Panasonic

TX-28PL10D

TX-32PL10D/M

Colour television

QuintrixF

T [tau] FLAT DIGITAL

100Hz SUPER DIGITAL SCAN

WIDE DIGITAL P-L-U-S

TOP TEXT

Q Link

Operating Instructions

English

TQB8E3445-eng

This is an unapproved issue — for information only.

WELCOME

Dear Panasonic Customer,
Welcome to the Panasonic family of customers. We hope that you have many years of enjoyment from your new colour television. This is a very advanced television; however, the Quick Start Guide will tell you how to have the TV operating quickly. You can then read the instructions completely and retain them for future reference.

CONTENTS

WARNINGS AND PRECAUTIONS

- This TV set is designed to operate on A.C. 220 – 240V, 50Hz.

- To prevent damage which might result in electric shock or fire, do not expose this TV set to rain or excessive moisture.

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

- Avoid exposing the TV set to direct sunlight and other sources of heat.

- The On/Off switch on this model does not fully disconnect the TV from the mains supply. Remove the mains plug from the wall socket when the TV set is not used for a prolonged period of time.

- **CABINET AND PICTURE TUBE CARE**
  Remove the mains plug from the wall socket. The cabinet and picture tube can be cleaned with a soft cloth moistened with mild detergent and water. Do not use solutions containing benzol or petroleum. TV sets can produce static electricity, care must be taken whenever touching the TV screen.

- Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 5cm is left all around this television receiver even when it is placed inside a cabinet or between shelves.

Check that you have the accessories and items shown

Operating Instruction book

Remote Control Transmitter
EUR511211

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

Remote control batteries

● 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 – Cd, Ni – MH) batteries.

QUICK START GUIDE

1 Plug in aerial and connect ancillary equipment.

AV1   SATELLITE RECEIVER

AV2

OR

VCR   AV1

AV2
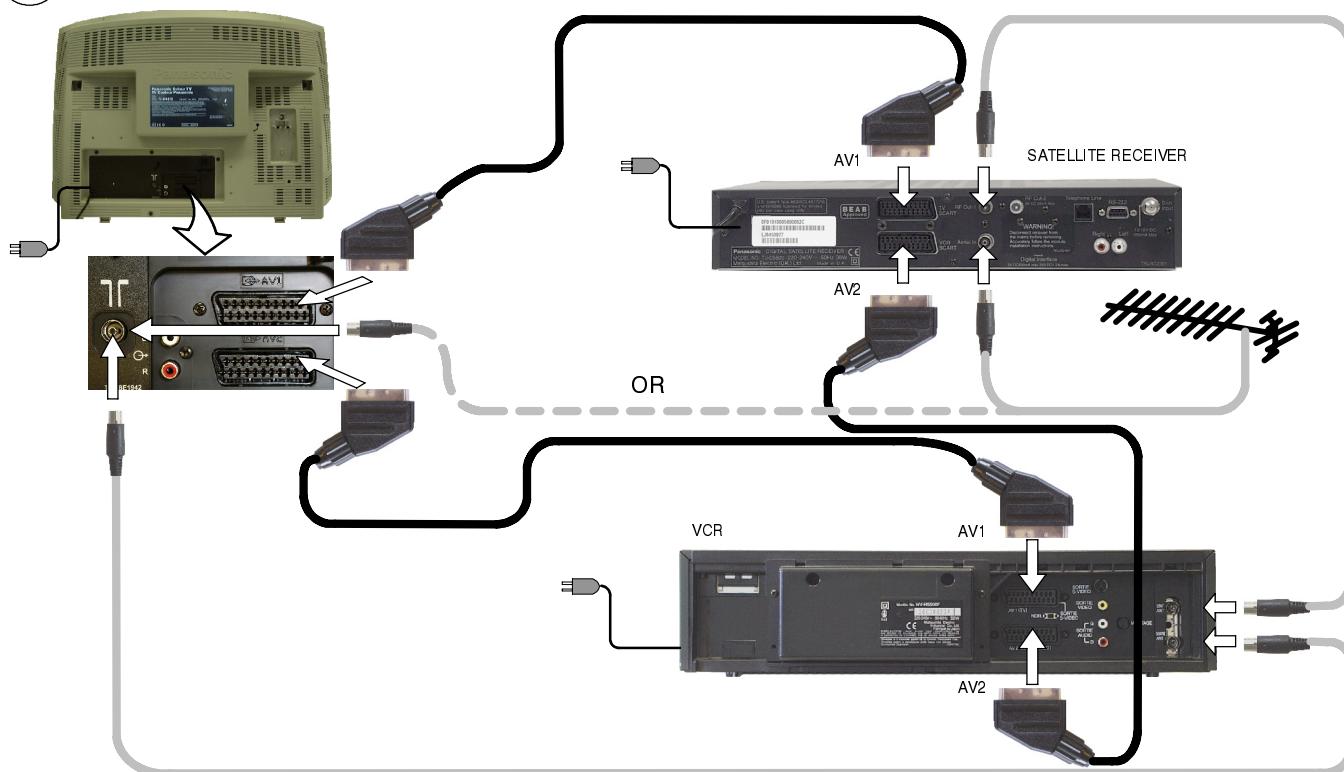
2
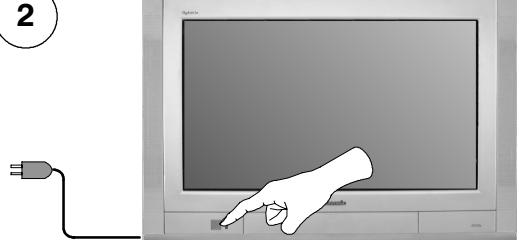
First, ensure that the **VCR is in Standby mode.**

Plug in TV and switch on.

3

Select your country.

For Switzerland and Belgium, select the desired language

Press the red button.

4

Auto setup will begin, your stations will be located and stored.

Use the Programme Edit menu to delete unwanted stations (see page 15).

Press the TV/AV button to exit.

TV/AV

5

If you are installing a new Q – Link compatible VCR, you can now switch it ON. Downloaded tuning data will match the television's. If you are installing a new NEXTVIEWLINK compatible VCR, you will need to initiate download manually.
See the VCR handbook for details.

- If the VCR has not accepted download data from the TV, you may need to select the Download option from the VCR's menu.
- If Q – Link is not operating correctly, check it is connected to the television's AV2 socket, the SCART lead is a "full function" type, and the VCR is compatible with Q – Link, NEXTVIEWLINK or similar technologies. Ask your dealer for further details.
- For further information on Q – Link and connecting equipment, see pages 22, 27 and 28.

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

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

Open the flap on the television's front panel

Press and release here to open flap
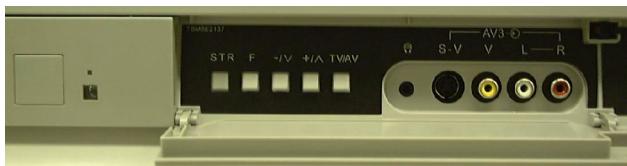
Press the **F** button repeatedly until the Geomagnetic Correction feature is displayed

F

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

−/v   +/∧
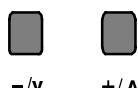
Press the **F** button again to return to normal viewing. Close the flap to prevent damage

F

7 You are now ready to begin viewing programmes

The cursor controls provide the two basic functions:

Adjust Volume   Change Programme

Red light indicates Standby mode.

MAINS Power On/Off switch

STR (Normalisation store)
Used to store tuning and other function settings

F (Function select)
Displays the On Screen Display functions, use repeatedly to select from the available functions - Volume, Contrast, Brightness, Colour, Sharpness, Tint (in NTSC mode), Bass, Treble, Balance, Tuning mode and Geomagnetic correction

RCA Audio/Video sockets (page 27)

S-VHS socket (see page 27)

Headphone socket (see page 27)

TV/AV switch (see page 23)

Increases or decreases the programme position by one. When a function is already displayed, press to increase or decrease the selected function.

Standby ON/OFF switch
Switches TV On or Off standby.

