Panasonic®

Operating Instructions
LCD Television

Model No. **TX-26LXD70**
TX-32LXD70

VIEᴦʌ

VIEᴦʌ Link   Link   DV3®   OWNER I.D.

HD ready   HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

U.K. Standard

English

Please read these instructions before operating your set and retain them for future reference.
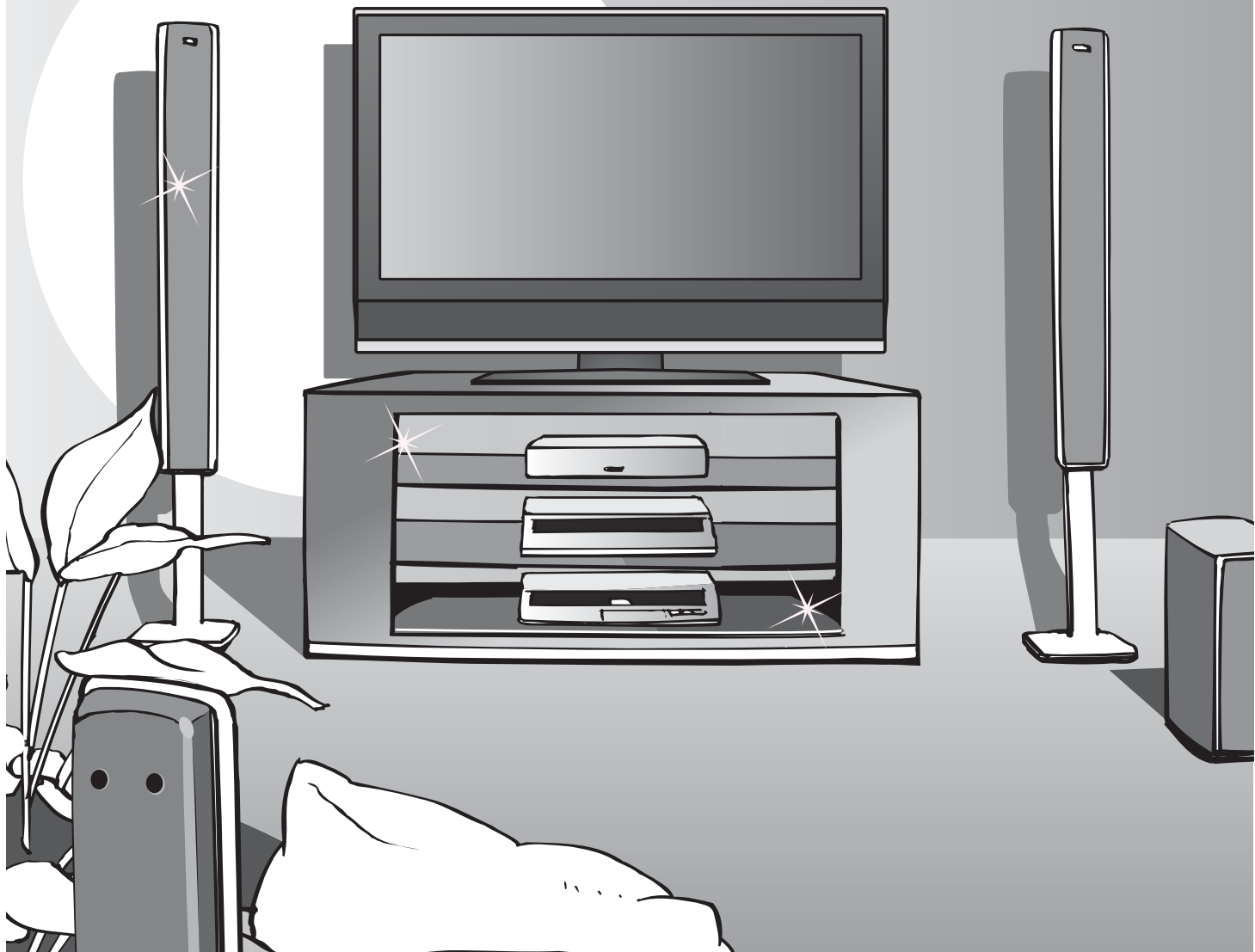The images shown in this manual are for illustrative purposes only.

