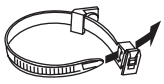
How to release:



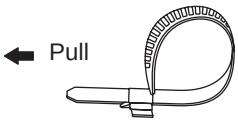
Pull up while drawing the knob.

– Cable fixing bands
Secure any excess cables with bands as required.

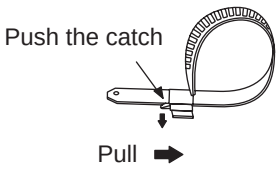
To secure cables connected to Terminals, wrap the cable fixing band around them then pass the pointed end through the locking block, as shown in the figure.
While ensuring there is sufficient slack in cables to minimize stress (especially in the power cord), firmly bind all cables with the supplied fixing band.



To tighten:

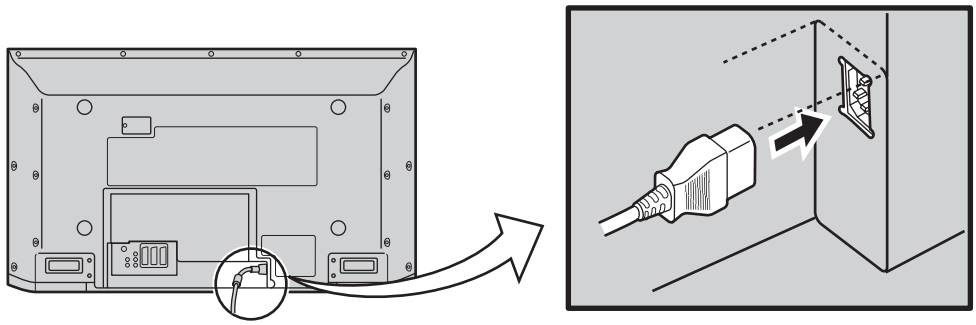


To loosen:

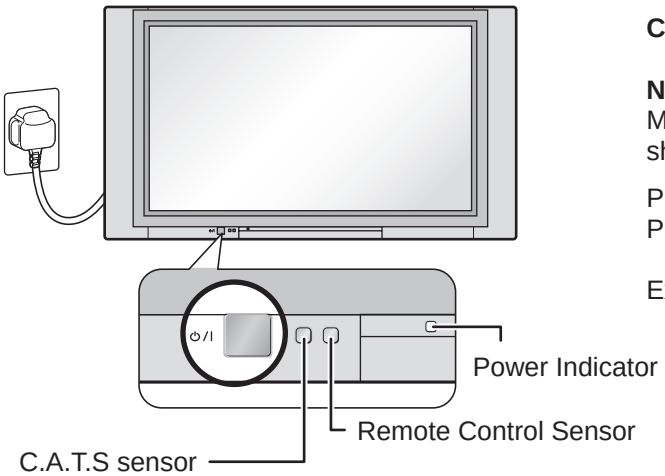


Mains lead connection

Connect the AC cord plug to the Plasma TV.



Plasma TV On/Off



Plasma C.A.T.S (Contrast Automatic Tracking System)
Plasma C.A.T.S automatically senses the ambient light conditions and adjusts the brightness and gradation accordingly, to optimise contrast.
(Effective when Viewing mode is set to Auto.)

Connect the mains plug to the mains Outlet

Note:
Mains plug types vary between countries. The mains plug shown at left may, therefore, not be the type fitted to your set.

Press the On / Off switch on the Plasma TV to turn the set on: Power-On.

Example: The screen below is displayed for a while after the Plasma TV is turned on.
(setting condition is an example.)

From the second time on, the below screen is displayed for a while (setting condition is an example).

For VIDEO / COMPONENT / TV INPUT:

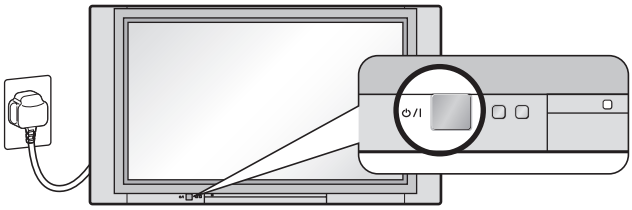
Press the ⏻ button on the remote control to turn the Plasma TV to standby.
Power Indicator: Red (standby)

Press the ⏻ button on the remote control to turn the Plasma TV on.

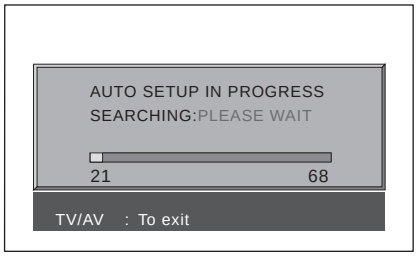
Turn the Plasma TV set off by pressing the ⏻/| switch on the Plasma TV while it is on or in standby mode.

Note:
The unit will still consume some power as long as the mains lead is still inserted into the mains outlet.

Auto setup



First, ensure that the recording device is in Standby mode, if it has Q-Link function and Satellite receiver is switched ON.



Plug in TV and switch on.
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,your stations will be located,sorted into order and stored ready for use.

TV to VCR /DVD recorder download
If a Q-Link, NEXTVIEWLINK or compatible recording device has been connected to the correct Scart socket before starting Step 1 , programme information will be downloaded to the device via Q-Link.

Downloaded tuning data will match the television's.

Not all recording devices support this download of programme information, some may require to be started manually. Refer to the device's operating instruction book.

If a recording device other than those described above has been connected, then there will be no download operation.

Notes:
If the recording device has not accepted download data from the TV, you may need to select the Download option from the device's menu system.
Refer to the recording device's operating instruction book.
If Q-Link is not operating correctly, check the following:
• The Scart cable is connected to the TV's correct Scart socket.
• The Scart cable is connected to the VCR's compatible (Q-Link, NEXTVIEWLINK or similar technology) Scart socket.
• The Scart cable is a "fully wired" type.

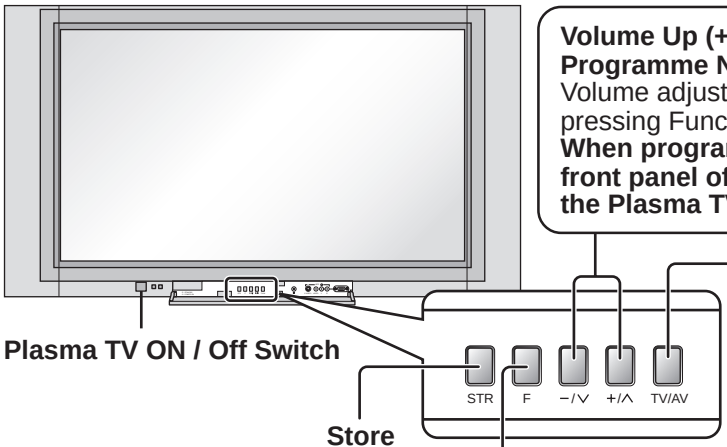
For further information on Q-Link and connecting equipment, see pages 18 and 45.
• The sorted programme order depends upon the TV signal, the broadcasting system, and reception conditions. If the order is not to your preference it can be rearranged. Refer to the Programme edit menu - see page 17 for details.
• If you have a digital satellite receiver, you can start Auto setup with the receiver set to any channel. You will then have to manually name the 'SAT' position after Auto setup is complete. Refer to the Programme edit - see page 38 for details.

Prog. Position	All channels	No CH5	No CH5/S4C	No CH4/CH5	No S4C	No CH4/S4C	No CH4/S4C/CH5
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	CH4	CH4	CH4	S4C	CH4	CH5	SAT
5	S4C	S4C	SAT	SAT	CH5	SAT	*
6	CH5	SAT	*	*	SAT	*	
7	SAT	*	*	*	*	*	*

Note:
* The next available channel will appear, If no other stations are available then the Programme position will remain nunsed.

Basic controls

Front panel controls and Remote control



Plasma TV ON / Off Switch

Store
(see page 20-23, 35, 39-41, 43)

Volume Up (+), Down (-)/
Programme Number Up (∧), Down (∨)
Volume adjustment which uses these buttons is performed after pressing Function button.
When programme number up (∧) or down (∨) button on the front panel of the Plasma TV is pressed in stand-by mode, the Plasma TV will be turned on.

TV/AVmode Selection
Press to select TV, AV input signal modes sequentially.

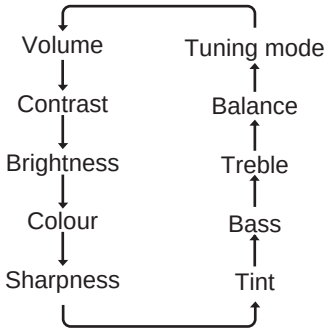
Picture Menu (see page 30, 31)

Sound Menu (see page 28, 29)

Setup Menu (see page 24, 25)

Status button
Press to display programme position, programme name, channel number, time, MPX mode, Aspect mode, receiving system and programme table.

Function selection
Displays the On Screen Display functions, press repeatedly to select from the available functions.
The following adjustments can be accessed directly.



Notes:
- Tint : In NTSC mode
- Tuning mode : Not displayed during AV mode.

Direct TV Record button (see page 18)

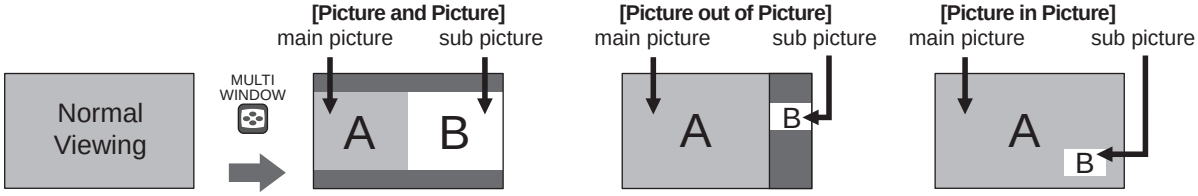
Ambience sound On or Off
(see page 29)

Aspect Control (see page 26, 27)

MULTI WINDOW

MULTI WINDOW

Press to display main picture and sub picture (see page 36).
The main picture and sub picture can be changed by using Red, Green, Yellow and Blue buttons.



• Direct channel access
You can tune to TV channel directly by pressing the "C" button and corresponding channel number buttons.

Channel Number 36..... C , 3 , 6

• Direct Programme Number Selection
You can select the number directly by pressing "Number 0-9" buttons or by pressing "Two Digit" and "Number 0-9" buttons.

Programme Number 8 8

Programme Number 12..... -/-- , 1 , 2

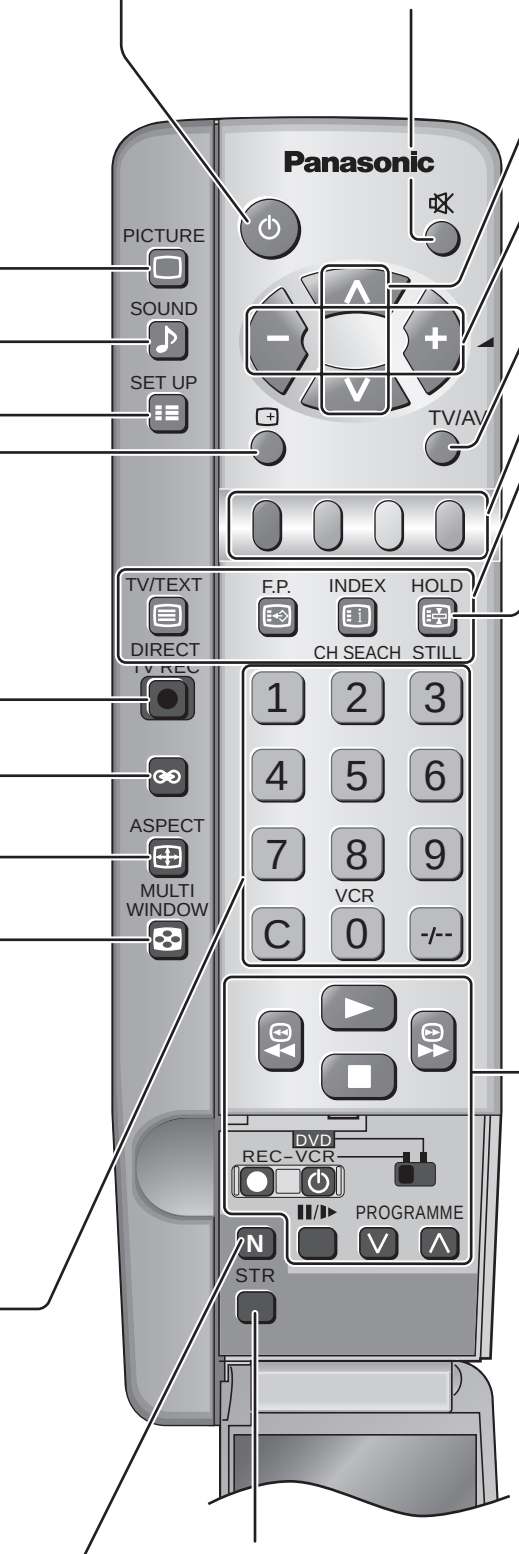
When in standby mode, switches TV on.

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

Plasma TV (Stand-by)
The TV set must first be plugged into the mains outlet and turned on at the On / Off switch.
Press this button to turn the TV set On from Standby mode, Press it again to turn the TV set to Standby mode.