Menu buttons
Press to access the Picture, Sound and Setup menus (see page 7)

Status button
Press to display programme position, programme name, channel number, TV system, time stereo mode and programme table

Teletext buttons (see page 25)

Direct TV Record button (see page 22)

Ambience on/off

Aspect control button (see page 8)

Direct Channel Access
During normal TV viewing or when in the Tuning, Programme edit or Manual tuning menus, press and then enter channel number using the numeric buttons

The N button will recall settings stored with STR

STR (Normalisation store)

Sound mute On/Off

Cursor buttons to make selections and adjustments

Switch between viewing TV or AV input (see page 23)

Coloured buttons used for Programme Edit functions (see page 15) Teletext functions (see page 25) AV selection (see page 23)

**Programme / channel change buttons (0-9) and Teletext page buttons (see page 25)**

Programme position for selection of two digit programmes (10-99) using numeric buttons

VCR / DVD buttons (see page 24)

The Help button provides a demonstration of On Screen Display menus

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

Menu Title

Sub-menus

Selection bar

```
Picture menu

Contrast
Brightness
Colour
Sharpness
Colour balance    Normal        ○ ● ○
P-NR              Off
AI                On
```

Select
Change
TV/AV Exit

Instructions

Indicator for options

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

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

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

The **PICTURE**, **SOUND** and **SET UP** buttons are used to open the main menus and also to return to the previous menu.

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

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

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

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

The **HELP** button will run a demonstration of the menus available. Press the **HELP** button and select one of the options.

If the **HELP** button is pressed whilst a menu is displayed, the 'Instructions' box will be hidden from view. Press the **HELP** button again to show the 'Instructions' box.

PICTURE   SOUND   SET UP

STR

TV/AV

HELP
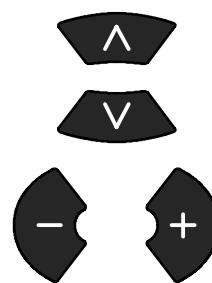
ASPECT CONTROLS

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

Note: Just mode is not available when viewing an RGB source.

Press the ASPECT button to move through the six aspect options: Panasonic Auto, 4:3, Zoom, S−Zoom, 16:9 (Full) and Just

ASPECT

Panasonic Auto

Some broadcasts are transmitted together with a wide screen identification signal (WSS). If the TV receives this signal then it will automatically switch to wide screen 16:9 mode, maximum display.

The automatic widescreen switching depends upon reception conditions and the strength of the signal. If the signal is poor and therefore the WSS is weak then it is possible that the picture may not expand to full size and that the TV will display black areas around the edges.

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

Panasonic Auto

4:3

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

4:3

Zoom

Zoom mode magnifies the central section of the picture.

The picture can be moved and enlarged vertically using the coloured keys. The former adjustment is useful for viewing any sub−titles which may appear outside the picture.

Zoom

ASPECT CONTROLS

The on screen selector keys that appear for some aspect functions will clear after a few seconds. If you subsequently wish to select an operation then press the Aspect key once more for the keys to reappear.

The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.

If, in 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 of your VCR requires adjustment (your VCR instruction book will contain adjustment details).

Blue key has been pressed to move picture upwards

S-Zoom

S-Zoom allows increased magnification and the ability to move the picture horizontally and vertically.
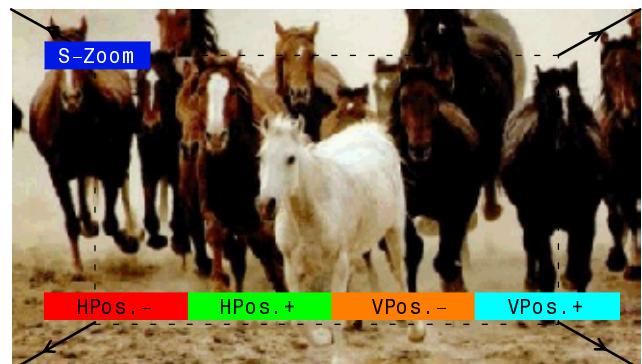
Increased magnification with **S-Zoom**

16:9 (Full)

16:9 (Full) will display the picture at its maximum size but with slight elongation.

16:9 (Full)

ASPECT CONTROLS

Just

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

Just

STILL CONTROL

STILL Control
The STILL key allows you to freeze the picture at any time.

HOLD

STILL

This menu allows you to make adjustments to the picture quality

Open the Picture menu
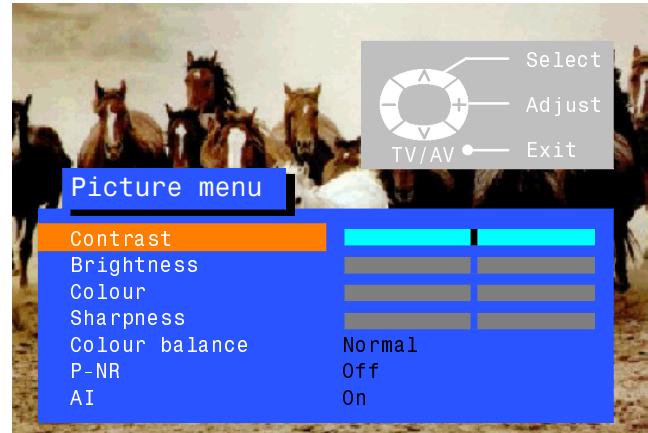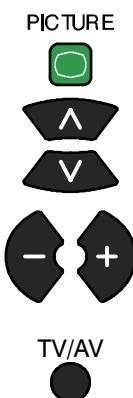
Move to your choice

Increase or decrease levels or set options

Press the TV/AV button to exit the Picture menu

PICTURE

TV/AV

Select
Adjust
TV/AV — Exit

Picture menu

Contrast
Brightness
Colour
Sharpness
Colour balance   Normal
P-NR   Off
AI   On

Contrast

Brightness

Colour

Sharpness

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

Tint

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

Select
Adjust
TV/AV — Exit

Picture menu

Contrast
Brightness
Colour
Sharpness
Colour balance   Normal
P-NR   Off
AI   On

Colour balance

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

P-NR

P-NR will automatically reduce unwanted picture interference.

AI

The AI setting automatically analyses the incoming picture and processes it to give improved contrast, optimum depth of field and vivid colour tones.

Sharpness

11

SOUND MENU

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

SOUND

Open the Sound menu

Move to your choice

Increase or decrease levels or
set options

Press the TV/AV button to exit
the Sound menu

TV/AV

Sound menu

| Select
| Adjust
TV/AV — Exit

Sound menu

Volume	
Bass	
Treble	
Balance	
MPX	Stereo
Mode	Music
Ambience	Off

Volume

The Volume adjustment sets the overall output volume.

Bass

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

Treble

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

Balance

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

Select
Change
TV/AV — Exit

Sound menu

Volume	
Bass	
Treble	
Balance	
MPX	Stereo
Mode	Music
Ambience	Off

MPX
● ○

MPX will usually be set to Stereo to provide the best reproduction, however if reception deteriorates or if the service is not available then it is advisable to switch to Mono. Mono (M1) and (M2) can also be selected if signals are being transmitted.

Mode
● ○

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

Ambience
● ○

Ambience provides a dynamic enhancer to simulate improved spatial effects.

Select
Change
TV/AV — Exit

Sound menu

Volume	
Bass	
Treble	
Balance	
MPX	Stereo
Mode	Music
Ambience	Off
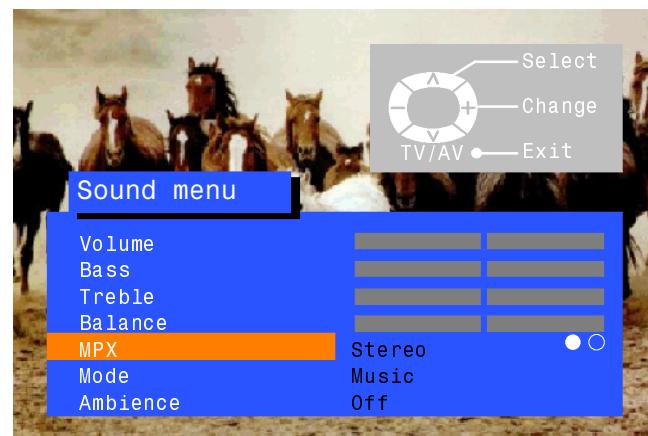
The Setup menu provides access to various advanced features and also to the Tuning menu

SET UP

Open the Setup menu

Move to your choice

∧
∨
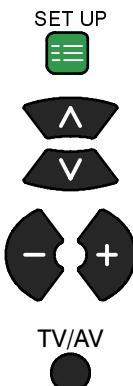
Increase or decrease levels, set options or access further menus

− +

Press the TV/AV button to exit the Setup menu

TV/AV

Select
Change
TV/AV ━● Exit

Setup menu

Teletext	FLOF	● ○
Off timer	Off	
Flicker reduction	On	
Q-Link	On	
Tuning menu		
OSD language		

●○

Teletext

The Teletext option allows you to choose between TOP / FLOF or LIST mode. See page 25.