TQB0E0400-1

Turn your living room into a home theatre!
Experience an amazing level of multi-media excitement

■ **Receive digital terrestrial broadcastings using an integrated (Digital Video Broadcasting) tuner**
(Display DVB programmes with TV Guide (p. 14) / Timer recording (p. 36) /
Register and instantly call up favourite programmes with Profile Edit (p. 29))

■ **Sharp pictures with HDMI terminal**

■ **Control DVD recorder / VCR via TV with Q-Link connection** (p. 38)

■ **Create home theatre and Panasonic equipment link-ups with
"VIERA Link" without complicated settings!** (p. 40)

■ **Support Audio Description signal** (p. 13 and p. 22)
Audio description (AD) is an ancillary component associated with a broadcasting which delivers
a verbal description of the visual scene as an aid to understanding and enjoyment particularly, for
visually-impaired viewers.

Contents

Enjoy rich multi-media

Camcorder

Personal computer

Amplifier with Speaker system

DVD Recorder

Satellite receiver

VCR

DVD player

Be Sure to Read

Quick Start Guide

Enjoy your TV!
Basic Features

Advanced Features

FAQs, etc.

Quick Start Guide

Viewing

Advanced

FAQs, etc.

Safety Precautions

Handling the mains plug

● Ensure that the mains plug is easily accessible at all times. 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 is not used for a prolonged period of time.

## Power source

● This TV is designed to operate on 220-240V, 50 / 60 Hz AC.

Do not remove the cover

● Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.

Do not expose to direct sunlight and other sources of heat

● Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

AC 220-240 V 50 / 60 Hz
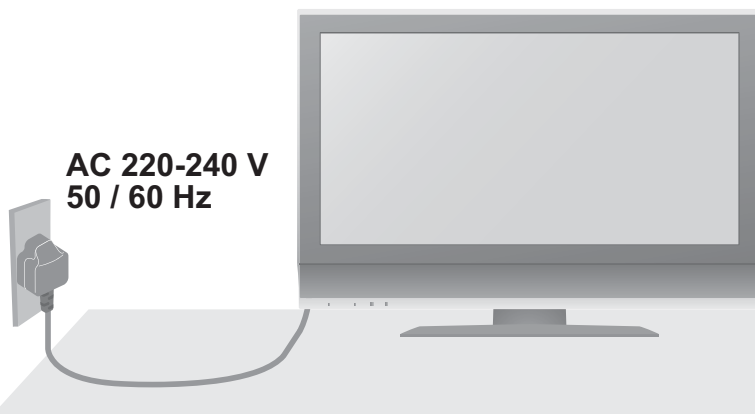
IMPORTANT: THE MOULDED MAINS PLUG

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 mains 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 ⟨ASA⟩ or the BSI mark ⟨BSI⟩ on the body of the fuse.

If the mains 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 mains plug must not be used until a replacement cover is obtained.
A replacement fuse cover may be purchased from your local Panasonic Dealer.

If the fitted moulded mains plug is unsuitable for the socket outlet in your home, then the fuse shall be removed and the mains plug cut off and disposed of safety. There is a danger of severe electrical shock if the cut off mains plug is inserted into any 13 amp socket.

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

<u>**IMPORTANT:**</u> – The wires in this mains lead are coloured in accordance with the following code: –
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 mains plug, proceed as follows.

Example 1

The wire which is coloured BLUE must be connected to the terminal in the mains 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 mains plug which is marked with the letter L or coloured RED.
Under no circumstances should either of these wires be connected to the Earth terminal of the three pin mains plug, marked with the letter E or the earth symbol ⏚ .
How to replace the fuse.

Example 2

For plug type shown in example 1:
Lift out the removable fuse compartment with a screwdriver and replace the fuse, then refit securely into the mains plug (see example 1).
For plug type shown in example 2:
Lift open the fuse compartment, in the mains plug, with a screwdriver, and replace the fuse, then press the fuse cover down securely (see example 2).

Notes

Do not expose to rain or excessive moisture

- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture.
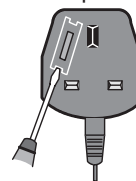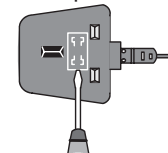This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

Do not block the rear ventilation openings

- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths and curtains.

Allow sufficient space around the TV for radiated heat

Minimum distance

TV Stand

(cm)
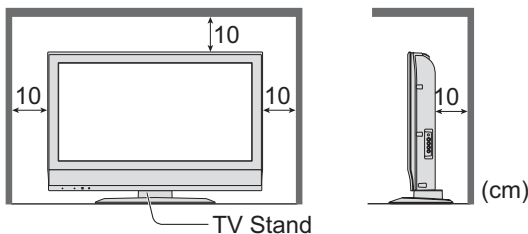
Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Use only the dedicated stands / mounting equipment

- Using an unauthorized stand or other fixtures may make the TV shaky, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use optional stands / mounts (p. 6).