Note:
It is also possible to turn the TV set on from STANDBY mode by pressing the “Direct Programme Number Selection” Buttons (0-9) on the Remote Control.

Sound Mute
Press to mute the sound completely the “Mute” symbol will appear.
Press again to restore the previous sound level, and cancel the mute.



Programme Number Selection
Press to select the next higher or lower Programme number.

Volume Adjustment
Press to increase or decrease the sound volume level.

TV/AV Mode Selection
Press to select TV, AV input signal modes sequentially.

Coloured buttons used for
- **Programme edit** (see page 38-41)
- **Teletext functions** (see page 42-44)
- **AV Selection**
- **Multi Window** (see page 36)
- **Channel Search** (see page 37)

TELETEXT Operation
(see page 42-44)
Channel Search
(see page 37)

STILL
Press to freeze the picture, press again to return to watching the current programme.

Store (see page 20-23, 35, 39-41, 43)
Stores some settings in TUNING menus and TELETEXT.

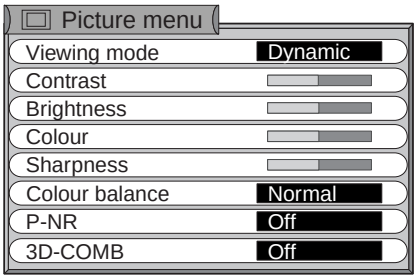
VCR / DVD player Operation
The Remote Control is capable of operating some functions of selected Panasonic VCR’s and DVD (Digital Versatile Disc) player equipment. Some VCR and DVD equipment have different functions, so to ensure compatibility please refer to the equipment's instruction book or consult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

Button	Function
▶	**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: Press once to skip to the next track.
◀◀	**Skip / Rewind / Review** VCR: Press to rewind the tape. In Play mode, press to view the picture rapidly in reverse (Review). DVD: Press once to skip to the previous track.
	VCR / DVD switch Use this switch to select whether controls operate DVD equipment or your VCR.
●	**Record (VCR only)** Press this button to start recording.
⏻	**Standby** Press to switch the VCR or DVD to standby mode. Press again to switch back on.
▮▮/▶ ■	**Pause / Still (VCR only)** Press in playback mode, the picture will pause. Press again to restart play.
PROGRAMME ∨ ∧	**Programme Up / Down (VCR only)** Press to increase or decrease the VCR programme position by one.

Using the On Screen Displays

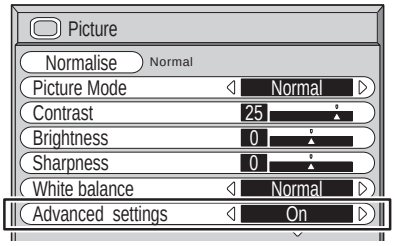
Many features available on this set can be accessed via the On Screen Display menu system.
Use the remote control as shown below to access and adjust features as desired.

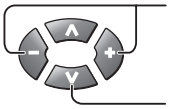
Press to display "**Picture menu**" screen. (see page 30)



During "PC" input signal

To Picture adjust menu (see page 32, 33)

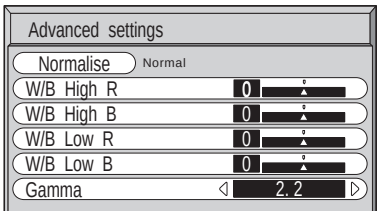




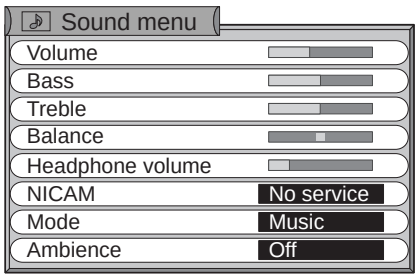
Press to select "On".

Press to enter Advanced settings .

To Advanced settings (see page 33)



Press to display "**Sound menu**" screen. (see page 28)

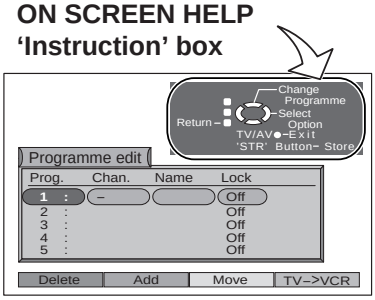


Please refer to the On Screen Help

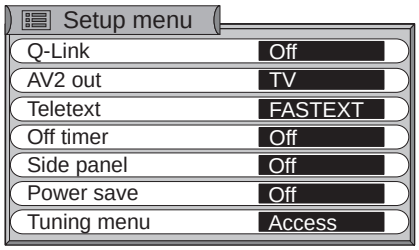
This Help box indicates which buttons on the remote control are used to navigate the menu shown, see above for descriptions of button functions.

An On Screen Help box is displayed whenever a menu is displayed on the TV.

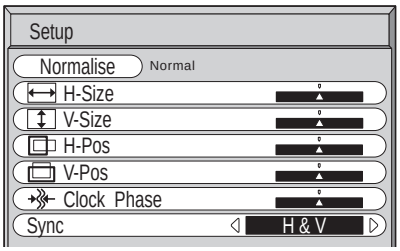
ON SCREEN HELP 'Instruction' box

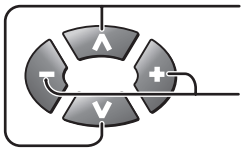


Press to display "**Setup menu**" screen. (see page 24, 25)



During **"PC"** input signal (see page 34)





Press to move the cursor up and down on the menu.

Press to access menus, adjust levels or to select from a range of options.

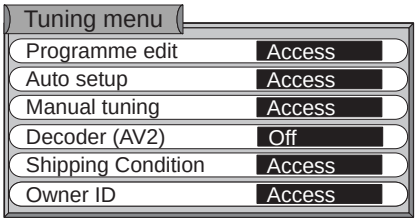
STR

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

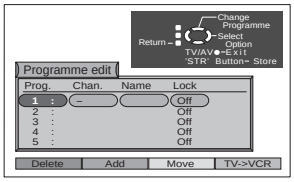
TV/AV

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

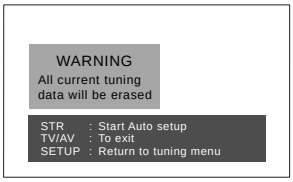
Tuning menu
(see page 19, 20-23, 38-41)



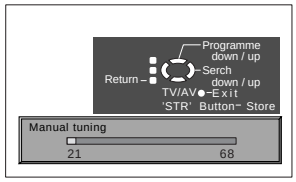
Programme edit
(see page 38-41)



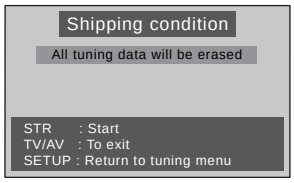
Auto setup
(see page 19)

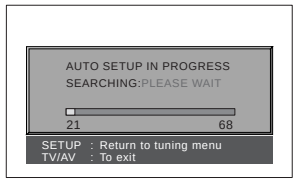


Manual turning
(see page 21)



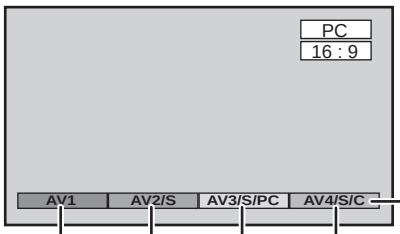
Shipping condition
(see page 22)





Input signal selection by colour button

Input selection can be made by colour buttons, which match on screen button indication.



Colour buttons (Red, Green, Yellow, Blue)

AV4 input: Composite or RGB (Controlled by external source)
⟶ S Video ⟶ Component

AV3 input: Composite ⟶ S Video ⟶ PC

AV2 input: Composite ⟶ S Video

AV1 input: Composite or RGB (Controlled by external source)

Q-Link

Q-Link allows the television to communicate with a compatible VCR or DVD Recorder.

For Q-Link communication to work, the TV must be connected to a recording device 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, and the AV4 socket of the television and the appropriate socket on your DVD Recorder.
For connection to the appropriate Scart socket on the recording device, refer to the device’s operating instruction book.

When using a “NEXTVIEWLINK” device the main features possible are the following :

Preset Download
This allows the programme order from the TV to be downloaded to the recording device, helping 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 8-13.
2. When Auto setup is started from within the Tuning menu, see page 20.
3. Preset download started from the recording device, refer to the device’s operating instruction book.

Important Note:
Not all recording devices support this type of data communication system. Some may support certain features, but not others. Refer to the recording device’s 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 programme currently shown on the television, by the recording device attached to the Scart socket, which can be chosen using “Q-Link”. (see page 24).

Press the **DIRECT TV REC** button on the remote control.

If the recording device is in Standby mode with usable recording media inserted, it will automatically switch on when you press the DIRECT TV REC button.

If a “Q-Link” device 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 devices will only display the message when on the VCR programme position(0) or in AV mode. Refer to the device’s operating instruction book.

Recording in progress

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

No recording -Check tape or disc

The tape or disc may have been “write protected”, missing or may be damaged. The device may already be recording. Refer to the device’s operating instruction book.

Additionally, when using a “Q-Link” device themain features possible are the following :

The following features are only available from the device connected to the scart socket selected using “Q-Link”. (see page 24).

TV / Recording device Auto Power On
If you insert pre-recorded media into the recording device and press the Play button whilst the TV is in ’Standby’ mode, the TV will automatically switch on and select the correct AV input so that you can view the content.

Recording device Auto Power Standby
Whenthe TV is switched into ’Standby’ mode, the recording device will also switch into ’Standby’ modeif there is no media inserted, or if there is media inserted and the device is in ’Rewind’ or ’Stop’ mode. If aVCR is rewinding a tape, it will not switch into ’Standby’mode until rewinding has finished.

Recording device Image View On
If the TV is in Standby mode and the recording device 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 devices may support this feature. Refer to the device’s operating instruction book.

This TV will also communicate with other recording device’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)

Important Note:
These recording devices may support some or all of the above functions. Refer to the device’s operating instruction book. Not all recording devices support this type of data communication system. Somemay support certain features, but not others. Refer to the device’s operating instruction book.Some features are only available from the device connected to the scart socket selected using “Q-Link“. (see page 24).
If Q-Link is inoperative, first confirm that your Scart cable is a “fully wired” type. Ask your dealer for further details.

Auto setup tuning

Auto setup

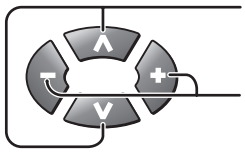
Automatically scans all TV channels and stores them in memory.
Auto setup automatically retunes your set. This feature is useful, if for example, you move house and wish to retune your set to receive the local stations.

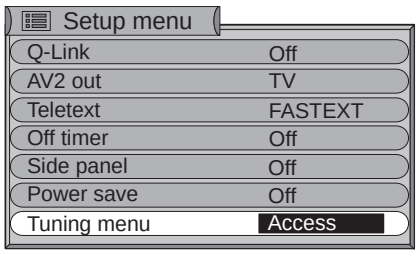
Display the Tuning menu screen

1 SET UP — Open the setup menu.

2 Move to Tuning menu.

Access Tuning menu.

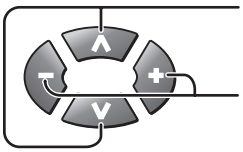


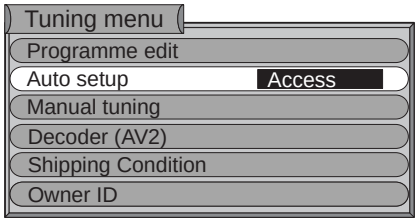


Auto setup tuning

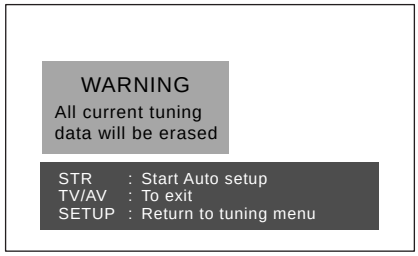
1 Move to Auto setup.

Access Auto setup.





Note:
If you proceed with the next step all tuning data will be erased (all stations and their programme positions stored in your set's memory will be wiped out so the new settings can be stored).

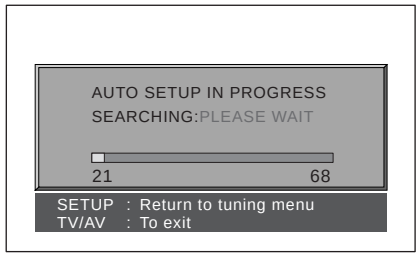


2 STR — Press to start Auto setup tuning, then the Searching screen will be displayed.

⇩

When Searching is complete the screen will return to the Turning menu screen.
The best tuning position is automatically memorized.

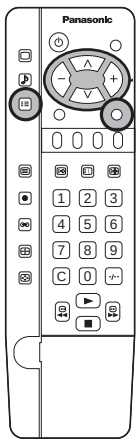
Once this operation is completed the TV will display programme position 1.



3 TV/AV — Press to exit from the Tuning Menu.
This returns the set to the normal viewing condition.

Note:
If an auto setup process is aborted midway, all channels that have been set up to that point will be saved to memory.

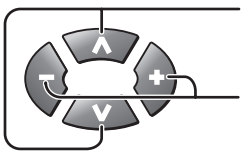
Tuning menu



1 SET UP

Press to display the Setup menu screen.

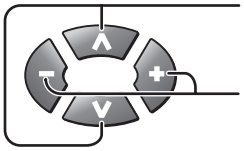
2



Press to select the Tuning menu.