●○○○○○○

Off timer

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

○●

Flicker reduction

You will normally find that Flicker reduction is best set to **On** to reduce any slight picture movement. However, it is possible that some occasional broadcasts may benefit by selecting the **Off** position.

○●

Q-Link

Q-Link allows you to enable or disable data communication with a compatible VCR. See page 22.

Tuning menu

The Tuning menu provides an entry to many other features including Programme edit, ATP, Fine tuning, Manual tuning, Colour system and Volume correction. See page 14.

OSD language

OSD language allows you to select the language used for On Screen Displays. See page 21.

Select
Change
TV/AV ━● Exit

Setup menu

Teletext	FLOF	
Off timer	Off	
Flicker reduction	On	
Q-Link	On	○ ●
Tuning menu		
OSD language		

Select
Change
TV/AV ━● Exit

Setup menu

Teletext	FLOF	
Off timer	Off	
Flicker reduction	On	
Q-Link	Off	● ○
Tuning menu		
OSD language		
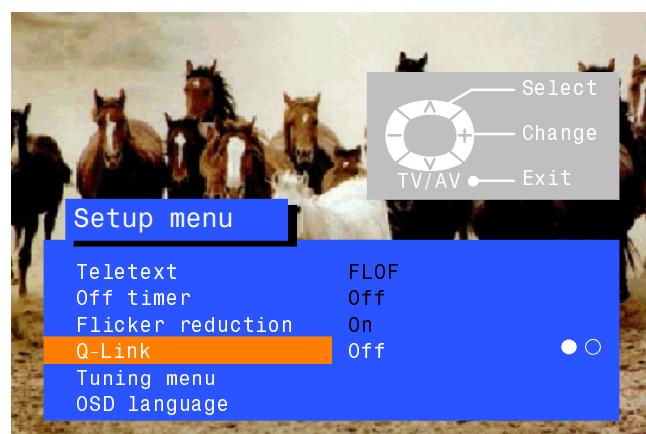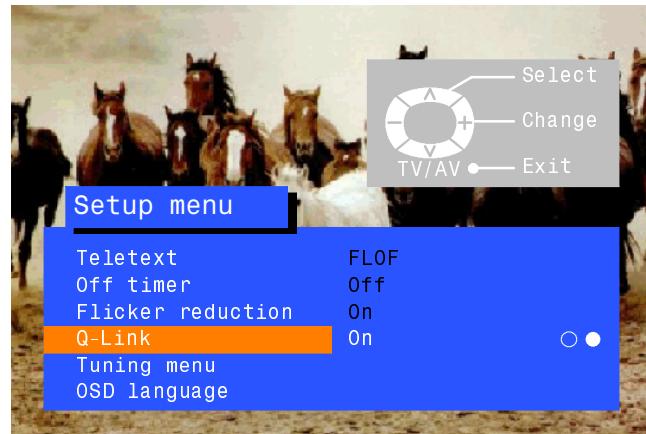
TUNING MENU

The Tuning menu provides access to manual, automatic and fine tuning menus

Open the Setup menu

SET UP

Move to Tuning menu

Access Tuning menu

Move to your choice

Increase or decrease levels, set
options or access further menus

TV/AV

Press the TV/AV button to exit

Setup menu

Teletext	FLOF	● ○
Off timer	Off	
Flicker reduction	On	
Q-Link	Off	
Tuning menu		
OSD language		

Select
Change
TV/AV — Exit

Setup menu

Teletext	FLOF
Off timer	Off
Flicker reduction	On
Q-Link	Off
Tuning menu	Access
OSD language	

Select
Access
TV/AV — Exit

Programme edit

Accessing the Programme edit menu
will allow stations to be moved, added,
deleted, named or locked and provides
access to the TV - system.
See page 15.

Auto setup

The Auto setup menu allows you to
automatically retune the TV.
See page 19.

Manual tuning

The Manual tuning menu allows
individual programme positions to be
tuned manually. See page 20.

Fine tuning

Stations can be finely tuned using the
Fine tuning adjustment.

●○○○ Colour system

The Colour system menu allows you to
decide the correct choice of
transmission standard.

Volume correc.

Volume correction allows you to adjust
the volume level of individual stations.

●○ Decoder (AV2)

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

1
CH41

Return —

Select
Access
TV/AV — Exit
'STR' — Store

Tuning menu

Programme edit	Access
Auto setup	
Manual tuning	
Fine tuning	
Colour system	AUTO
Volume correc.	
Decoder (AV2)	Off
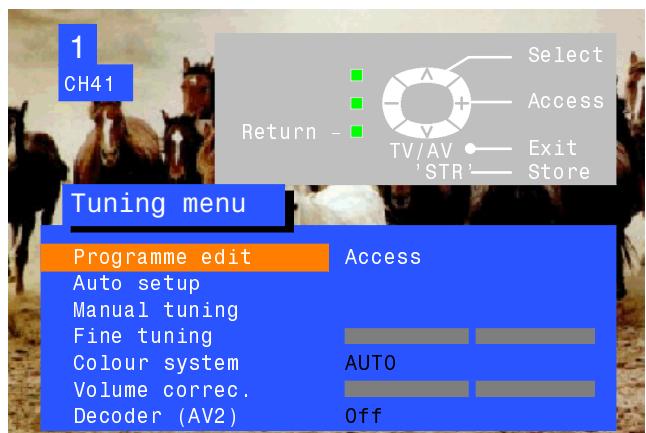
TUNING MENU – PROGRAMME EDIT

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

Open the Setup menu

SET UP

Move to Tuning menu

Access Tuning menu

Move to Programme edit menu

Access Programme edit menu

Make required changes
(see sections below)

Press STR button to store
changes

STR

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

TV/AV

| Select
Change
TV/AV — Exit |

Setup menu

Teletext	FLOF ● ○
Off timer	Off
Flicker reduction	On
Q-Link	Off
Tuning menu	
OSD language	

Select
Access
TV/AV — Exit

Setup menu

Teletext	FLOF
Off timer	Off
Flicker reduction	On
Q-Link	Off
Tuning menu	Access
OSD language	
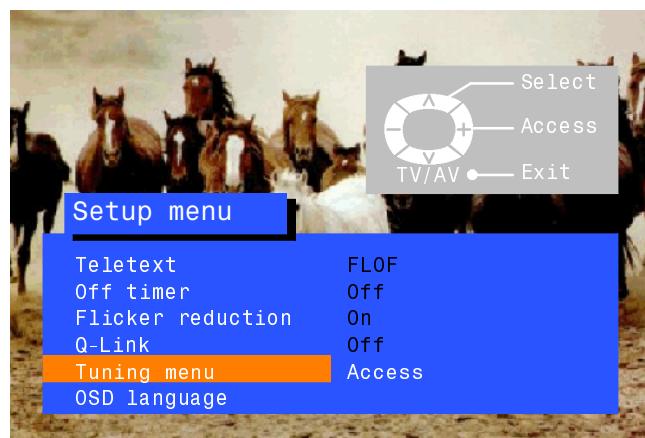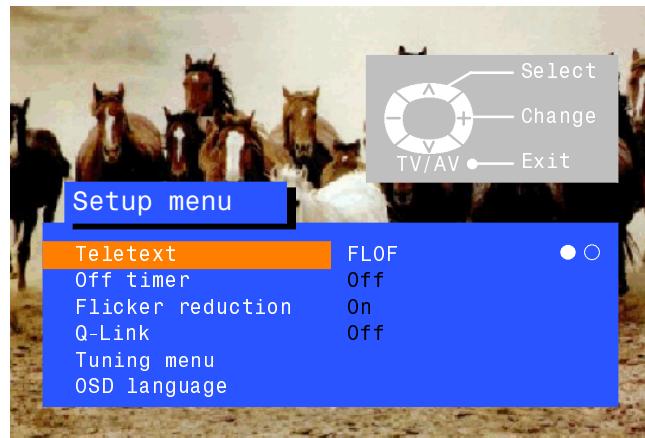
To delete an unwanted programme position

Choose the programme position

Press the Red button on remote
control

Press the Red button again to
confirm

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

TV/AV

1
CH41

Return —

Select
Access
TV/AV — Exit
STR — Store

Tuning menu

Programme edit	Access
Auto setup	
Manual tuning	
Fine tuning	
Colour system	AUTO
Volume correc.	
Decoder (AV2)	Off