■ Auto power standby function
- If no signal is received and no operation is performed in TV mode for 30 minutes, the TV will automatically go to standby mode.

■ Keep the TV away from these equipment
- Electronic equipment
In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).
- Equipment with an infrared sensor
This TV also emits infrared rays (this may affect operation of other equipment).

■ Transport only in upright position

■ Adjust the LCD panel to your desired angle

(View from the top)

15°   15°
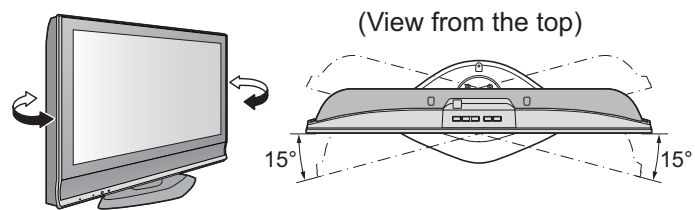
Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Regular care: Gently wipe the surface clean of dirt by using a soft cloth.
Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or diluted neutral detergent by 100 times of water. Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

> **Caution**
- The surface of the display panel has been specially treated and may be easily damaged.
Do not tap or scratch the surface with your fingernail or other hard object.
- Use care not to subject the surface to insect repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet

Regular care: Wipe the surface clean using a soft dry cloth.
Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

> **Caution**
- Use care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Use care not to subject surfaces to insect repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet to make contact with a rubber or PVC substance for a long time.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals.
(Moisture and dust may lead to fire or electrical shock.)
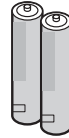
5

Accessories / Options

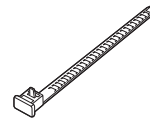## Standard accessories   Check that you have the accessories and items shown ☑

☐ Remote Control Transmitter
- EUR7651110

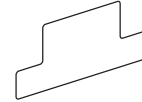☐ Batteries for the Remote Control Transmitter (2)
- R6 (UM3)

☐ Clamper
- TMME203

☐ Bottom Sheet
- TMK0E942
Use when removing the TV Stand (see below)

☐ Operating Instructions   ☐ 1 Year Guarantee Registration

☐ Pan European Guarantee Card   ☐ CRM (Customer Relationship Management)

Installing remote's batteries

1

Pull open

Hook

2

Close

Note the correct polarity (+ or -)
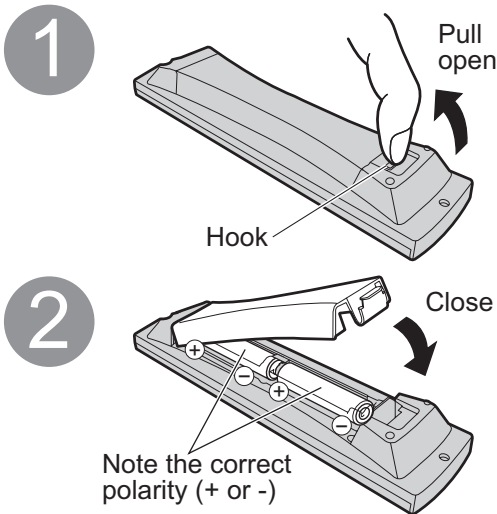
Caution
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.

Using the clamper
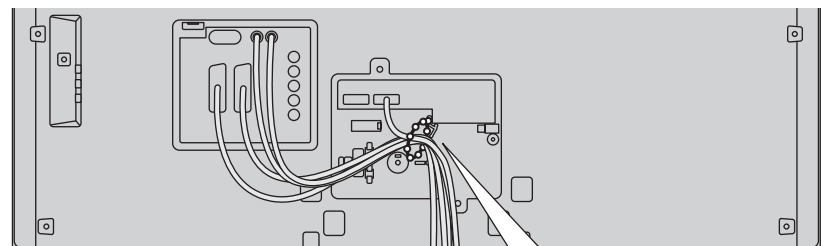
Rear of the TV

Clamper (Standard accessory)

Clamper that bundle mains lead

To tighten:

To loosen:
① Keep the knob pressed ②
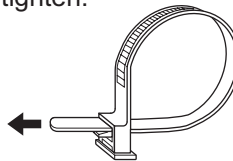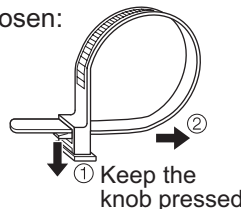
Bundle the cables:
② Lock
① Tight
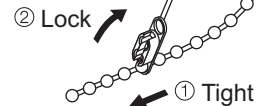
Hook the clamper:
① ②
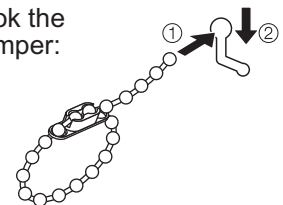
- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clampers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.