Press to Access the Tuning menu.

3

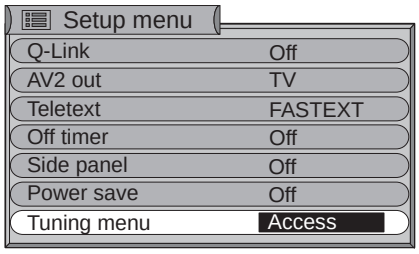


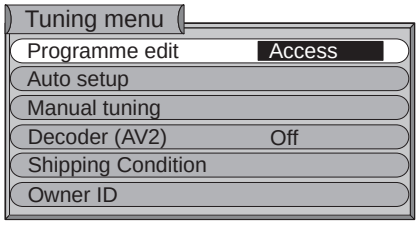
Press to select the menu to adjust.

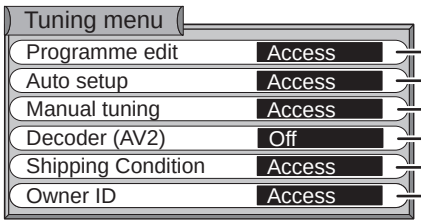
Press to adjust or Access.

4 TV/AV

Press at any time to go back to watching TV.







Access in order to customise your programme settings (see page 38-41). (eg: adding or deleting a programme position.)

Allows you to automatically retune this set. Useful if you move house and wish to retune your set to the local stations (see page 19).

Allows individual programme positions to be tuned manually (see page 21).

Lets you change the recording source on DIRECT TV REC (see page 22).

Allows you to clear all tuning information and reset all control levels back to factory setting (see page 22).

Allows you to enter a security code and address information (see page 23).

Pressing STR after having adjusted some feature will store the setting as the default (replacing the factory setting).

Manual Tuning

Manual tuning of the programme position is available either from the On Screen Display menu or from the front panel controls.
Turn this set on and select the broadcast channel. Follow the step on the previous page to display the Tuning menu screen.

(From the On screen Display menu)

It is possible on individual programme position.

1 Press to select the Manual tuning.

Press to access the Manual tuning screen.

2 Press to select the desired Programme Number.

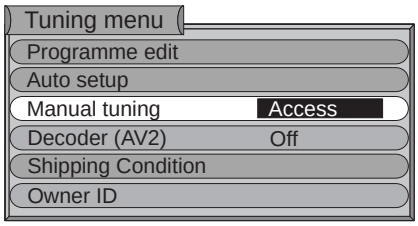
Press to search the higher or lower channel.

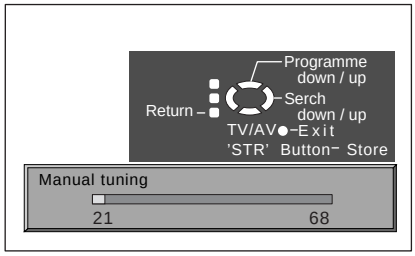
3 STR

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

4 TV/AV

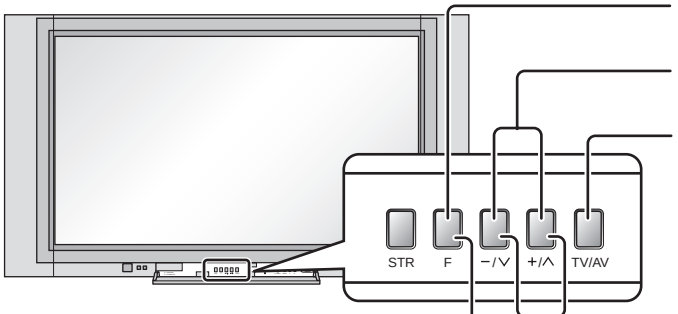
Press to exit from the Tuning Menu. This returns the set to the normal viewing condition.





Search Start.

(Via Front panel)



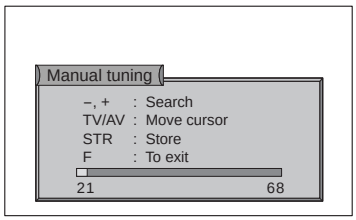
1 Press until Tuning mode is reached.

2 Press to access Tuning mode.

3 Press to move between Change programme, search and TV system.

4 Press to change programme position or start search.
When the desired station is found, press STR to store.
The programme position will flash.
Repeat above procedure to tune additional programme positions.

5 Press at any time to exit the Tuning menu.

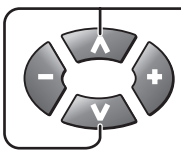


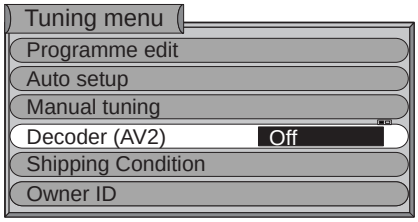
Helpful Hint

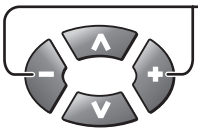
Programme position '0' is designed to receive RF signal from your VCR or DVD recorder, although a scart connection, If available, is preferable to give improved picture and sound.

Decoder (AV2/AV4)

If a Q-link compatible VCR or DVD recorder is connected to AV2/AV4, the recording source for DIRECT TV REC can be changed by selecting the Decoder (AV2/AV4) 'On' or 'Off' using the remote control.

1  Press to select the Decoder (AV2/AV4) on tuning menu screen.



2  Press to select On or Off.

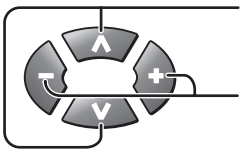
On ⟷ Off

Decoder (AV2/AV4) On : Recording signal from plasma TV tuner.

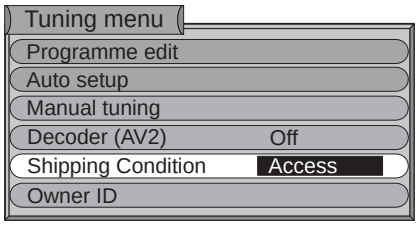
Decoder (AV2/AV4) Off : Recording signal from its own tuner.

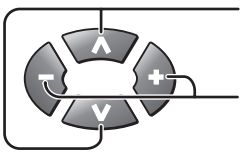
Shipping condition

Shipping condition allows you to reset the set 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 factry settings. You may need to adjust your VCR or programme position '0' VCR after operating the Shipping condition menu. (refer to page 35)

1  Press to select the Tuning menu.

Press to access to tuning menu.

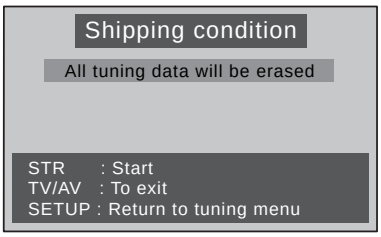


2  Press to select the Shipping condition.

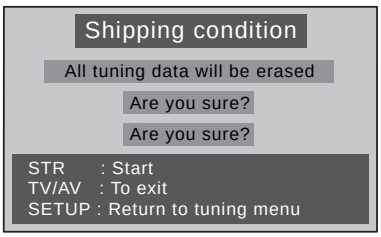
Press to access to shipping condition.

3 STR Press to start.

4 STR Press again to comfirm each time that you are asked "Are you sure ?"



5 ⏻/I Switch TV off.
The next time the TV set is switched on Auto setup will begin, stations will be located, sorted and stored ready for use (see page 13).

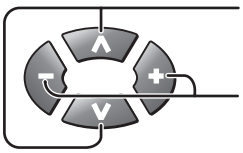


Note:

TV/AV Press to go back to watching TV, before tuning data is erased. (To exit from the shipping condition menu without changing any data.)

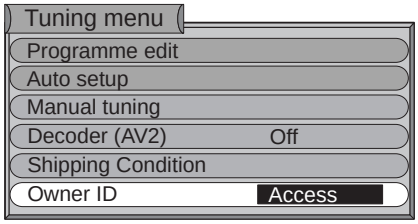
Owner ID

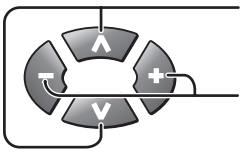
Owner ID allows you to enter a security code and adress information so that in the unfortunate event of theft it will help the Police to determine the owner.
If the Owner ID information was not entered after Auto setup or it is necessary to alter some of the ID information it can be re-accessed via the Tuning menu.

1 

Press to select the Tuning menu.

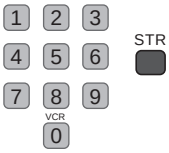
Press to access to tuning menu.



2 

Press to select the Owner ID.

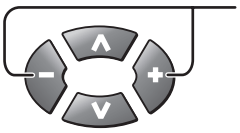
Press to access to Owner ID.

3 

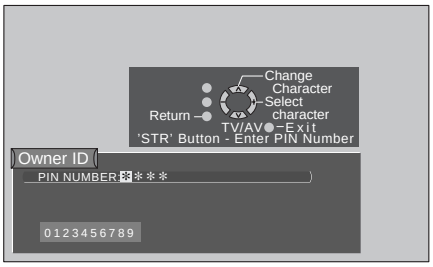
If Owner ID has previously been set, enter the PIN NUMBER (using 0 to 9 on the remote control) followed by STR to proceed, this will take you to the NAME option.

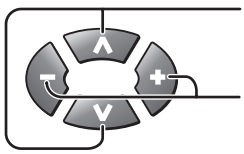
4

If no Owner ID has previously been set, enter the required 4 digit Owner ID PIN NUMBER (using 0 to 9 on the remote control).
If a 4 digit PIN NUMBER was entered above, you will be taken automatically to the NAME line.

5 

If not, move to the NAME line.

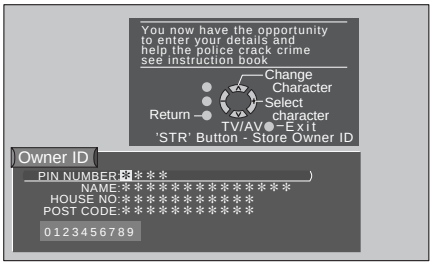


6 

Press to the change character.

Press to select the character position.

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



7 STR

Press STR to store the details.

8 STR

Press again, to confirm, when asked, “Are you sure?”
The Tuning menu will be displayed.

9 TV/AV

Press the TV/AV button to exit.

N

We recommend that as soon as you have stored Owner ID details (or have exited the feature), the picture controls are reset to normal viewing levels. To do this, press the “N” button, found under the remote control’s pull down flap.

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

____ ____ ____ ____

Note:
If you lose or forget your PIN number, contact your nearest Panasonic Dealer for advice.

Setup menu

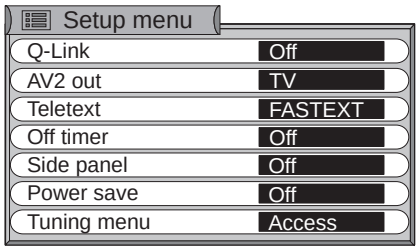
The setup menu provides access to various advanced features and also to the Tuning menu.

1 SET UP — Press to display the setup menu screen.

2 Press to select the menu to adjust.

Press to adjust the desired setting.

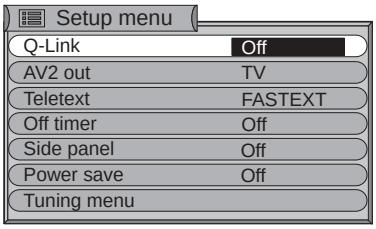
3 TV/AV — Press at any time to go back to watching TV.



Q-Link

Allows you to enable or disable data communication between this set and a compatible VCR or DVD recorder. (see page 8, 18)

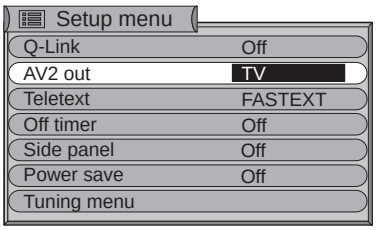
Off ⟷ AV1 ⟷ AV4



AV2/AV4 out

Offers a choice of signals to send to the Scart socket selected in the Q-Link. You can choose from the current TV programme position, the signal entering AV1, AV2, AV3, AV4 or Moniter - the picture displayed on screen.

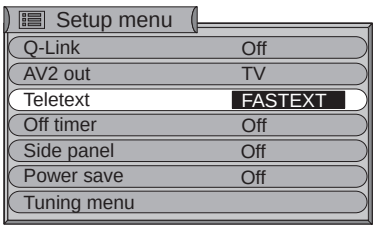
TV ⟷ AV1 ⟷ AV2
Monitor ⟷ AV4 ⟷ AV3



Teletext

Allows you to choose from 2 modes. (See page 42)

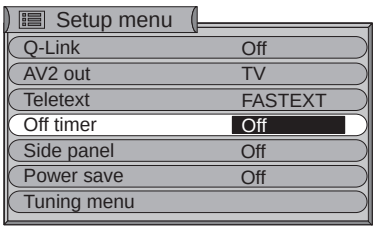
FASTEXT ⟷ List



Off timer

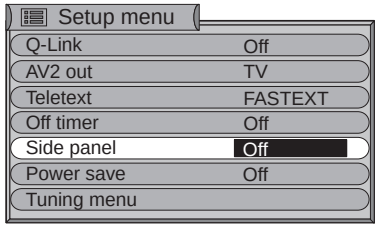
Switches this set off within a preset time which you can choose from OFF and between 15 to 90 minutes in 15 minute intervals.