Change
programme
Select
option
Return — TV/AV — Exit
STR — Store

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	–		Off	SC2
4:	–		Off	SC2
5:	–		Off	SC2

| Delete | Add | Move | TV > VCR |

15
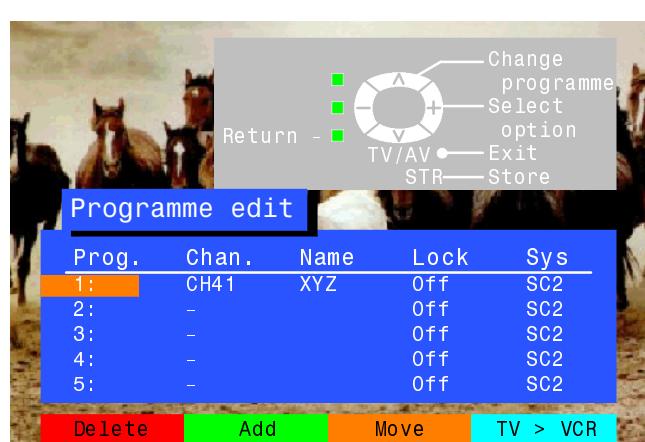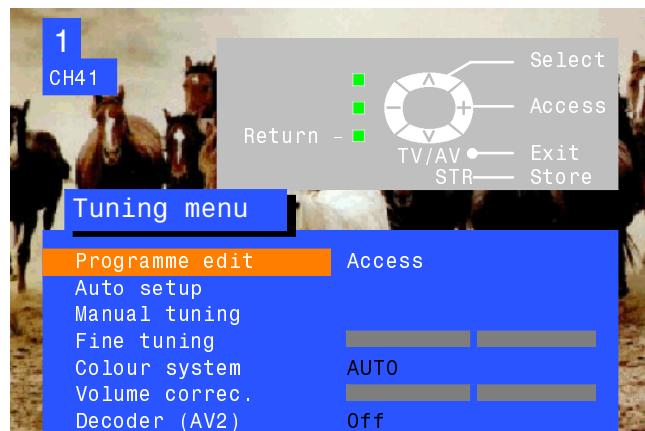
To add a programme position

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

∧
∨

Press the Green button

Press the Green button again to confirm

This blank programme can then be tuned, named, locked and be allocated your choice of TV-system

Press STR to store

STR

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

TV/AV

Change programme
Select option
Return –
TV/AV — Exit
'STR' Button — Store

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	–		Off	SC2
5:	–		Off	SC2

| Delete | Add | Move | TV > VCR |
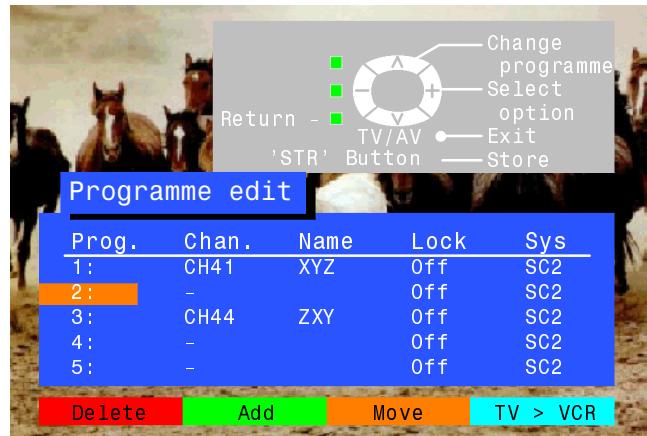
To move a programme to another position

Choose the programme position to be moved

∧
∨

Press the Yellow button on remote control

Choose new position

∧
∨

Press the Yellow button again to confirm

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

TV/AV

Change programme
Select option
Return –
TV/AV — Exit
'STR' Button — Store

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	–		Off	SC2
5:	–		Off	SC2

| Delete | Add | Move | TV > VCR |

Change programme
Select option
Return –
TV/AV — Exit
'STR' Button — Store

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	–		Off	SC2
4:	–		Off	SC2
5:	CH44	ZXY	Off	SC2

| Delete | Add | Move | TV > VCR |

16
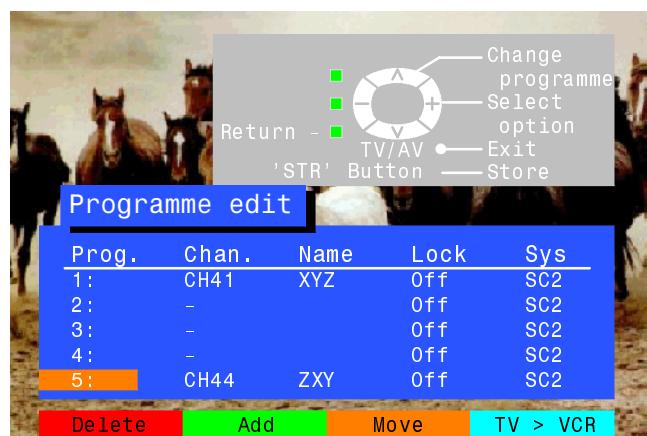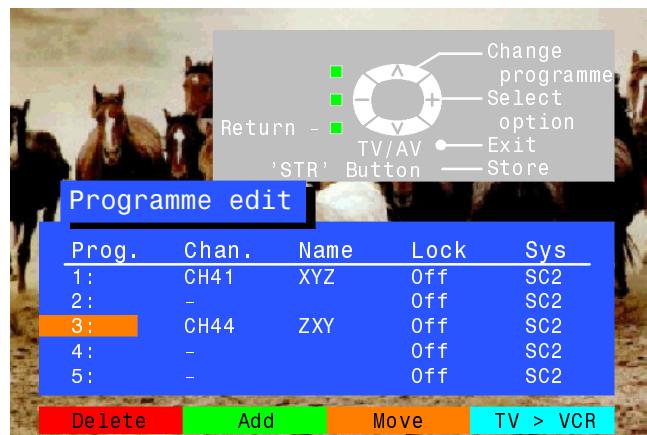
TUNING MENU – PROGRAMME EDIT

To tune a programme position

Choose the programme position

Move to the channel column

Increase or decrease channel number or use the 'C' key for Direct Channel Access (see page 6)

STR

Press STR to store

TV/AV

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

```
                              Change
                              channel
                            Select
                            option
 Return                 TV/AV    Exit
   'STR' Button         Store
```

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	-		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	-		Off	SC2
5:	-		Off	SC2
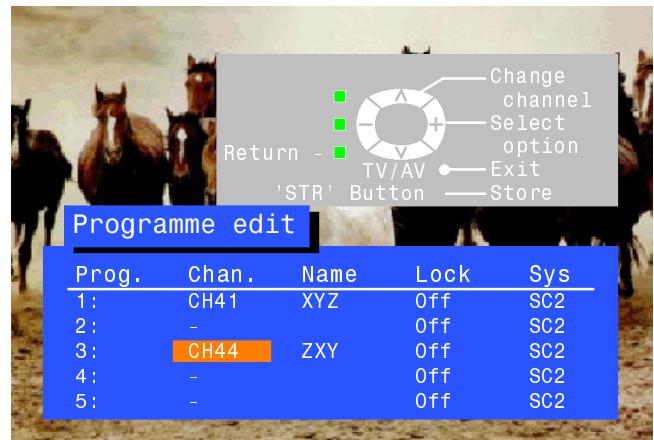
To rename a programme position

Choose the programme position

Move to the Name column
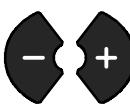
Choose the new character

Move to the next character position
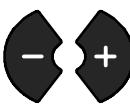
Continue until renaming is done

STR

Press STR to store

TV/AV

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

```
                              Change
                              character
                            Select
                            option
 Return                 TV/AV    Exit
   'STR' Button         Store
```