Optional accessories

Wall-hanging bracket
- TY-WK32LR2W

Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.
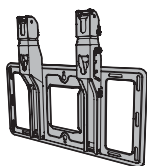
WARNING!
- Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer.
  Any damage resulting from not having a professional installer mount your unit will void your warranty.
- Always be sure to ask a qualified technician to carry out set-up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
- Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.

■ How to remove the TV Stand

① Remove four screws and take the TV Stand.

Rear of the TV

② Attach the Bottom Sheet.

Bottom of the TV

Identifying Controls

Mains power
On / Off switch

Changes the input mode

Function select
● Volume / Contrast / Brightness /
Colour / Sharpness /
Tint (NTSC mode) / Bass / Treble /
Balance / Auto Setup (p. 30)

Increases or decreases the programme
position by one. When a function is
already displayed, press to increase or
decrease the selected function. When in
Standby mode, switches TV On.

Remote control
signal receiver

C.A.T.S. (Contrast Automatic Tracking System) sensor
(senses brightness to adjust picture quality in "Auto" Mode in Picture Menu) (p. 22)

DVB LED
● Active for Timer Programming or
Standby for Direct TV Recording   :orange (flash)
Timer Programming On   :orange

Power LED
● Standby: red
On: green
When using the remote control, indicates the TV has received a command.

Standby On / Off switch
(Switches TV On or Off standby)

TV Guide (p. 14)

OK button to confirm selections and choices
Press after selecting programme positions to
quickly change programme.

Main Menu
Press to access VIERA Link, Picture,
Sound and Setup menus (p. 21)

Changes aspect ratio (p. 13)

Access VIERA Link Menu (p. 41)

Programme / channel change buttons (0-9)
and Teletext page buttons. (p. 12 and p. 19)
When in Standby mode, switches TV On.

Programme Information (p. 13)

Selects programmes in sequence

Teletext (p. 18)

Subtitles
Showing subtitles (p. 13)

VCR / DVD operations (p. 17)

Changes the input mode
TV - switches DVB (digital broadcasting)
/ Analogue mode (p. 12)
AV - changes AV input mode (p. 16)

EXIT (Returns to TV screen)

Cursor buttons to make selections and
adjustments

Returns to the previous menu

Coloured buttons used for the
selection, navigation and operation of
various functions

DIRECT TV Recording
To immediately record programme in VCR /
DVD recorder with Q-Link connection
(p. 38)

Option menu
Sets the selectable settings of viewing
and sound options easily (p. 13)

Sound mute On / Off

Volume

Still picture (p. 13)
Teletext Hold (p. 20)

Teletext Index (p. 20)

Panasonic
TV

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Basic Connection

External equipment and cables shown are not supplied with this TV.
Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.

Example 1
Connecting aerial

TV only

Rear of the TV

Aerial

AC 220-240 V
50 / 60 Hz

Mains lead

RF cable

PC

R L
AUDIO OUT

Y
P_B
P_R
L
R
COMPONENT

VIDEO

AUDIO

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO
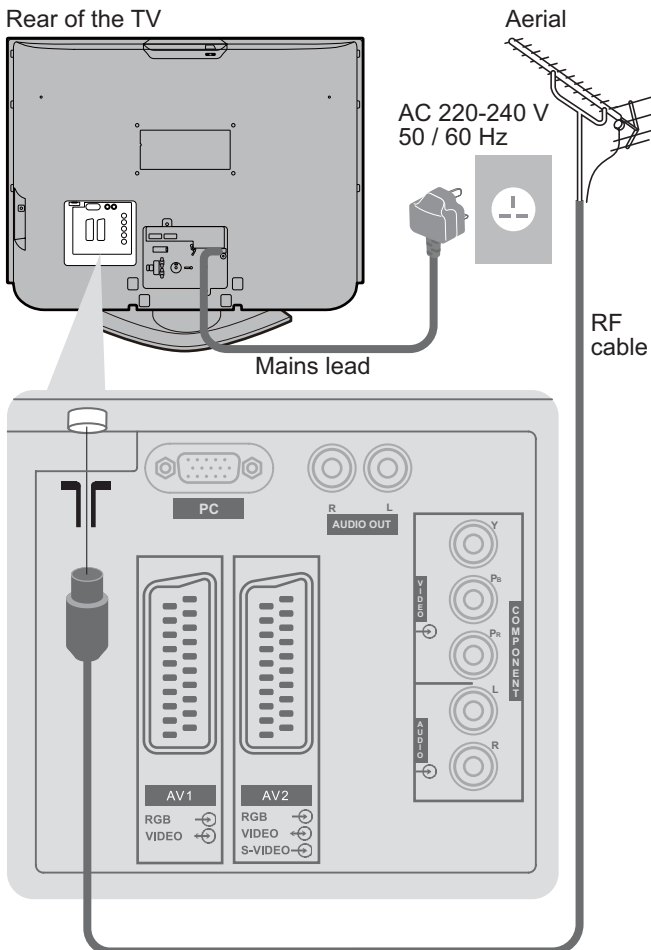
Example 2
Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