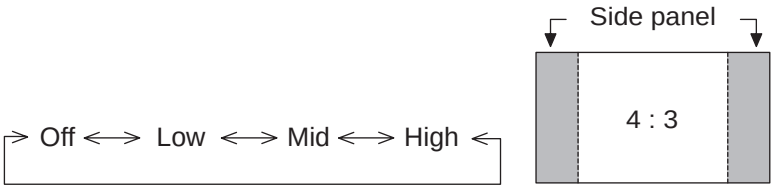
Off ⟷ 15 ⟷ 30 ⟷ 45
90 ⟷ 75 ⟷ 60



Side panel

Do not display a picture in 4:3, 14:9 mode for an extended period, as this can cause an after-image to remain on the side panels either side of the display field.
To prevent the appearance of such an after-image, illuminate the side panels.

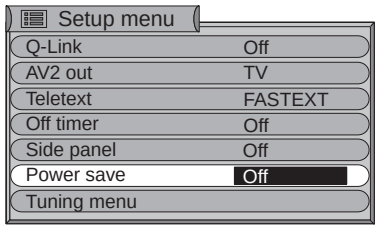




Power save

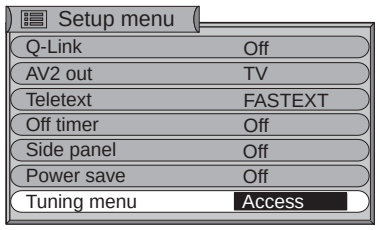
By reducing the brighness of picture, power consumption is reduced.

On ⟷ Off



Tuning menu

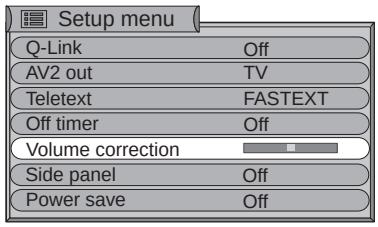
Provides access to many other features including programme edit and Auto setup. (See page 30-33, 36-39)
Not displayed during **AV** mode.



Volume correction

During **AV** mode, Volume correction is displayed.

Lets you adjust the volume level of individual station. Use this feature if the volume level varies significantly between stations. Adjusting one station's volume to bring it into line with the other stations means you can avoid having to adjust the volume each time you change channels.

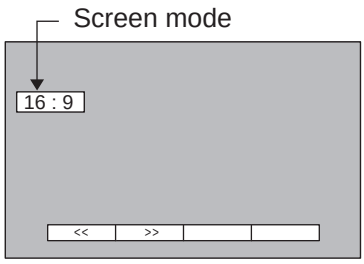


Aspect Controls

Press the **ASPECT** to move through the seven aspect options: **Panasonic Auto, 16:9, 14:9, 4:3, Zoom1, Zoom2 and Zoom3.**

Notes:
- If you leave Aspect set to Panasonic Auto, this set software determines the best ratio for each programme viewed. In order not to disrupt your viewing, no mode information is displayed while this is happening. Simply press the ASPECT button to display mode information in the top left of the screen.
- The screen modes (16:9/14:9/4:3/Zoom1/Zoom2/Zoom3) are selectable manually.
- During Aspect change, the displayed picture will momentarily disappear. This is not a malfunction.

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



'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 to the appropriate **16:9** or **14:9** 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 on how dark the picture is.

Panasonic Auto

Panasonic Auto determines the best aspect ratio 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 the appropriate widescreen mode. The Panorama (Just) mode is selected if a signal with wide aspect ratio is not present (the screen cannot be switched from Panorama mode into 4:3 mode).

The text shown on the screen indicates how **Panasonic Auto** determined which ratio to use:

Panasonic Auto
'WIDE' appears in the top left of the screen, **Panasonic Auto** switches to the appropriate 16:9 or 14:9 widescreen ratio.

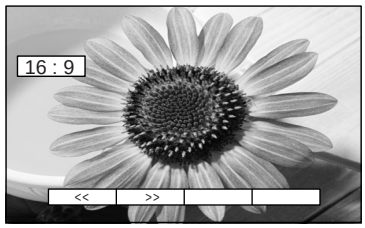
When in Panasonic Auto mode, if a Letter box signal is input and there is no Aspect information, the picture is automatically adjusted to **Just, Zoom1** or **Zoom3**.

Notes:
- If, in Panasonic Auto mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control on your VCR requires adjustment (your VCR 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.

Panasonic Auto
'Panasonic Auto' appears in the top left of the screen. The best ratio is chosen and the picture expanded to fill the screen.

16:9

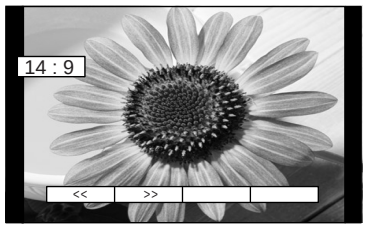
16:9 will display the picture at its maximum size but with slight stretching.



16 : 9

14:9 Letterbox

14:9 will display a 14:9 picture at its standard 14:9, size without any stretching. Gray stripes will be visible down the left and right sides of the picture.



14 : 9

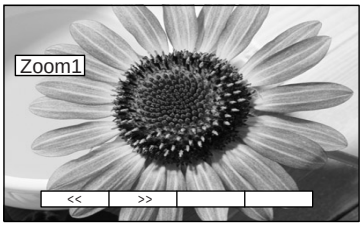
4:3

4:3 will display a 4:3 picture at its standard 4:3 size without any stretching. Gray stripes will be visible down the left and right sides of the picture.

4 : 3

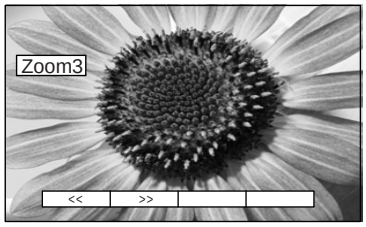
Zoom1, Zoom2, Zoom3

Zoom mode magnifies the central section of the picture.



Zoom1

Zoom2



Zoom3

Sound menu

1 SOUND — Press to display the sound menu screen.

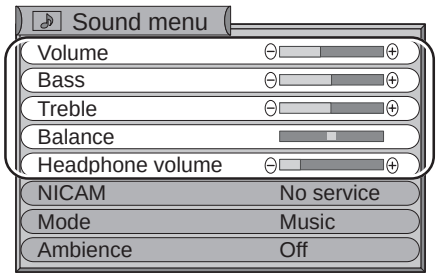
2 Press to select the menu to adjust.

Adjust the desired level by listening to the sound.

Press TV/AV at any time to go back to watching TV.

Some features are only available with the Ambience feature switched off.

Volume, Bass, Treble, Balance, Headphone Volume

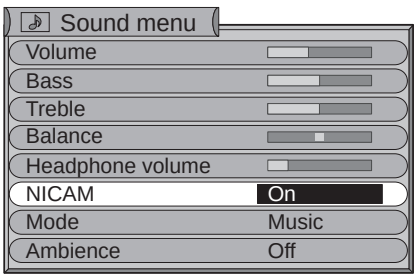


Item	Effect	Function
Volume	Less – + More	Adjusts output volume.
Bass	Less – + More	Adjusts lower deeper sounds.
Treble	Less – + More	Adjusts higher sharper sounds.
Balance	Left SP – + Right SP	Adjusts the sound level difference between left and right speakers.
Headphone volume	Less – + More	Adjusts Headphone volume.

NICAM

Usually set to **On** to receive a Stereo signal, but if reception deteriorates or if the service is not available then switch to **Off**.
Mono (**M1**) and (**M2**) can also be selected if a Bilingual signal is being transmitted.

This function is not available in **AV** modes.

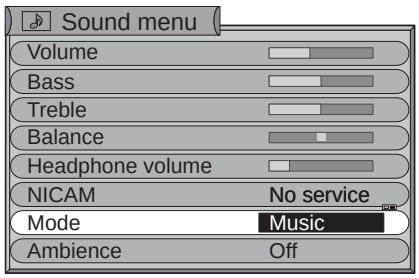


Mode

Sound quality can be improved when watching music or speech by selecting the appropriate mode **Music** or **Speech**.

Press − or + to select Mode.

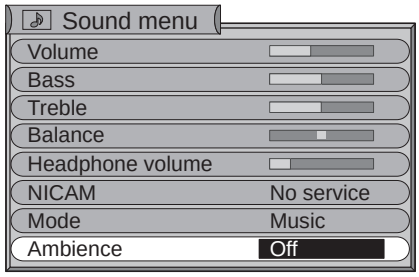
Music ⟷ Speech



Ambience

To enjoy a concert hall effect, turn Ambience to on.

Press − or + to switch between ON and OFF.



The benefits of Ambience sound are enormous. You can be completely enveloped in sound; just as if you were at a concert hall or cinema.
The Ambience effect can be obtained without the use of external Ambience speakers.

Picture menu

1 PICTURE — Press to display the picture menu screen.

2 Press to select the menu to adjust.

Adjust the desired level by looking at the picture behind the menu.

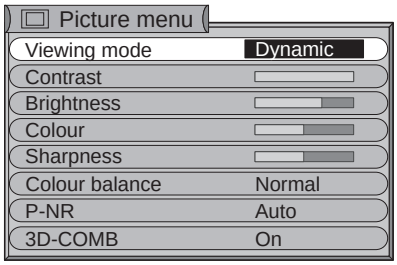
3 TV/AV — Press to exit from the Picture menu.
This returns the set to the normal viewing condition.

Viewing mode

Picture menu mode will be memorized for each TV, AV mode.

Press − or + to switch between modes

Dynamic ⟷ Normal
Auto ⟷ Cinema



Mode	Function
Dynamic	Displays a bright screen with maximum contrast.
Normal	Displays standard image.
Cinema	Ideal for movies in the dark room.
Auto	Automatically selects the mode that best suits the brightness of the environment.

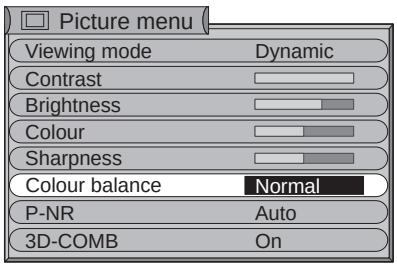
In each Viewing mode setting, Contrast, Brightness, Tint (in NTSC only), Colour, Sharpness and Colour balance can be adjusted and stored to suit your particular viewing requirement (for example, you may require different settings for viewing sport, films, news etc.)
Viewing mode offers you up to maximum of three separate settings for each signal source: RF, AV1, AV2, AV3 and AV4 (including RGB). Changes will be stored automatically.
By analysing and processing the incoming picture, all three modes feature automatic enhancement.

Colour balance

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

Press − or + to switch between modes.

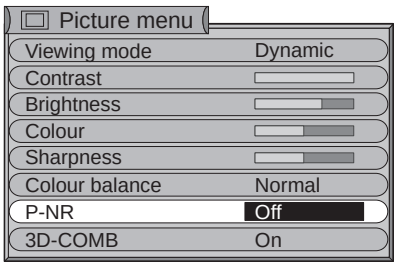
Cool ⟷ Normal ⟷ Warm



P-NR

This Picture Noise Reduction System (P-NR) is designed to reduce picture noise during poor quality reception conditions.
The P-NR mode will change as below.

On ⟷ Off

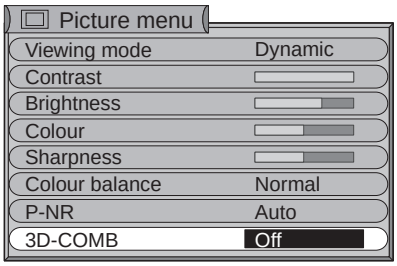


3D-COMB

Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen. Set 3D-COMB to On to display sharper nd more accurate colours.

On ⟷ Off

Displayed only when receiving PAL or NTSC signals. Not displayed during RGB Video, S Video input and AV4C input mode.

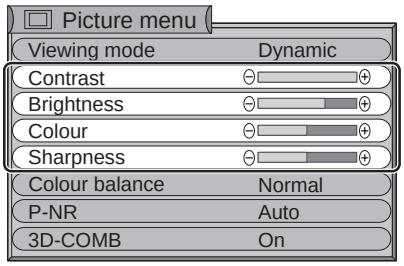


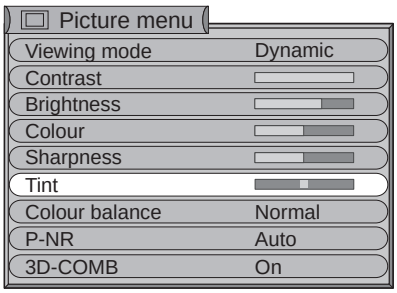
Contrast, Brightness, Colour, Sharpness, Tint

You can change the level of each Function (Contrast, Brightness, colour, Sharpness, Tint) for each picture menu according to your personal preference.

With an NTSC signal source connected to this set, the picture hue can be adjusted to suit your taste.

During **AV** mode, Tint is displayed.





Item	Effect	Function
Contrast	Darker − + Brighter	Adjust for contrast.
Brightness	Less − + More	Adjusts for easier viewing of dark pictures such as night scenes and hair.
Colour	Less − + More	Adjusts slightly to a lighter.
Sharpness	Less − + More	Displays a sharp image.
Tint	Reddish − + Greenish	Adjusts the picture hue.