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	-		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	-		Off	SC2
5:	-		Off	SC2

```
A B C D E F G H I J K L M N O P Q
R S T U V W X Y Z Ă Ć Č Ě Ł Ř Ś Š
Ş Ţ Ž + - .   0 1 2 3 4 5 6 7 8 9
```
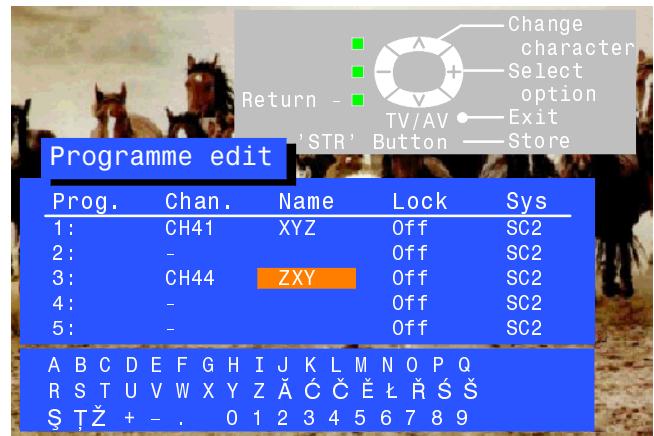
TUNING MENU – PROGRAMME EDIT

To lock a programme position to prevent access

Choose the programme position

Move to the lock column

Choose between lock on or lock off

Press STR to store

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 keys on the remote control is not available.

```
                              Lock
                          ■   On/Off
                          ■   Select
                                 option
              Return – ■
                          TV/AV ●——Exit
              'STR' Button ——Store
```

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	–		Off	SC2
5:	–		Off	SC2
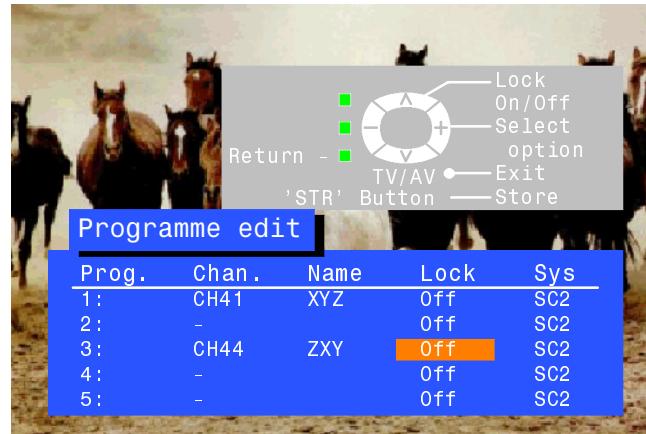
To change the TV-system for a programme position

Choose the programme position
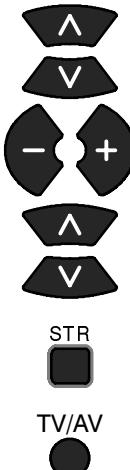
Move to the Sys column

Choose the required sound system:
SC1 : PAL B/G, H / SECAM B/G
SC2 : PAL I
SC3 : PAL D/K / SECAM D/K
F   : SECAM L/L'

Press STR to store

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

```
                              Change
                          ■   TV system
                          ■   Adjust
                                 option
              Return – ■
                          TV/AV ●——Exit
              'STR' Button ——Store
```

Programme edit

Prog.	Chan.	Name	Lock	Sys
1:	CH41	XYZ	Off	SC2
2:	–		Off	SC2
3:	CH44	ZXY	Off	SC2
4:	–		Off	SC2
5:	–		Off	SC2
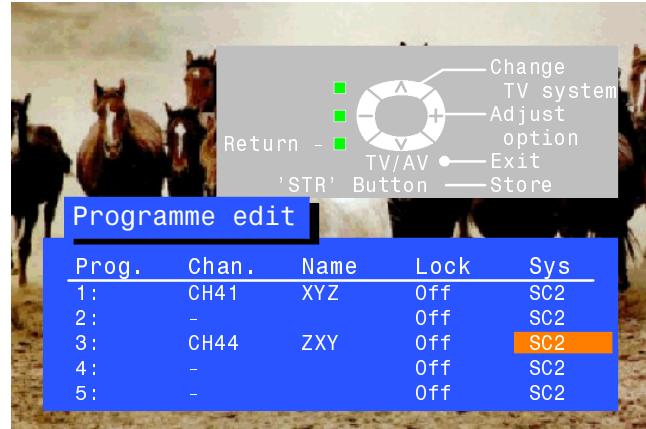
To copy programme information to a compatible VCR connected to AV2

Move to the Prog. column

Press the Blue button on the remote control.
Programme data will now be sent to the VCR. 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 handbook for further information.

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

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

18

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

Open the Setup menu

SET UP

Move to Tuning menu

∧
∨

Access Tuning menu

− +

Move to Auto setup

∧
∨

Access Auto setup

− +

Press to confirm start

− +

Select your country

∧
∨

Press to start Auto setup (ATP)

− +

Select
Access
TV/AV ● Exit

Setup menu

Teletext	FLOF
Off timer	Off
Flicker reduction	On
Q-Link	Off
Tuning menu	Access
OSD language	

1
CH41

Select
Access
Return –
TV/AV ● Exit
STR Store

Tuning menu

Programme edit	
Auto setup	Access
Manual tuning	
Fine tuning	
Colour system	AUTO
Volume correc.	
Decoder (AV2)	Off

The TV will search for, locate and sort into order your local stations. If a compatible VCR is connected via the AV2 socket, programme data will be sent to the VCR via Q-Link (see page 22).

WARNING
All current tuning
data will be erased

Start Auto setup
Return –
TV/AV ● Exit
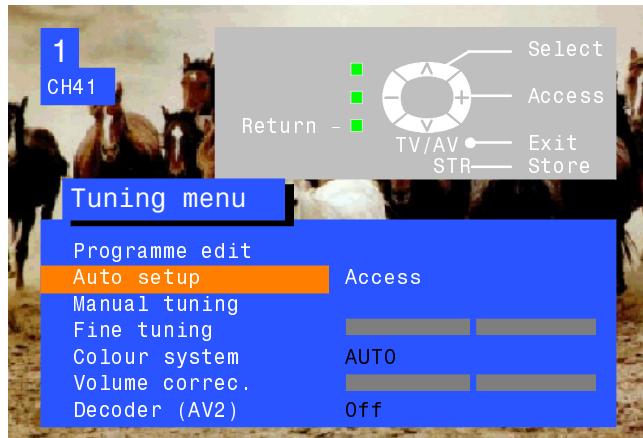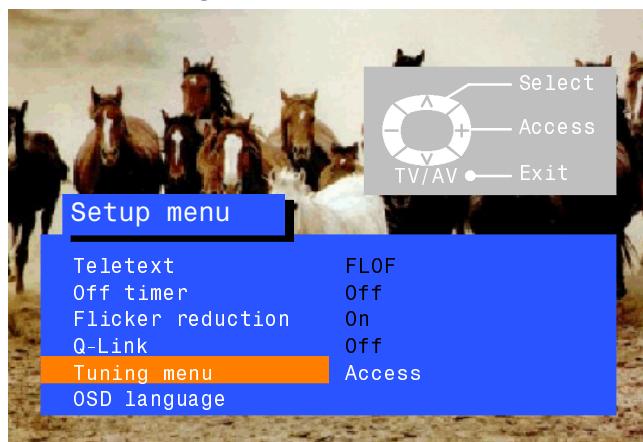
Once this operation is completed the TV will display programme position 1.

CH41

AUTO SETUP IN PROGRESS

SEARCHING : PLEASE WAIT

Found : CH41 XYZ

02   78:01   41

SETUP : Return to tuning menu
TV/AV : To exit

19
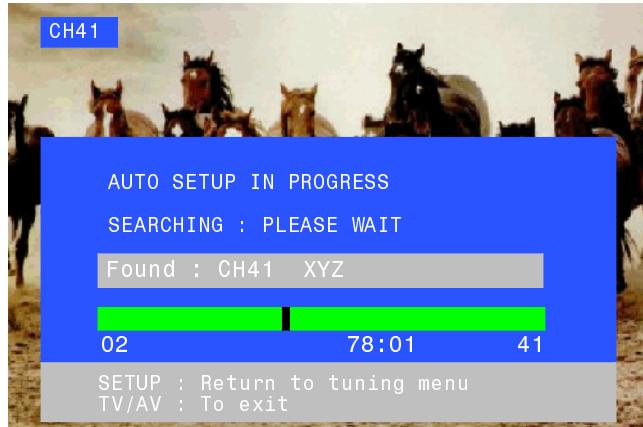
TUNING MENU – MANUAL TUNING

Manual tuning of the Programme positions is available either from the On Screen Display menu or from the front panel controls

Manual tuning menu

Open the Setup menu

SET UP

Move to Tuning menu

Access Tuning menu

Move to Manual tuning

Access Manual tuning

Select the programme position
to be tuned

Start tuning

When the desired programme is
found, press STR to store

STR

Press the TV/AV button to exit.