Rear of the TV

Aerial

AC 220-240 V
50 / 60 Hz

Mains lead

PC

R L
AUDIO OUT

Y
P_B
P_R
L
R
COMPONENT

VIDEO

AUDIO

AV1
RGB
VIDEO

AV2
RGB
VIDEO
S-VIDEO

SCART cable
(fully wired)

RF cable

RF IN

RF OUT

DVD Recorder or VCR

RF cable
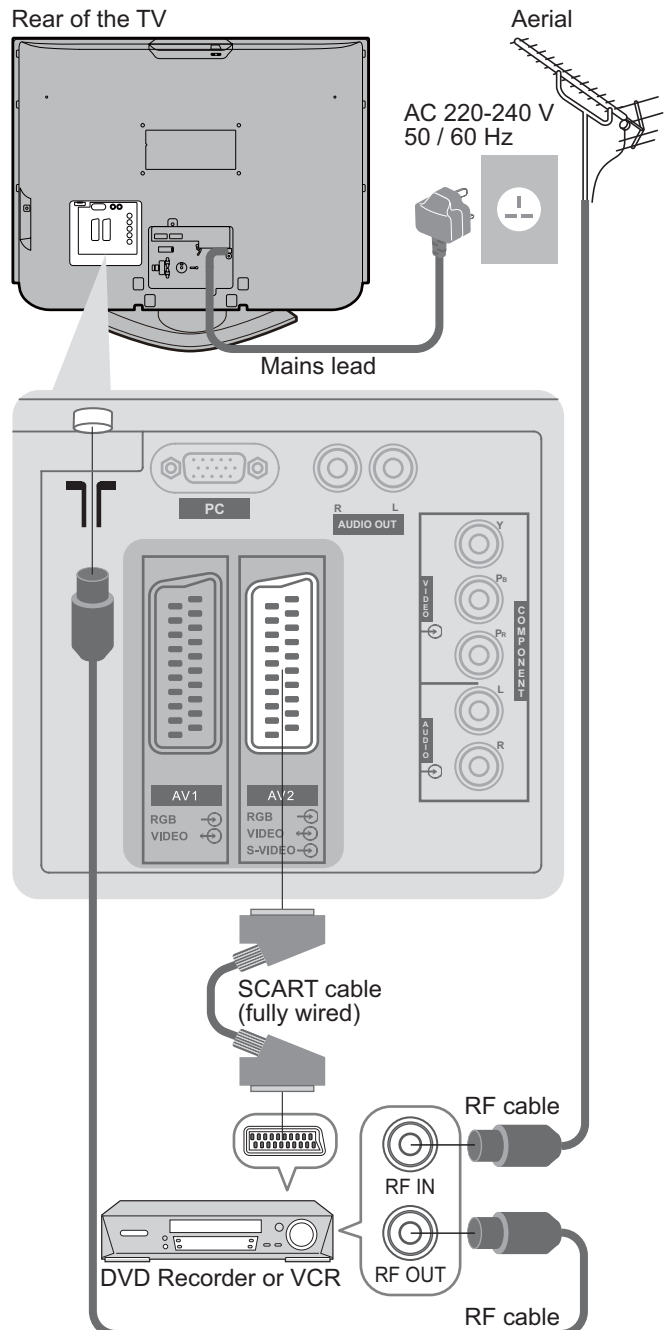
Note

● Connect to AV2 for a DVD Recorder / VCR supporting Q-Link (p. 38).
● Connect to AV1 for a Satellite receiver.
● If connecting the TV and Satellite receiver with SCART cable, you can watch satellite broadcast by RGB input signal.