Notes:
• When this set is receiving NTSC Signals, Tint is displayed and level adjustment is possible.
• Only Contrast will be displayed during TEXT mode.

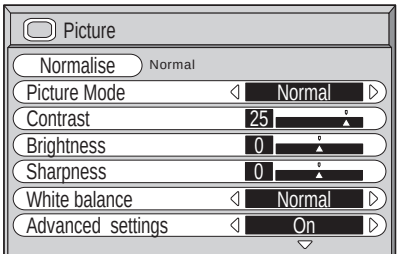
Picture Adjustments (PC mode)

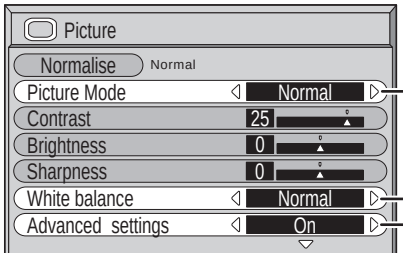
When you switch to PC input (AV3 / PC), Picture menu will be changed as shown bellow.
Sound menu will not be accessible in PC mode.

1 PICTURE — Press to display the picture menu screen.

2 Press to select the menu to adjust.

Adjust the desired level by looking at the picture behind the menu.





Press the left ◄ or right ► button to switch between modes.

Auto ⟷ Normal
Cinema ⟷ Dynamic

Auto
Automatically selects the mode that best suits the brightness of the environment.

Normal
For viewing in standard (evening lighting) environments.
This menu selects the normal levels of Brightness and Contrast.

Dynamic
For viewing in brighter environments.
This menu selects higher than normal levels of Brightness and Contrast.

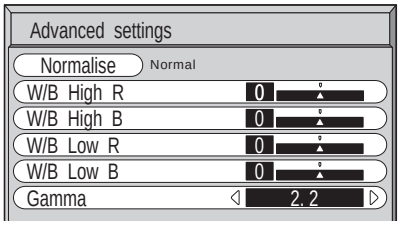
Cinema
Ideal for movies.

Note:
If you would like to change the picture and colour of the selected Picture menu to something else, adjust using the items in the Picture menu. (see next page)

Press to select “On”.

Press to enter Advanced settings .

Advanced settings On
Enables fine picture adjustment at a professional level (see next page).



Advanced settings Off
Displays images with settings of the Picture menu.

Press the left ◄ or right ► button to switch between modes.

Normal ⟷ Cool ⟷ Warm

Helpful Hint (N / Normalise Normalisation)

While the “Picture” menu is displayed, if either the N button on the remote control is pressed at any time or the − or + button is pressed while the yellow cursor is at the “Normalise” position, then all adjustment values are returned to the factory settings.

Item	Effect	Function
Contrast	Less − + More	Selects the proper brightness and density for the room.
Brightness	Darker − + Brighter	Adjusts for easier viewing of dark pictures such as night scenes and black hair.
Sharpness	Less − + More	Adjusts picture sharpness.

Note:
You can change the level of each function (Contrast, Brightness, Sharpness) for each Picture menu.

Note:
In PICTURE, there is not a noticeable change even when contrast is increased with a bright picture or reduced with a dark picture.

Advanced settings

Item	Effect	Details
W/B High R	Less − + More	Adjusts the white balance for light red areas.
W/B High B	Less − + More	Adjusts the white balance for light blue areas.
W/B Low R	Less − + More	Adjusts the white balance for dark red areas.
W/B Low B	Less − + More	Adjusts the white balance for dark blue areas.
Gamma	Down − + Up	S Curve ⟷ 2.0 ⟷ 2.2 ⟷ 2.5

Note:
Carry out “W/B” adjustment as follows.
Ⓐ Adjust the white balance of the bright sections using the “W/B High R” and “W/B High B” settings.
Ⓑ Adjust the white balance of the dark sections using the “W/B Low R” and “W/B Low B” settings.
Ⓒ Repeat steps Ⓐ and Ⓑ to adjust.
Steps Ⓐ and Ⓑ affect each other’s settings, so repeat each step in turn to make the adjustment.

Helpful Hint (N / Normalise Normalisation)

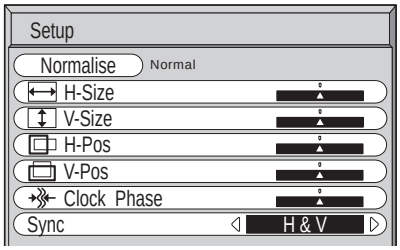
On the remote control unit, while the “Advanced settings” menu is displayed, if either the N button is pressed at any time or the − or + button is pressed while the yellow cursor is at the “Normalise” position, then all adjustment values are returned to the factory settings.

Adjusting Position and Size

Adjusting screen

1 SET UP — Press to display the Setup menu.

2 Press to select H-Pos/H-Size/V-Pos/V-Size/Clock Phase.

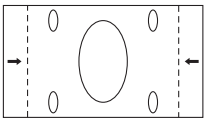
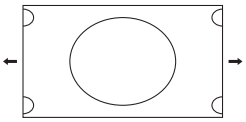
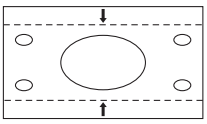
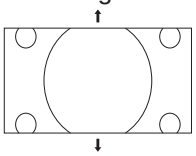
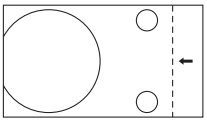
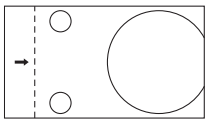
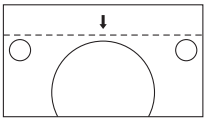
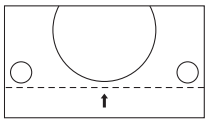


3 Press to adjust Pos./Size.

TV/AV — Press to exit from adjust mode.

1 Press **TV/AV** button.

2 Press **Yellow** (AV3) button to access 'PC' mode.

H-Size	When the Position Left "◄" button is pressed 	When the Position Right "►" button is pressed. 
V-Size	When the Position Left "◄" button is pressed. 	When the Position Right "►" button is pressed. 
H-Pos	When the Position Left "◄" button is pressed. 	When the Position Right "►" button is pressed 
V-Pos	When the Position Left "◄" button is pressed. 	When the Position Right "►" button is pressed. 
Clock Phase	Flickering and distortion can be eliminated by using the Position Left "◄" or Right "►" button to carry out adjustment.	
Sync	H & V : To synchronize by the horizontal and vertical signals from your PC. ↕ on G : To synchronize by the green signal form your PC (if available).	

Helpful Hint (N / Normalise Normalisation)

While the Setup display is active, if either the N button on the remote control is pressed at any time or the − or + button is pressed while the yellow cursor is at the "Normalise" position, then all adjustment values are returned to the factory settings.

Tuning your VCR and satellite receiver

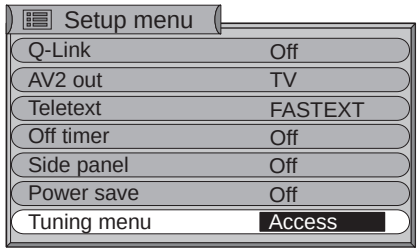
Your new TV is supplied with programme position ‘0’ set to receive an RF signal from your VCR, although a Scart connection is preferable if the VCR is so equipped (see page 9, 10 or 45 for suitable inputs to the Scart socket on this set.)
However, if for some reason your VCR is tuned to a different RF channel then you will not receive any picture or sound from your VCR on programme position ‘0’ of this set. Either adjust the tuning of this TV programme position ‘0’ (follow the instructions below) or adjust the RF channel of your VCR (some VCR’s allow adjustment of their RF channel via their remote control unit) or both until this TV is tuned to the RF output channel of your VCR.
It is intended that this advice is used in conjunction with the instruction books for your additional equipment.

Tuning your TV to the VCR

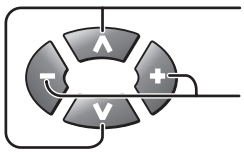
Switch on the VCR, insert and play a pre-recorded tape with known content.

1 SET UP

Press to display the Setup menu screen.

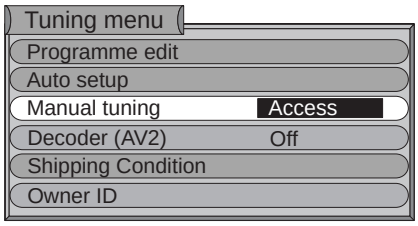


2

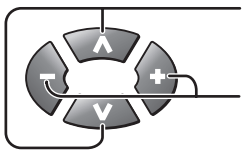


Press to select the Tuning menu.

Press to Access the Tuning menu screen.



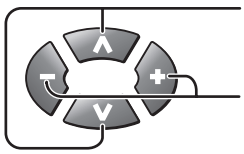
3



Press to select the Manual tuning.

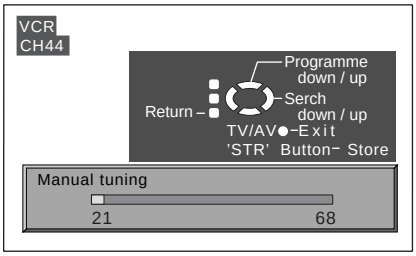
Press to Access the Manual tuning screen.

4



Press to select program position ‘0’ VCR.

Press to start seaching for the VCR playback of the known content tape.
When the VCR playback is found, press STR to store.



TV/AV

Press to exit.

The tape with known content is found and displayed.
Pressing STR will store the setting.

Notes:

- If picture patterning occurs on programme position ‘0’ , or any others, it may be necessary to adjust the RF output channel of the VCR, refer to the VCR instruction book.
- If a Satellite Receiver and a VCR 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 instruction books for precise tuning information.
- A VCR is used as an example. The above instructions also apply to other equipments with RF output signal, e.g. DVD recorder, satellite receiver, etc...

Multi Window

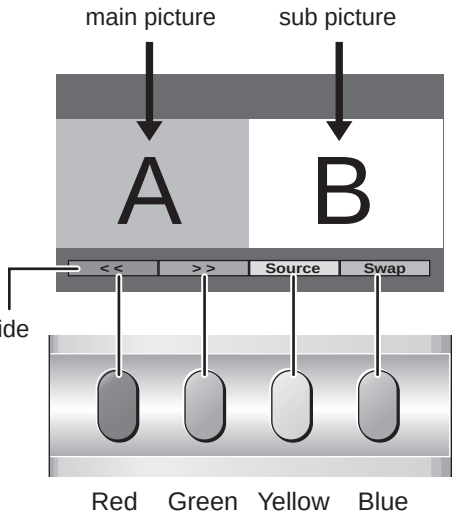
You can watch two TV channels or input video source and television channel on the screen at the same time.

MULTI WINDOW

Press to display main picture and sub picture as shown.

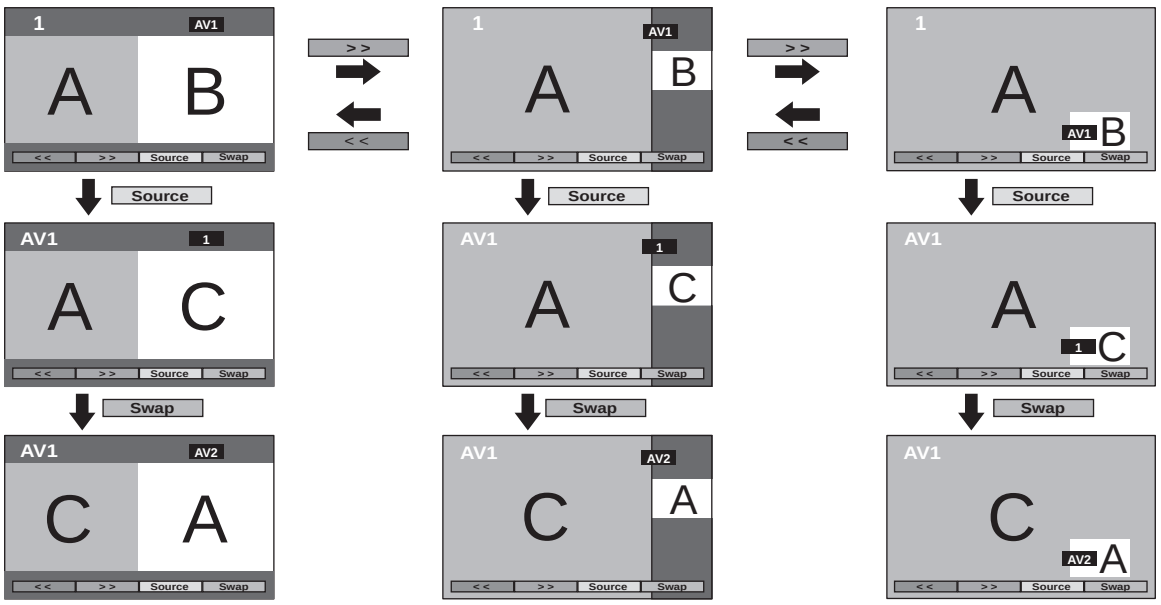
Press the MULTI WINDOW button (whilst the selector keys are on screen) to return to normal viewing.

[Picture and Picture]



The main picture and sub picture can be changed as below, using the red, green, yellow and blue buttons on the remote control while referring to the Colour Bar Guide shown at the bottom of the display.