TV/AV

```
1
CH41
                                    Select
                                    Access
         Return –
                        TV/AV       Exit
                   'STR' Button     Store

Tuning menu
   Programme edit
   Auto setup
   Manual tuning          Access
   Fine tuning
   Colour system          AUTO
   Volume correc.
   Decoder (AV2)          Off
```

```
1
CH41
                                  Programme
                                  down/up
                                  Search
                                  down/up
         Return –
                        TV/AV     Exit
                   'STR' Button   Store

Manual tuning

   02                78:01          41
```
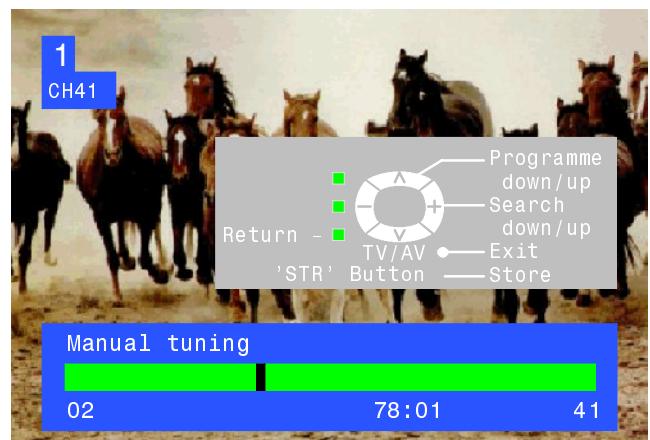
Manual tuning (Front panel)

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

F

Press the – or + button to access
Tuning mode

-/v   +/∧

Press the TV/AV button to move
between "Change programme",
"Search" or "Change TV system"

TV/AV

Press the – or + button to change
programme position, start search,
or alter TV system

-/v   +/∧

When the desired station is found,
press STR to store the changes

STR

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

F

```
1
CH41

SC2

Manual tuning (Front panel)

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

   02                78:01          41

   STR  F  -/V  +/∧ TV/AV
```
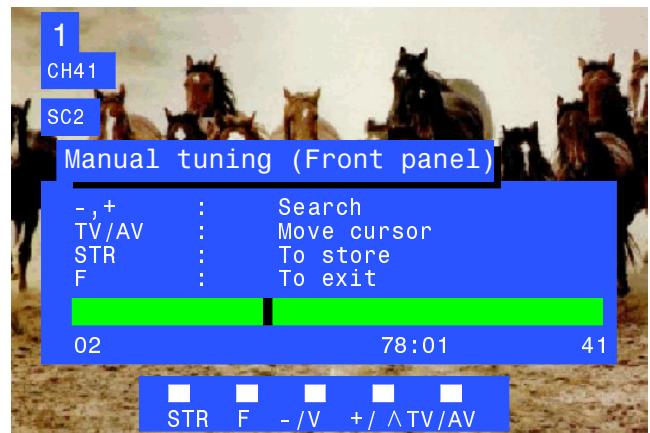
OSD LANGUAGE

When you first installed the TV the On Screen Display language was set according to your choice of country. If you wish to use a different language then it can be chosen from the OSD language menu

**Open the Setup menu**

SET UP

Move to the OSD language menu

Access the OSD language menu

Move to your choice

Press the TV/AV button to select and exit

TV/AV

```
                           Select
                           Access
              TV/AV    Exit

  Setup menu

    Teletext            FLOF
    Off timer           Off
    Flicker reduction   On
    Q-Link              Off
    Tuning menu
    OSD language        Access
```

```
                           Select
                           Select
     Return              Exit
              TV/AV

  OSD language

    Deutsch      Español      Nederlands
    English      Norsk        Suomi
    Français     Dansk        Türkçe
    Italiano     Svenska      Português
    ELLHNIKA
```
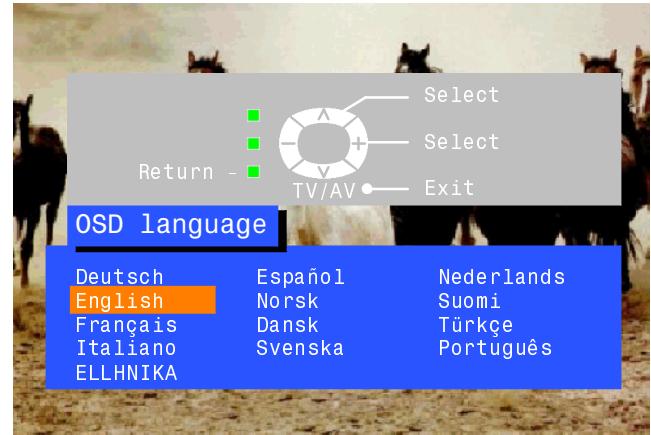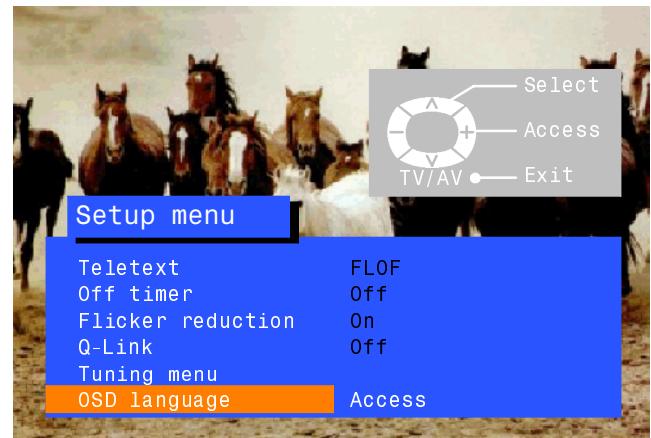
Q-Link allows the television to communicate with your VCR

Open the Setup menu

SET UP

Move to Q-Link

∧
∨

Confirm Q-Link is set to "On"

− +

TV/AV

Press the TV/AV button to exit

Select
Change
TV/AV — Exit

Setup menu

Teletext	FLOF
Off timer	Off
Flicker reduction	On
Q-Link	On ○ ●
Tuning menu	
OSD language	
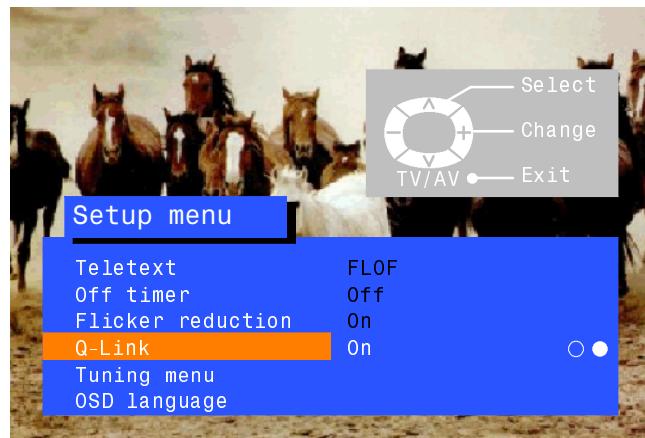
The VCR must be connected with a SCART lead (full function type) attached between the AV2 socket of the television and the appropriate socket on your VCR. See the VCR handbook for further information. Q-Link, NEXTVIEWLINK or similar technology allows the television to instruct a **compatible VCR** to record the programme that is currently being displayed on screen, regardless of the programme position set on the VCR, thus simplifying the process of recording programmes.

To record the programme you are currently watching

DIRECT
TV REC

Press the DIRECT TV REC button on the remote control ●

If the VCR is off, it will automatically switch on when you press the DIRECT TV REC button.
A message, sent from the VCR, will appear on screen showing what is being recorded, or if it is not possible to record:

VCR recording preset prog

VCR recording own tuner

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

VCR recording TV source

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

No recording – TAPE IS PROTECTED

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

Examples of other messages that might be displayed are:

No recording – NO TAPE

No recording – VCR IS PLAYING

VCR recording VCR external

No recording – ALREADY RECORDING

No recording – TAPE MAY BE DAMAGED

No recording – NO SOURCE AVAILABLE

To share tuning information

To ensure correct recordings are made, the television and VCR should share tuning information – see page 18.
● Whenever the Auto setup (ATP) function is used, tuning data will be downloaded to the VCR.

Auto Power functions

With Panasonic Q-Link VCRs these additional features are available:
● If you insert a tape in your VCR and press the Play button, the television will automatically switch on and select the AV2 input so you can view the tape.
● If you switch off the television whilst the VCR is in Stop, Fast Forward or Rewind modes, the VCR will switch off automatically.