● SCART: 21 pin connection used for video, audio and switching signals (Also known as Euro SCART and Peritel)
● RF: Radio Frequency - Signal received from terrestrial aerial.
● RGB / S-Video / Video:
                Choose between these three video formats depending on personal preference and equipment requirement.
                (RGB - Red, Green and Blue)
● VCR: Video Cassette Recorder
● DVD: Digital Versatile Disc

Example 3
Connecting DVD Recorder / VCR and Sattelite receiver

TV, DVD Recorder / VCR and Satellite

Rear of the TV

AC 220-240 V
50 / 60 Hz

Aerial

Mains lead

RF cable

PC

R L
AUDIO OUT

Y

V
I
D
E
O

P_B

P_R

C
O
M
P
O
N
E
N
T

L

A
U
D
I
O

R

RF cable

AV1

RGB
VIDEO

AV2

RGB
VIDEO
S-VIDEO

SCART cable
(fully wired)

SCART cable
(fully wired)

SCART cable
(fully wired)

Satellite
receiver

DVD Recorder
or VCR

RF IN   RF IN   RF OUT

RF cable

RF IN   RF OUT

RF cable

9
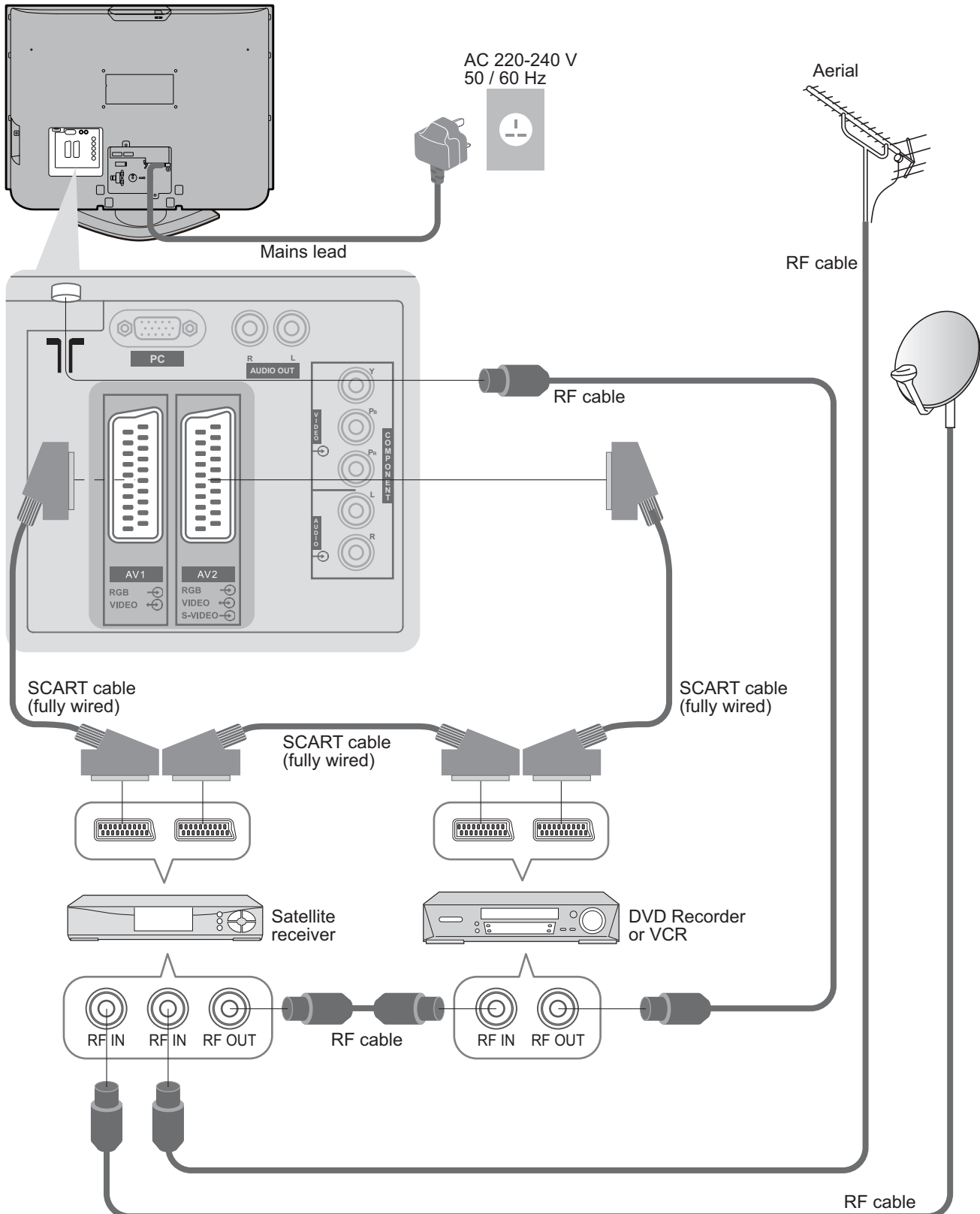
Auto Setup

Search and store TV channels automatically.
These steps are not necessary if the setup has been completed by your local dealer.

1 **Plug the TV into mains socket and switch On**
(Takes a few seconds to be displayed)

● You can now use the remote control to turn On the TV or turn the TV to standby mode. (Power LED: On)

Auto Setup - Digital and Analogue

Digital Scan	21		68
Analogue Scan	21		68