[Picture and Picture] **[Picture out of Picture]** **[Picture in Picture]**



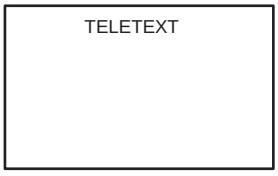
Note:
The Colour Bar Guide for the features (corresponding to the four coloured buttons on the remote control) will disappear after a few seconds. If you would like to select an operation when the Colour Bar Guide are not shown, press MULTI WINDOW once more and the Colour Bar Guide will reappear.

Picture and text

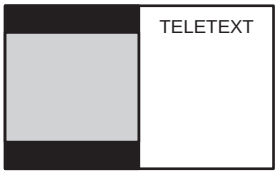
TV/TEXT

MULTI WINDOW

Press the **TV/TEXT** button, followed by the **MULTIWINDOW** button to move between viewing **teletext** and the **picture and text** feature. **Picture and text** lets you see the current programme and page of teletext side by side.
Whilst using this feature, the remote control affects the teletext page; if you wish to make changes to the programme viewed press the **TELETEXT** button to return to watching the programme on its own then make the desired changes.



TELETEXT mode



Picture and text mode

Channel Search

Select the desired channel after displaying still pictures of all stored channels on the screen divided into 9 sections. Up to 9 channels can be displayed at the same time.

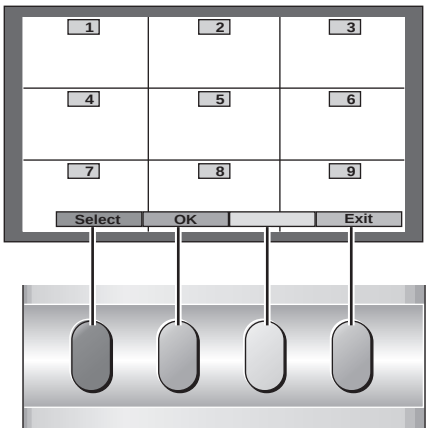
CH SEARCH — Press to display divided-by-9 screen of channels.

Red — Press to select channel number. The yellow channel number changes successively each time the button is pressed.

Green — Press to view the selected channel.

To exit a channel search mode.

Press Blue or CH SEARCH



Red Green Yellow Blue

Programme edit

Use this setting when changing setting of receiving channels or changing the channel display.
This feature is not available for AV1 to AV4 and PC positions.

To access the Programme edit screen

1 SET UP

During viewing of a TV channel, press to display the Setup menu screen.

2

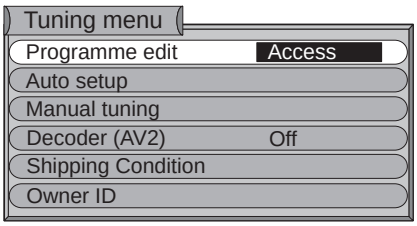
Press to select the Tuning menu.

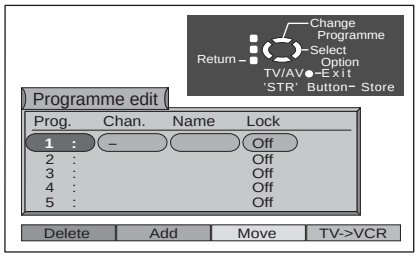
Press to access the Tuning menu screen.

3

Press to select the Programme edit.

Press to access the Programme edit screen.



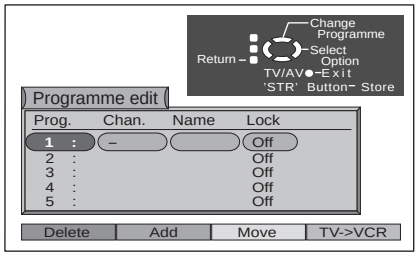


Programme edit

1

Press to select the Programme position.

Press to select the Prog., Name or Lock.



Note:
When the cursor enters the Name field, it will move character-by-character up to five before moving to the next field.

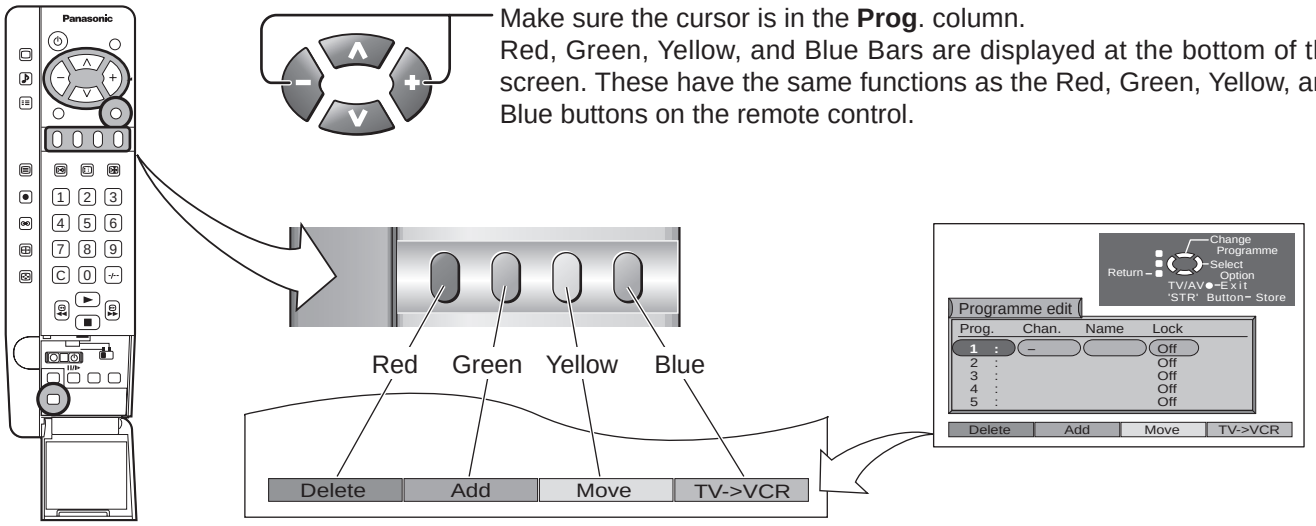
2

The buttons function in accordance with the position of the cursor: Prog., Name or Lock.
Press to change the settings.

Note:
"Chan."(TV transmission channel number) cannot be accessed in programme edit mode.

Cursor position	Function of ∧ ∨ buttons
Prog.	Moves the Programme position. Red, Green, Yellow, and Blue Bars are displayed at the bottom of the screen. These have the same functions as the Red, Green, Yellow, and Blue buttons on the remote control. (see next page)
Name	The characters that can be input are displayed at the bottom of the screen. Select the characters required and input.
Lock	Turns the channel Lock On and Off. (When receiving a channel while Lock On is selected, the volume will be muted and the screen be black and display "Programme is locked".)

Deleting, Adding and Moving a programme

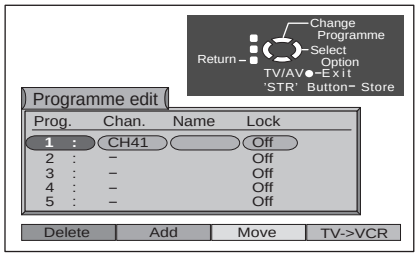


Make sure the cursor is in the **Prog**. column.
Red, Green, Yellow, and Blue Bars are displayed at the bottom of the screen. These have the same functions as the Red, Green, Yellow, and Blue buttons on the remote control.

To delete an unwanted programme position

1 Ensure that the cursor is in the Prog. Column.

2 Choose the programme position.



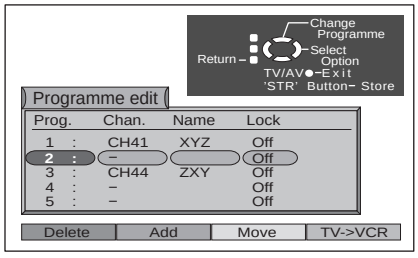
3 Press the Red button on remote control.

4 Press the Red button again to confirm.

5 If you have finished in the Programme edit menu, press the TV/AV button to exit.

To add a programme position

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



2 Press the Green button.

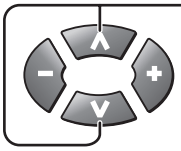
3 Press the Green button again to confirm.

4 Press STR to store.

5 If you have finished in the Programme edit menu, press the TV/AV button to exit.

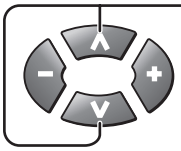
Programme edit

To move a programme to another position

1  Choose the programme position to be moved.

2

Press the Yellow button on remote control.

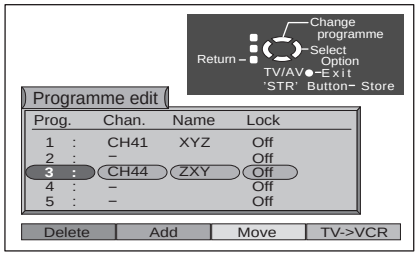
3  Choose new positon.

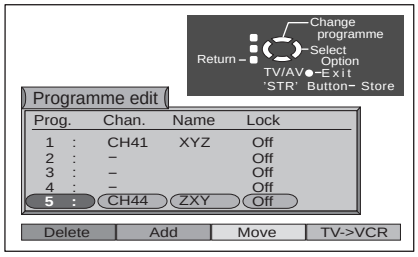
4

Press the Yellow button again to confirm.

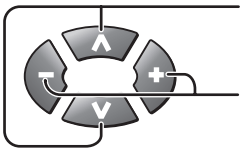
5

If you have finished in the Programme edit menu, press the TV/AV button to exit.

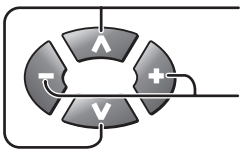




To rename a programme position

1  Choose the programme position.

Move to the Name column.

2  Choose the new character.

Move to the next character position.

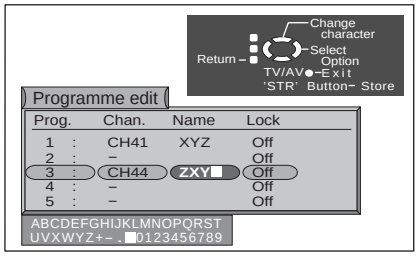
3 Continue until renaming is done.

4

Press STR to store.

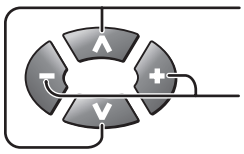
5

If you have finished in the Programme edit menu, press the TV/AV button to exit.



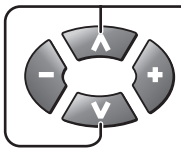
To lock a programme position to prevent access

1 Choose the programme position to be locked.



Move to the lock column.

2 Choose between lock On or lock Off.

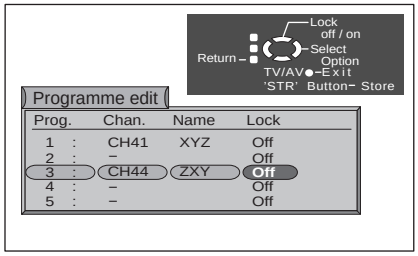


3 STR

Press STR to store.

4 TV/AV

If you have finished in the Programme edit menu, press the TV/AV button to exit.



Note:
When a programme position is locked, Direct Channel Access using the ‘C’ and numeric buttons on the remote control is not available.

To copy programme information to a VCR (Download)

You must copy programme information to a compatible VCR connected to AV2 or AV4 (see page 45 for connection information) to be able to use Q-Link functions.

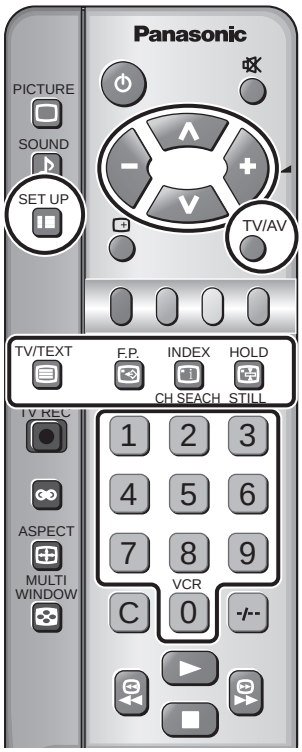
Blue

Press the blue button.
Programme data will now be sent to the VCR. This might take a few seconds, depending on the number of stations stored. If the message “Unable to download, check your VCR” appears on the screen, the television is unable to send the programme information to the VCR. See the VCR instruction book for further information.

Note:
If you have a Q-Link VCR, ensure that it is in **Stand-by** mode. If your VCR is not a Q-Link VCR, please refer to the VCR instruction book.

TELETEXT Operation

TELETEXT



- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- Pressing the Picture button whilst in Teletext operation will display the contrast function with a cyan bar, press − or + to alter the setting as required.
- Pressing the Setup 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 after pressing SOUND or MUTE button.

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 this set's memory.

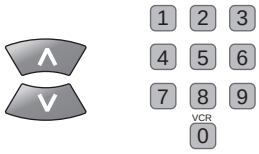
What is FASTEXT mode?
In FASTEXT mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

Note:
When watching TV in 4:3 or zoom mode, pressing TV/TEXT button will display teletext page momentarily in that aspect before switching to normal teletext picture size.

TV / Teletext mode

Press TV/TEXT to switch between the current programme, teletext and the picture and text feature (lets you see the current programme and teletext side by side, see page 32).