To turn off Q-Link communication

If you do not wish to use the Q-Link feature, go to the Setup menu and set the Q-Link option to "Off". See page 13.

Important Note:
Not all VCRs support this type of data communication system. Some may support certain features, but not others. See the VCR handbook for further information.
If Q-Link is inoperative, first confirm that your SCART lead is a full function type. Ask your dealer for further details.

AV SELECT AND SETUP

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

Press the TV/AV button

TV/AV

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

The options will disappear

**You may wish to make adjustments to the Setup or Sound menus**
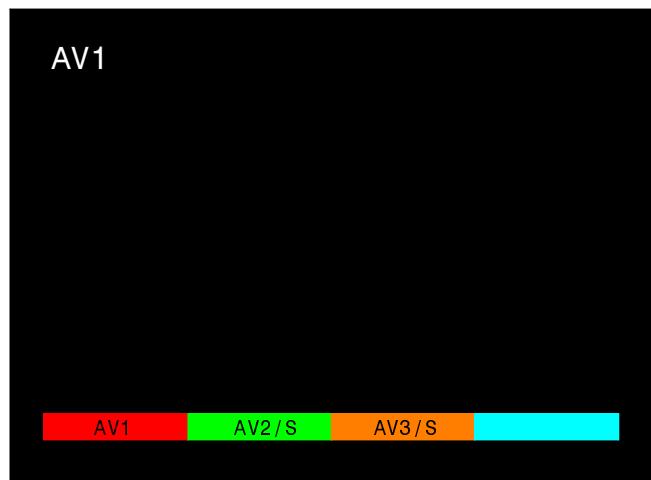
AV1

23

| AV1 | AV2/S | AV3/S | |

Setup menu

Open the Setup menu

SET UP

Move to your choice

Access adjustments or options

Press the TV/AV button to exit

TV/AV

Select
Change
TV/AV — Exit

Setup menu

Teletext	FLOF	● ○
Off timer	Off	
Flicker reduction	On	
Colour system	AUTO	
Volume correc.		
Q-Link	On	
OSD language		
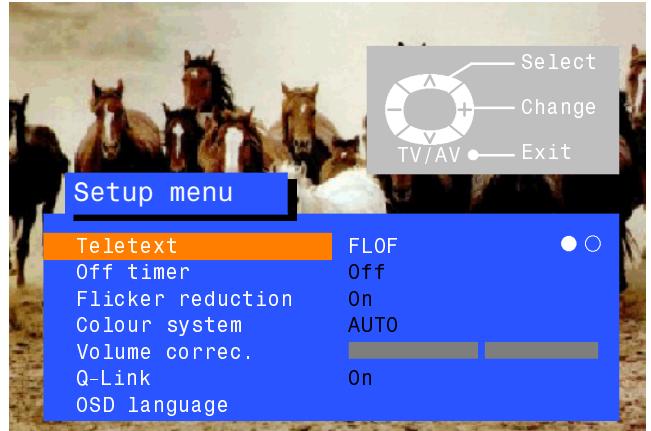
Sound menu

Open the Sound menu

SOUND

Move to your choice

Access adjustments or options

Press the TV/AV button to exit

TV/AV

Select
Adjust
TV/AV — Exit

Sound menu

Volume	
Bass	
Treble	
Balance	
Mode	Music
Ambience	Off

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

Standby

Press to switch the VCR or DVD to standby mode. Press again to switch back on.

VCR / DVD switch

Use this switch to select whether controls operate DVD equipment or your VCR.

Play

Press to playback the tape or DVD.

Stop

Press to stop the tape or DVD.

Skip / Fast Forward / Cue

VCR: Press to fast forward the tape. In Play mode, press to view the picture rapidly forward.
DVD: Press once to skip to the next track. In play mode press and hold to view the picture rapidly forward.

Skip / Rewind / Review

VCR: Press to rewind the tape. In Play mode, press to view the picture rapidly in reverse.
DVD: Press once to skip to the previous track. In play mode press and hold to view the picture rapidly in reverse.

Pause / Still

Press in playback mode, the picture will pause. Press again to restart play.

Programme Up / Down

Press to increase or decrease the VCR programme position by one.

Record

Press this button to start recording.

TELETEXT OPERATION

- 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 ◀ ▶ 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.

What is LIST mode?
In LIST mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

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

What is TOP Teletext?
TOP Teletext makes the task of selecting the desired Teletext pages easier and shorter. In fact page access time is almost instantaneous, just press the button and the page appears.

How does it work?
TOP uses the four coloured buttons, Red, Green, Yellow and Blue to select the following information.
- To move between subject blocks (SPORT for example) use the Blue button. Within this SPORT topic it is possible to select different groups such as Tennis, Football, Baseball etc, by using the Yellow button. When the last group within the block is reached, the yellow button moves to the next block.
- The Green button will select the next available page UP.
- The Red button will select the next available page DOWN.

What are the advantages?
- Page selection at the touch of a single button.
- Easy to use step–by–step selection of the topical subject.
- Reduction of waiting time.
- If non existent page number is entered, a question mark will appear at the bottom of the screen.
- Page status line at bottom of screen so you always know which button will take you to the desired information.

TV/TEXT

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

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

SET UP

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

SET UP

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

Red / Green / Yellow / Blue buttons
In TOP / FASTEXT mode these correspond to the differently coloured subjects.
In LIST mode they correspond to the differently coloured page numbers.

STR

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

25

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

HOLD

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

F.P.

Favourite Page (F.P.)
Stores a favourite page in memory for instant recall. To store such a page, the TV must be in LIST mode, and the programme position must be from 1 – 25. Press the **Blue** button, select the page number, then press and hold the **STR** button. The page number is now stored.
Press **F.P.** to recall this page.

SET UP

Update Display
Press the **SET UP** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page.
When found, the screen will display the page number at the top left.
Press the **Yellow** button to view the page.
Press **TV / TEXT** again to return to normal TV operation.

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.

SET UP

Sub Coded Page Access
When Teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require.
It is possible to enter your required sub page and continue watching the normal programme until the correct sub page is found.
Select the required page number using buttons 0 – 9.

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

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

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

Press the **Yellow** button to view a normal TV programme.
(Press **SET UP**, **Yellow** in LIST mode).

When the page is available, press the **Yellow** button to view the page.
To clear the page perform one of the following :
● Press **SET UP**.
● Select a new page number.
● Press **TV/TEXT** to return to normal TV operation.

INDEX

Index
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.