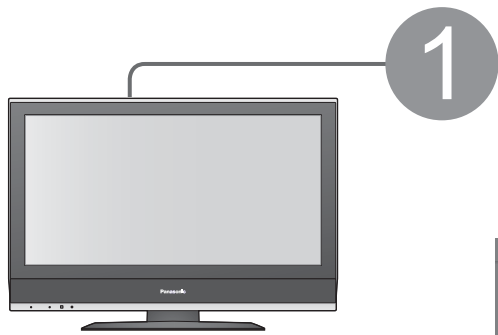| Channel	Service Name	Type	Quality
62	CBBC Channel	DVB	10
62	BBC Radio Wales	DVB	10
62	BBC Radio Cymru	DVB	10
62	E4	DVB	10
62	Cartoon Nwk	DVB	10
29		Analogue	–
33	BBC1	Analogue	–

This will take about 3 mins.

● EXIT

● Auto Setup will start to search for TV channels and store them. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.
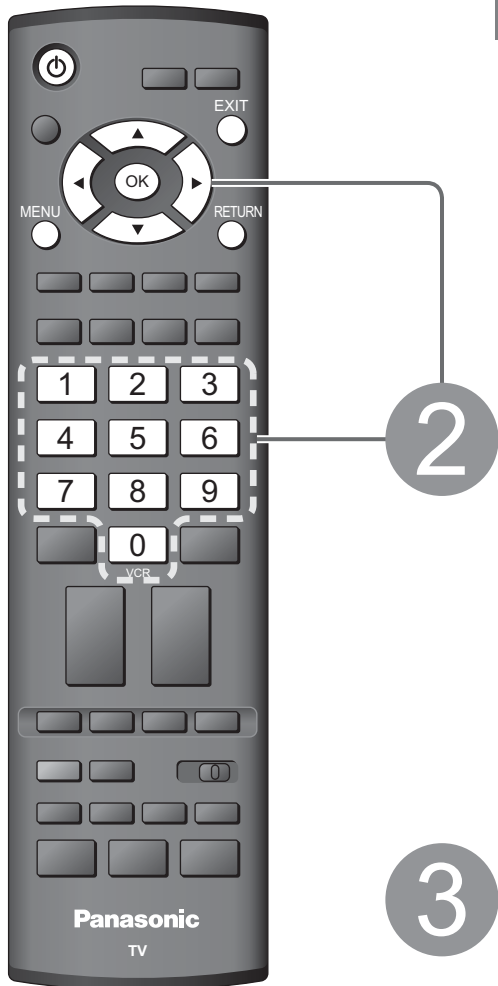
DOWNLOAD IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

● If a compatible recording equipment with Q-Link or similar technologies (p. 38) is connected, analogue channel information is automatically downloaded to the equipment.

2

■ **When inputting owner ID**

Owner ID
Please enter new PIN
PIN   ＊ ＊ ＊ ＊

● EXIT
● RETURN   0 – 9 PIN entry

Following the on-screen operation guide, enter your own choice of PIN number, name, etc.
● For detailed procedures
  ➡ "Owner ID" (p. 33)
● Make a note of the PIN number in case you forget it.

■ **When inputting owner ID later**

➡ EXIT

● If you input the ID later
  ➡ "Owner ID" (p. 33)

3 **Select the picture setting**

Viewing Mode
Please select your preferred viewing mode.

Dynamic	Normal	Cinema	Auto

● Also possible to change the setting in Picture Menu (p. 22)

① select
② set
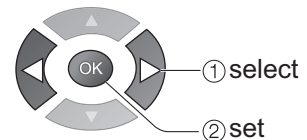
Auto Setup is now complete and your TV is ready for viewing.