Page Selection



Pages can be selected in two ways:
a. Press ∧ or ∨ to increase or decrease the page number by one.
b. By entering the page number, using 0 -9 on the remote control.

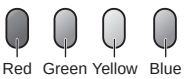
Full / Top / Bottom

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

Reveal

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

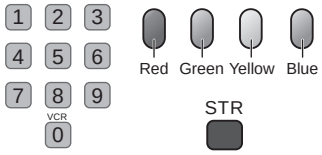
Red / Green / Yellow / Blue buttons



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

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

List Store

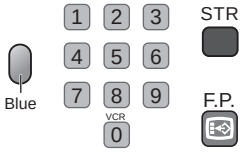


In List mode the four page numbers can be altered (programme positions 1 - 25 only).
To do this, press one of the four coloured buttons and enter the new page number.
Press and hold STR , the page number will change to white indicating that the page is stored.

Hold

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

Favourite Page (F.P.)



Stores a favourite page in memory for instant recall. To store such a page, this set must be in List mode, and the programme position must be from 1 - 25.
Press the **Blue** button, enter the page number, then press and hold STR .
The page number is now stored.
Press F.P. to recall this page.
Factory preset is page 888.

Update Display
News Flash
Update

Update Display

Press SET UP 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 to return to normal TV operation.

News Flash

When a news flash page has been selected, press SET UP , **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 SET UP , **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.

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.

Accessing sub pages

When Teletext information exceeds one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. As each sub page is found its number is displayed at the top of the page so that you may select it; as more sub pages are picked up, the display at the top of the page changes, so that you are always offered the most recently transmitted selection of sub pages.
In **picture and text** mode, use the left and right cursor buttons to select a sub page from the range displayed at the top of the Teletext window.
In Teletext operation, use the following procedure to access sub pages:

If the sub page you want to look at is not yet available, press the SET UP button (to display special functions) followed by the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.
When the sub page you are waiting for is available press the **Yellow** button to return to viewing the Teletext pages, then use the left and right cursor buttons to select the sub page of your choice.

Notes:
- If you do not want the four coloured special function keys to be displayed on the TV picture while waiting for a sub page to be found, press either the PICTURE, SOUND or SET UP menu button to clear the keys from the screen. Press the SET UP key once more to redisplay the keys.
- If you have cleared the special function keys from the screen and then used the left and right cursor buttons to select a sub page, whilst still viewing the TV picture, you must press the SET UP button then the **Yellow** button to display the Teletext page again.
- If the top of the page indicates that sub pages are being transmitted but the page displayed never changes, then the 'sub page number' is there to show the page contents have been updated, there are no sub pages.

Alternatively, if you know which sub page you require, press the SET UP button (to display special functions) followed by the **Blue** button; T**** will be displayed where the page number is normally found.
Enter desired sub page number before the T**** disappears.
For example, to select page 6 enter 0, 0, 0 and 6.
Press the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.
When the page is available, press the **Yellow** button to view the page. Regardless of how many pages are found, pressing the **Yellow** button will take you to the sub page which you requested.

Press TV/TEXT to return to normal TV operation.

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:

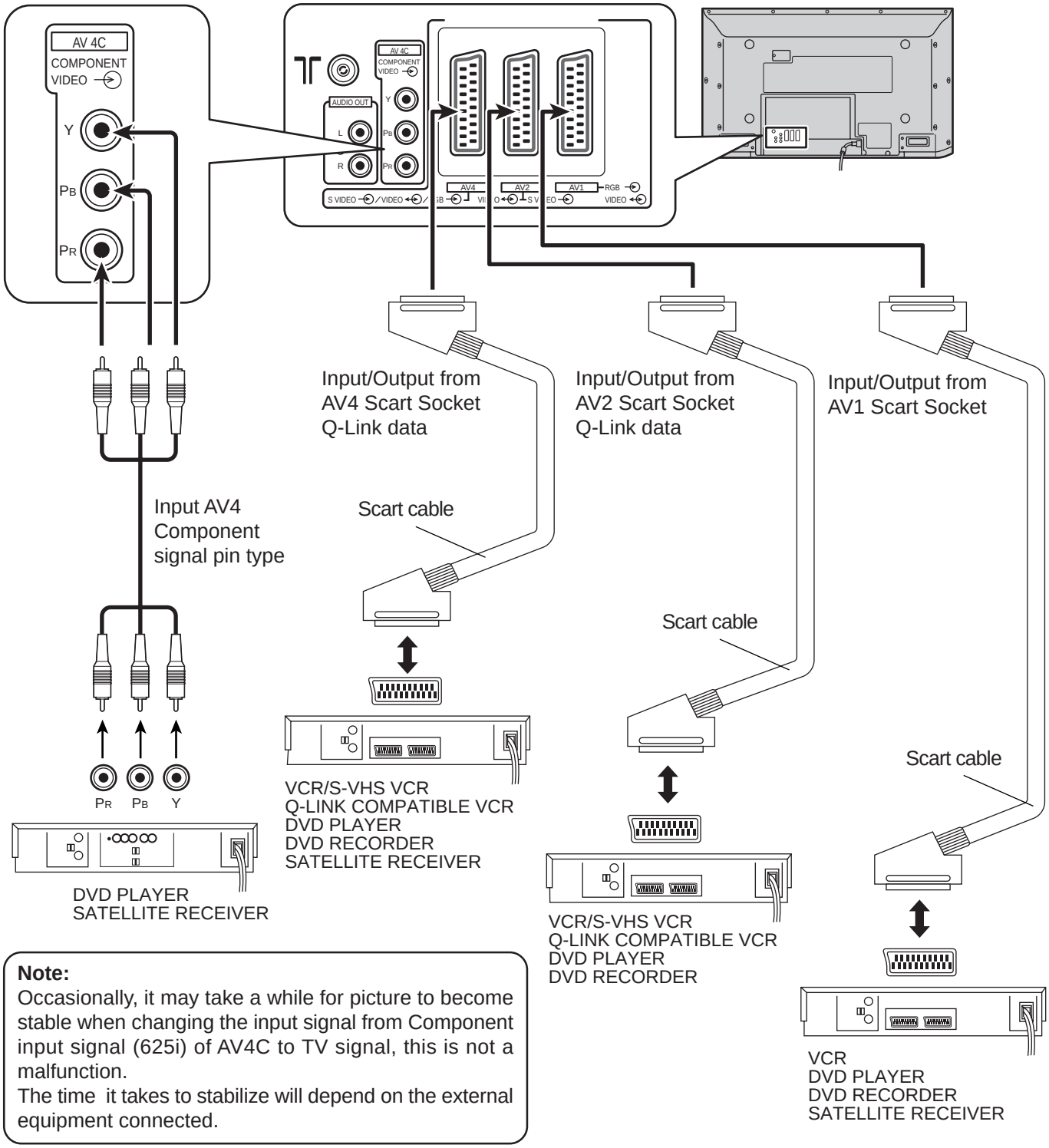
Press the **TV/AV** menu button

Press the relevant on screen selector key to select the AV source you wish to view (for example, press the green button to select AV2 if you have connected a video recorder to the AV2 SCART socket).
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).

How to connect the Input/Output terminals

Connects VCRs and other peripheral equipment

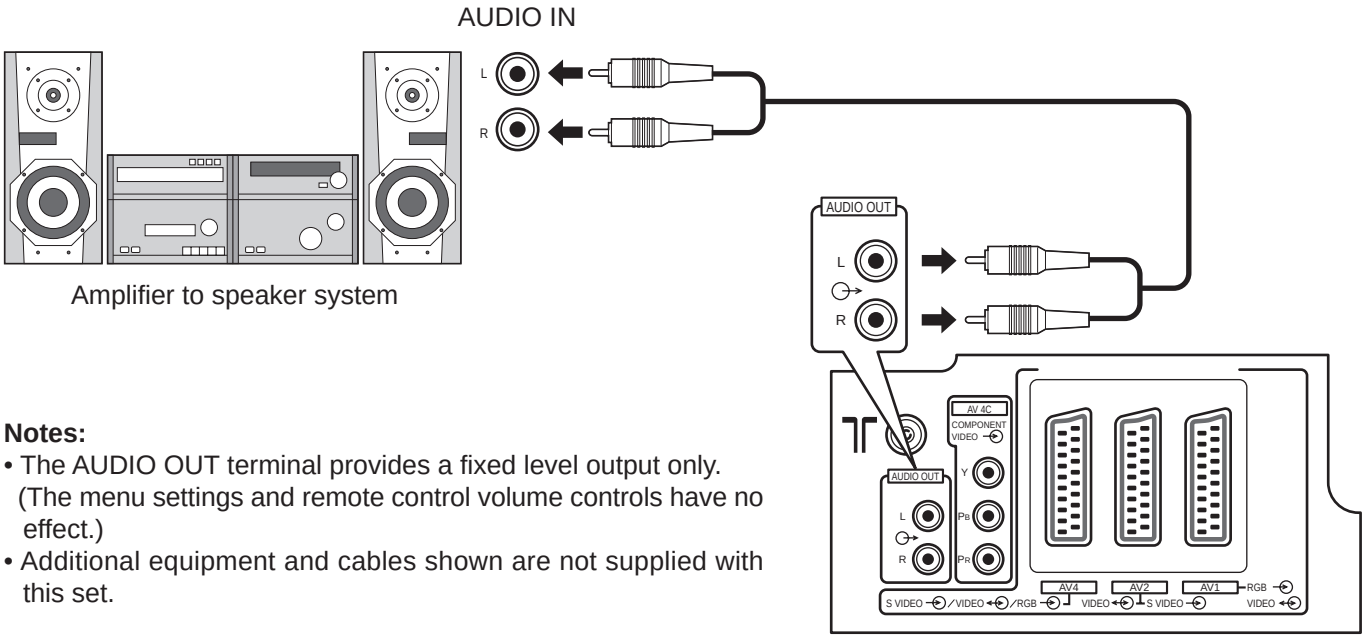


Note:
Occasionally, it may take a while for picture to become stable when changing the input signal from Component input signal (625i) of AV4C to TV signal, this is not a malfunction.
The time it takes to stabilize will depend on the external equipment connected.

Notes:

- Additional equipment and cables shown are not supplied with this set.
- Do not connect a computer with TTL output (5V) to this set.
- The AV2, AV4 21 pin socket can also be used as an output to Audio/Video equipment. (see page 9)
- Select the desired VIDEO input position by pushing the TV/AV button. (see page 15)
- For Scart socket wiring information see page 49.
- Scart RGB and Component video cannot be connected at the same time to AV4, Scart RGB has priority. AV4C (Component input) cannot be selected while Scart RGB is connected.

How to connect the AUDIO OUT terminals

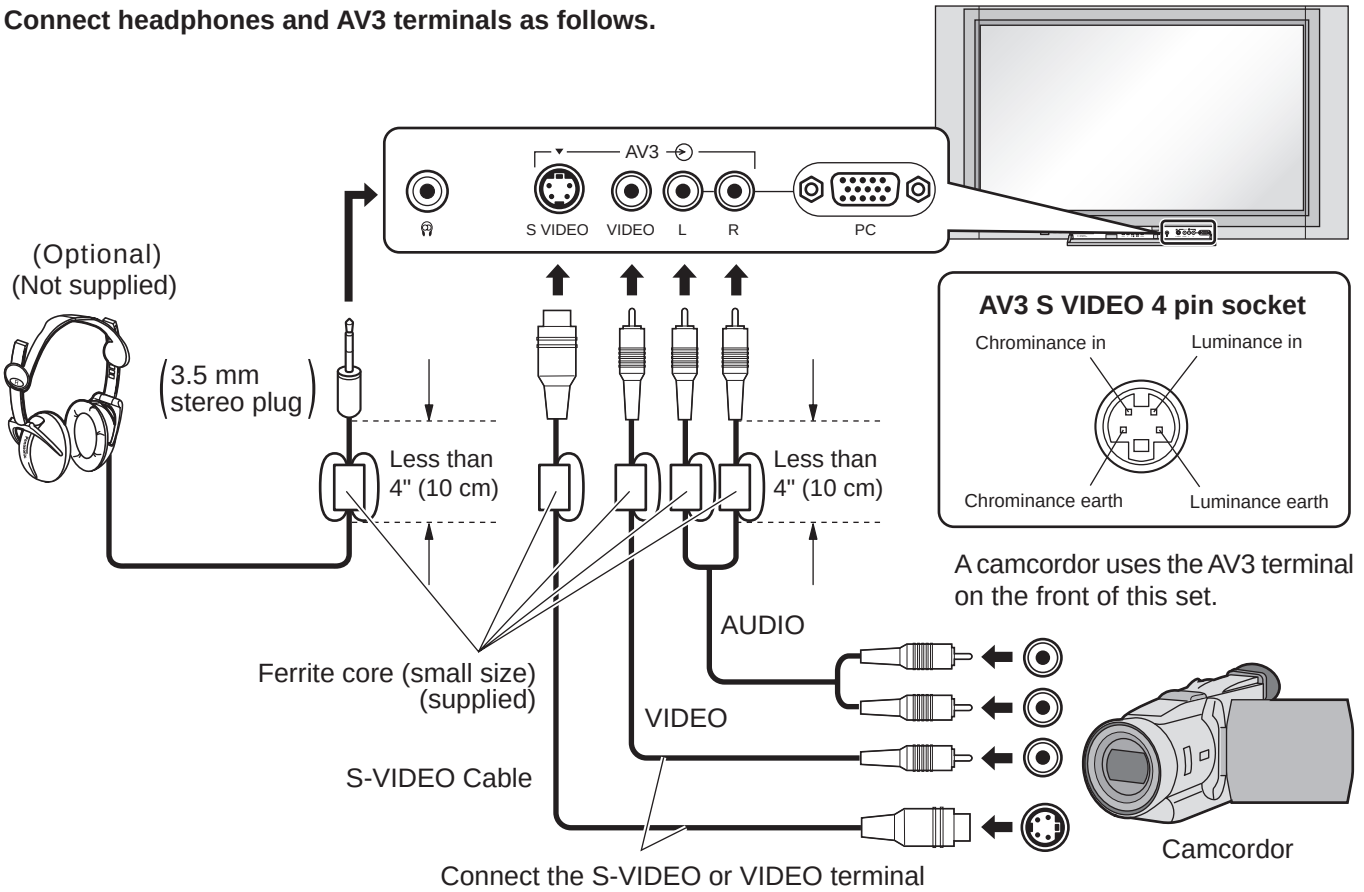


Amplifier to speaker system

Notes:
- The AUDIO OUT terminal provides a fixed level output only. (The menu settings and remote control volume controls have no effect.)
- Additional equipment and cables shown are not supplied with this set.