Front AV3 RCA Audio / Video and Headphone Sockets

Press and release to open

Output from **Headphone** socket

3.5mm Stereo Plug

STEREO HEADPHONES
with 3.5mm Plug

Video input to
S−Video socket

S−V

Video input to
V socket

RCA
Video
Cable

V   L − R

Audio input to
L / R
sockets

2 x RCA
Audio
Cables

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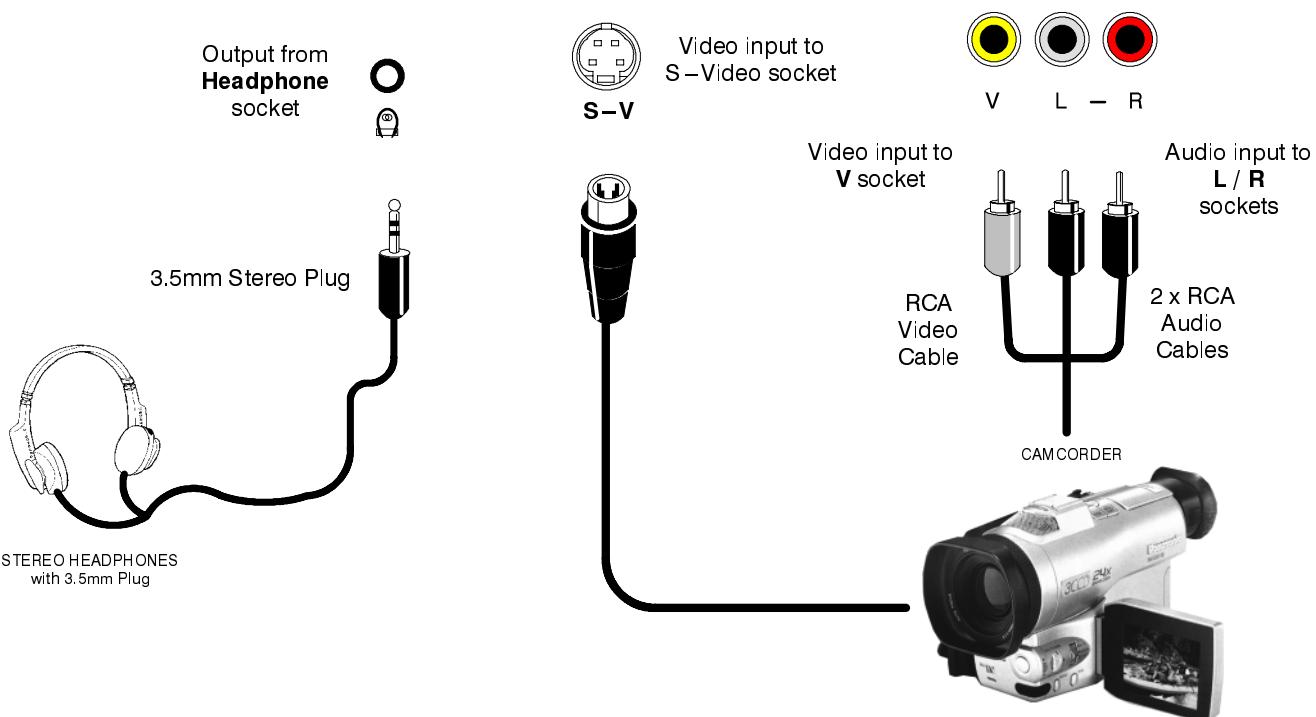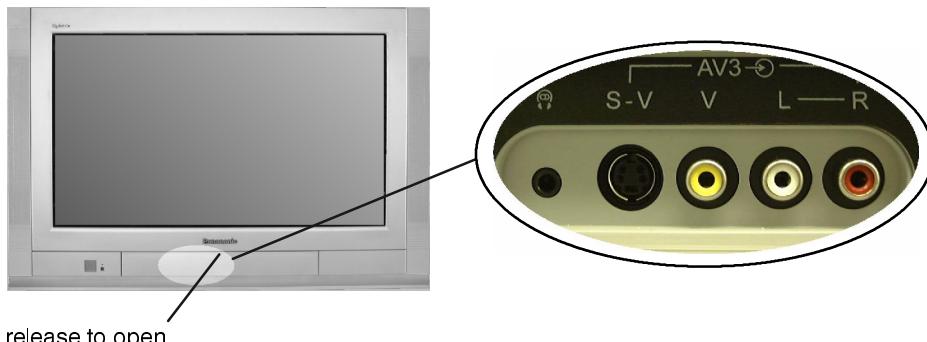
Note :
Ancillary equipment and cables shown are not supplied with this TV set.

■ SCART Terminal Information

AV1 21 pin SCART terminal

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

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

AV2 21 pin SCART terminal

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

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

S−Video 4 pin socket

Chrominance in   Luminance in

Chrominance earth   Luminance earth

27
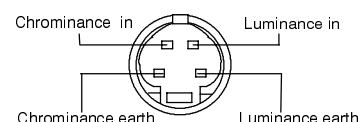
Rear AV1/AV2(S) 21 Pin SCART and RCA Audio Out Terminals

HI-FI SYSTEM

2 x RCA Audio Cables

Output from
L-R AUDIO OUT
Sockets

TBM8E1942

Input/Output from
AV1 SCART Socket

Input/Output from
AV2 SCART Socket
Q-Link data

SCART Cable

SCART Cable

VCR

VCR
S-VIDEO VCR
Q-LINK COMPATIBLE VCR

SATELLITE RECEIVER

S-VIDEO CAMCORDER

CAMCORDER

GAMES CONSOLE / COMPUTER (RGB)

Notes:
Ancillary equipment and cables shown are not supplied with this TV set.
Do not connect a computer with TTL output (5V) to this set.

Symptoms		Checks
Picture	**Sound**	
Snowy Picture	Noisy Sound	Aerial location, direction or connection
Multiple Images	Normal Sound	Aerial location, direction or connection
Interference	Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lights Switch on P−NR in Picture menu to reduce picture noise
Normal Picture	No Sound	Volume level Sound mute switched on
No Picture	No Sound	TV set to AV mode Not plugged into A.C. outlet Not switched on Picture / Sound controls set at minimum levels Check if in standby mode
No Colour	Normal Sound	Colour controls set at minimum levels
Poor or Distorted Picture	Weak or No Sound	Retune Channel(s)
Coloured Patches	Normal Sound	Magnetic Interference from unshielded equipment Receiver moved while switched ON, switch TV off for 30 minutes. If picture is also tilted, use Geomagnetic Correction feature (see Quick Start Guide, page 5)
Normal Picture	Weak or distorted sound	Sound reception may have deteriorated. Switch MPX setting (Sound menu) to Mono until reception improves.
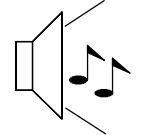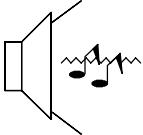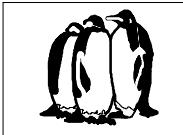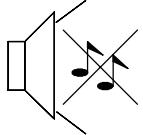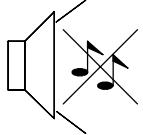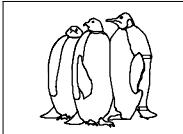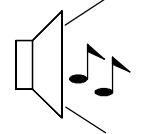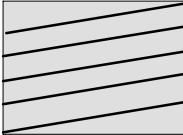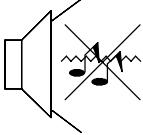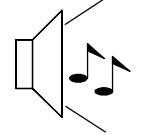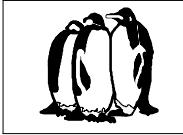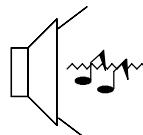
FOR YOUR GUIDANCE

■ 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 the TV).

■ TV Games / Home Computers

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

● Reduce the brightness and contrast levels to a minimum viewing level.

● Do not operate the television set for a continuous period of time while using TV games or home computers.

● This type of picture tube damage, is not an operating defect, and as such is not covered by the Panasonic warranty.

■ Last Position Memory

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

Programme	Tint
OSD language	(M.NTSC / NTSC only)
AV Position	Contrast
Volume	Sharpness
MPX	Aspect
Bass	Standby
Treble	Artificial Intelligence (AI) – Picture
Balance	Colour
Colour Balance	Brightness
Status	Ambience
P–NR	Teletext mode
Volume correction	Q–Link
Decoder (AV2)	Geomagnetic correction
Flicker reduction	

■ Sleep Feature

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

SPECIFICATIONS

		TX–32PL10D/M	TX-28PL10D
Power Source		220 – 240V 50Hz A.C.	
Power Consumption		120W	124W
Standby Consumption		1,4W	1,4W
Picture Tube Visible Diagonal		76 cm	66 cm
Audio Output Music Power		2 x 7W RMS (2 x 15W MPO), 8Ω impedance	
Dimensions	H	547 mm	508,8 mm
	W	845 mm	763,2 mm
	D	550 mm	512,2 mm
Weight		56 kg	42 kg
Receiving Systems/ Band name		**PAL B/G, H, PAL I, SECAM B/G, SECAM L/L'** VHF E2 – E12 VHF H1 – H2 (ITALY) VHF A – H (ITALY) UHF E21 – E69 CATV (S01 – S05) CATV S1 – S10 (M1 – M10) CATV S11 – S20 (U1 – U10) CATV S21 – S41 (Hyperband) **PAL D/K, SECAM D/K** VHF R1 – R2 VHF R3 – R5 VHF R6 – R12 UHF E21 – E69 **PAL 525/60** Playback of NTSC tape from some PAL video recorders (VCR) **M.NTSC (AV input only)** Playback from NTSC 4,43 MHz Videorecorders (VCR) **NTSC (AV input only)** Playback from NTSC Videorecorders (VCR)		
Number of programme positions		99 + VCR	
Aerial – Rear		UHF / VHF	
Headphones – Front		3,5mm, 8Ω impedance	
AV – Rear		**AV1** - 21 pin terminal - Audio / Video in / out, RGB in. **AV2** - 21 pin terminal - Audio / Video in/out, S-Video in, Q-Link 2 x RCA Audio Monitor Out.	
AV – Front		**AV3 -** S–Video in, 2 x RCA Audio in, 1 x RCA Video in.	

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

NOTES

2001CX