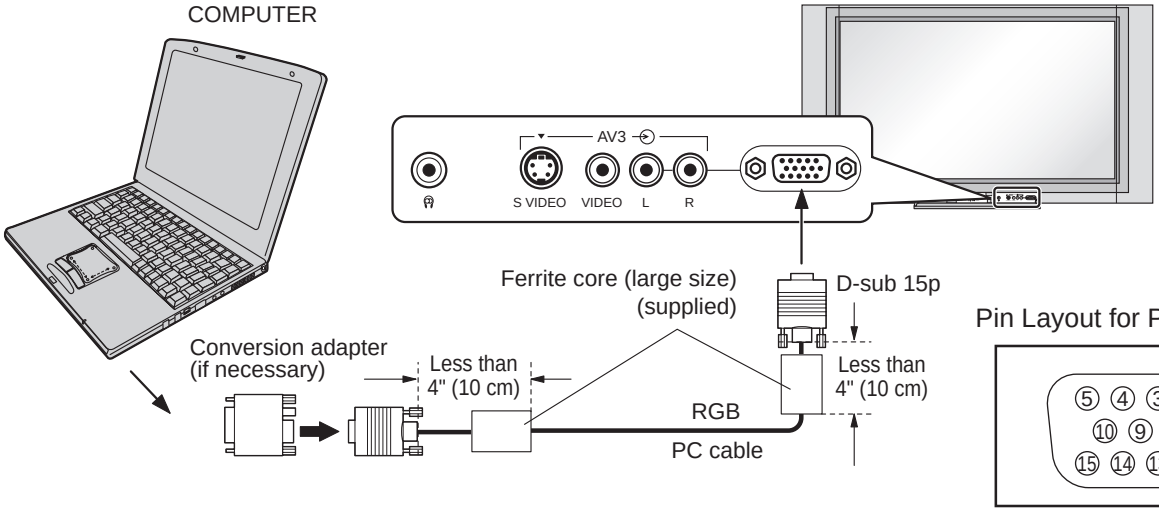
How to connect the Headphones / AV3 terminals

Connect headphones and AV3 terminals as follows.

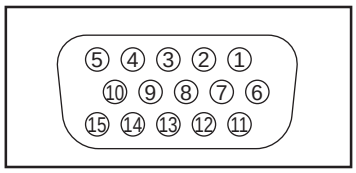


Notes:
- The volume level of the headphones can be adjusted by selecting “Headphone Volume” from the Sound menu.
- Additional equipment and cables shown are not supplied with this set.

PC Input Terminals connection



Pin Layout for PC Input Terminal



Notes:

(1) Computer signals which can be input are those with a horizontal scanning frequency of 15 to 110 kHz and vertical scanning frequency of 48 to 120 Hz. (However, the image will not be displayed properly if the signals exceed 1,200 lines.)

Signal Names for D-sub 15P Connector

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R (P_R/C_R)	⑥	GND (Ground)	⑪	NC (not connected)
②	G (Y)	⑦	GND (Ground)	⑫	NC
③	B (P_B/C_B)	⑧	GND (Ground)	⑬	HD/SYNC
④	NC	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC

(2) The display resolution is a maximum of 640 × 480 dots when the aspect mode is set to “4:3”, and 852 × 480 dots when the aspect mode is set to “16:9”. If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
(3) The PC input terminals are DDC1/2B-compatible. If the computer being connected is not DDC1/2B-compatible, you will need to make setting changes to the computer at the time of connection.
(4) Some PC models cannot be connected to the set.
(5) There is no need to use an adapter for computers with DOS/V compatible D-sub 15P terminal.
(6) The computer shown in the illustration is for example purposes only.
(7) Additional equipment and cables shown are not supplied with this set.
(8) Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range.
(9) Component Input is possible with the pin 1, 2, 3 of the D-sub 15P Connector.

Input signal that can be displayed

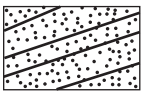
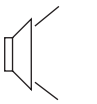
	signal name	horizontal frequency(kHz)	vertical frequency(Hz)	PC
1	640 × 400 @70 Hz	31.47	70.00	*
2	640 × 480 @60 Hz	31.47	59.94	*
3	Macintosh13” (640 × 480)	35.00	66.67	*
4	640 × 480 @75 Hz	37.50	75.00	*
5	852 × 480 @60 Hz	31.50	60.00	*
6	800 × 600 @60 Hz	37.88	60.32	*
7	800 × 600 @75 Hz	46.88	75.00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

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

Note: Signals without above specification may not be displayed properly.

Troubleshooting

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

Symptoms		Checks
Picture	**Sound**	
Snowy Picture	Noisy Sound	Aerial location, direction or connection
Multiple Image	Normal Sound	Aerial location, direction or connection
Interference	Noisy Sound	Electrical appliances Cars/Motorcycles Fluorescent lights
Normal Picture	No Sound	Volume level Sound mute switched on
No Picture	No Sound	This set to AV mode Not plugged into A.C. outlet Not switched on Picture / Sound controls set at minimum levels Check if in stand-by mode
No Colour	Normal Sound	Colour Controls set at minimum levels
 Poor or Distorted Picture	 Weak or No Sound	Retune Channel (s)
Normal Picture	Weak or distorted sound	Sound reception may have deteriorated. Switch MPX setting (Sound menu) to Off until reception improves.

Plasma TV panel

Symptoms	Check
Some parts of the screen do not light up	The plasma TV panel is manufactured using an extremely high level of precision technology, however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a malfunction.
After-images appear	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma TV. Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode. **Note:** The permanent after-image on the Plasma TV resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.

Notes:

• External surfaces of the unit may become hot during operation. But this is completely normal.

• See label on the base of this equipment for ratings and other information.

For your Guidance

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 this TV).

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 wil not operate when this TV is in AV mode.

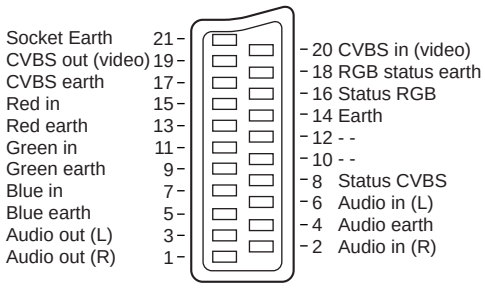
Last position Memory
Certain functions have a last position memory, i.e. the setting at the time of switch - off will be the setting used when this set is switched on again:

Programme	OSD language
Headphone volume	Tint (M.NTSC/NTSC only)
AV position	Contrast
Volume	Sharpness
Bass	Aspect
Treble	Standby
Balance	Brightness
Status	Colour
Teletext mode	Colour balance
Decoder(AV2)	P-NR
Q-Link	Volume correc.
Text language	(in AV mode only)
3D-COMB	Mode of Sound
	Viewing mode

Pin Assignment

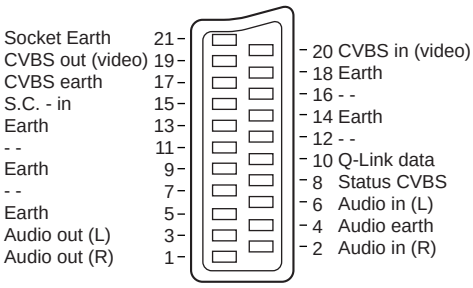
Scart and S VIDEO socket information

AV1 Scart socket (RGB, VIDEO)



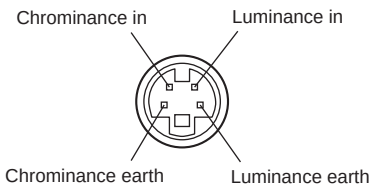
Suitable inputs for AV1 include RGB (Red / Green / Blue).

AV2 Scart socket (S VIDEO, Q-Link)

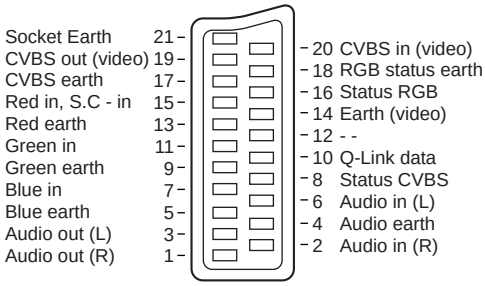


AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

AV3 S VIDEO 4 pin socket



AV4 Scart socket (RGB, S VIDEO, Q-Link)



Suitable inputs for AV4 include RGB (Red / Green / Blue).
AV4 - Pins 15 and 20 are dependent on AV4 S-VHS / VIDEO switching.

Specifications

		TH-37PA20	TH-42PA20
Power Source		220 V - 240 V 50 Hz / 60 Hz A.C.	
Power Consumption			
	Normal use	243 W	313 W
	Standby	1.8 W	
	Plasma TV OFF	1.0 W	
Plasma Display panel			
	Drive method	AC type	
	Aspect Ratio	16:9	
	Contrast Ratio	4000:1	
	Screen size	37-inch	42-inch
	(No.of pixels)	818 mm (W) × 461 mm (H) × 939 mm (diagonal)	920 mm (W) × 518 mm (H) × 1056 mm (diagonal)
		408,960 (852 (W) × 480 (H)) [2,556 × 480 dots]	
Sound			
	Speaker	L: Woofer (40 mm) × 4 + Tweeter (35 mm) × 1 R: Woofer (40 mm) × 4 + Tweeter (35 mm) × 1	
	Audio Output	16 W (8 W + 8 W) (10 %THD)	
	Headphone	M3 (3.5 mm) Jack × 1	
Applicable signals			
	Colour System	NTSC, PAL, PAL60, Modified NTSC	
	Scanning format	525 (480) / 60i · 60p, 625 (575) / 50i · 50p	
	PC signals	VGA display VGA SVGA, XGA, SXGA, UXGA ……(compressed) Horizontal scanning frequency 15 - 110 kHz Vertical scanning frequency 48 - 120 Hz	
Receiving Systems/ Band name		**PAL I** UHF: 21 - 68 **PAL 525/60** Playback of NTSC tape from some PAL video recorders (VCR) **M.NTSC** Playback from M.NTSC Videorecorders (VCR) **NTSC** (AV INPUT ONLY) Playback from NTSC Videorecorders (VCR)	
OUTPUT			
	AUDIO OUT	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms
INPUT			
	AV3-Front	VIDEO (RCA Pin Type × 2) S-VIDEO (MINI DIN 4-pin) AUDIO L-R (RCA Pin Type × 2)	1.0 Vp-p (75 Ω) Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω) 0.5 Vrms
	AV4C-Rear	Y P_B/P_R	1.0 Vp-p (including synchronization) ±0.35 Vp-p
	PC	(HIGH-DENSITY D-SUB 15PIN) AUDIO L-R (RCA Pin Type × 2)	R,G,B/0.7 Vp-p (75-ohm) HD, VD/1.0 - 5.0 Vp-p (high impedance) 0.5 Vrms (high impedance)
INPUT/OUTPUT			
	AV1-Rear	21 Pin socket (Audio/Video in, TV out, RGB in)	
	AV2-Rear	21 Pin socket (Audio/Video in, Audio/Video out, S-Video in, Q-Link)	
	AV4-Rear	21 Pin socket (Audio/Video in, Audio/Video out, S-Video in, RGB in, Q-Link)	
ANT-Rear		UHF	
Operating Conditions		Temperature : 0 ° – 40 °C (34 °F - 104 °F) Humidity : 20 % - 80 % RH (non-condensing)	
Accessories Supplied			
	Remote Control Transmitter	N2QAJB000081	
	Batteries	2 × R6 Size	
	Fixing band	(TMME203 or TMME 187) × 1	
	Ferrite core	Large size × 3, Small size × 5	
Dimensions (W × H × D)		1070 mm × 596 mm × 99 mm	1170 mm × 658 mm × 99 mm
Mass (Weight)		29.5 kg	35.0 kg

Notes:

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

(2) This equipment complies with the EMC standards listed below.
EN55013, EN61000-3-2, EN61000-3-3, EN55020.

Customer's Record

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

Model Number _____ Serial Number _____

Matsushita Electric Industrial Co., Ltd.

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

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