● To check programme list at-a-glance
  ➡ TV Guide (p. 14)
● To edit channels
  ➡ Editing Channels (p. 28)
    Analogue Programme Edit (p. 31)

Many features available on this TV can be accessed via the On Screen Display menu.

■ How to use remote control

MENU

Open the main menu

Move the cursor / select the menu

Move the cursor / adjust levels / select from a range of options

OK Access the menu / store settings after adjustments have been made or options have been set

RETURN

Return to the previous menu

EXIT

Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box

(example: Owner ID)

Owner ID

Please enter new PIN

PIN   * * * *

● EXIT   0 — 9 PIN entry
● RETURN
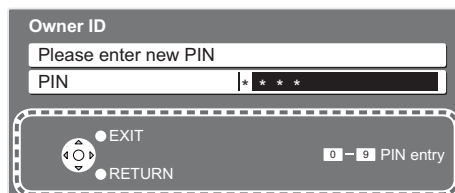
On-screen operation
guide will help you.

Using the On Screen Displays

Note

● If tuning have failed ➡ "Auto Setup" (p. 30).
● If downloading have failed ➡ "Download" (p. 23).
● If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Watching TV

1 **Turn power on**

(Press for about 1 second)
● Mains power On / Off switch should be On.

2 **Select DVB (Digital Video Broadcasting) or Analogue**

TV

1 BBC ONE WALES   23:35   Profile 1
Coronation Street   Change category
20 : 00 ~ 20 : 55   ◄ Now ►   For info press i

Information banner

● You can also select the mode using the TV button on the top panel of the TV.

Volume

3 **Select a channel**

∧ up   1 2 3
              4 5 6
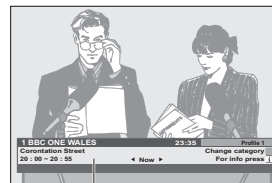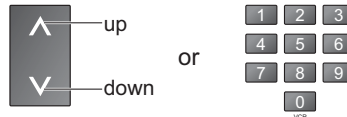   or   7 8 9
∨ down   0
                VCR

● To select the two or three-digit programme number, e.g. 39
➡ 3 ➡ 9 (in a short time)
● To select programmes using TV Guide (p. 14)

Note
● To watch pay-TV (p. 27)

■ **Other useful functions** (Operate after ③)

Turn the TV off automatically after a fixed period

Off Timer

Display the menu
MENU

Select "Setup"

VIErA Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup

②access
①select
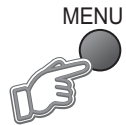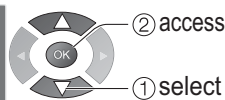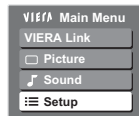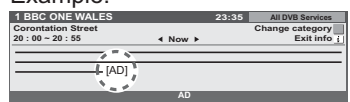
Select "Off Timer" and set the time

☰ Setup Menu   1/2
DVB Timer Programming
DVB Profile Edit
DVB Service List
Q-Link Settings
Child Lock
Tuning Menu
Off Timer   ◄ Off ▬▬▬
Power on Preference   TV
Teletext   FASTEXT

②set
①select
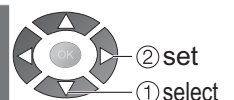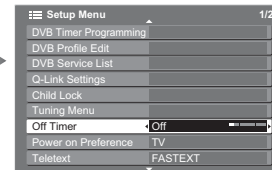
● To cancel ➡ Set to "Off" or turn the TV off
● To display the remaining time ➡ Information banner (p. 13)
● When the remaining time is within 3 minutes, the remaining time will flash on screen.

■ **Other useful functions** (Operate after ③)

Hold	**Freeze / unfreeze picture**	HOLD

Display subtitles	**Display / hide subtitles** (if available) STTL ● To change the language for DVB ➡ "Preferred Subtitle" (p. 23) (If available)

Display the current programme status

Check or change the current programme status instantly

OPTION

● To change ➡ ②change / ①select

Subtitle Language (DVB mode)
➡ Possible if the programme has some languages of subtitles

Multi Audio (DVB mode)
➡ Possible if the programme has some languages of sounds

NICAM (Analogue mode)
➡ Sound Menu (p. 22)

Volume Correction
➡ Adjusts volume of individual channel or input mode

Audio Description (DVB mode)
➡ This function can aid visually-impaired viewers by adding an additional audio track to describe events on-screen.
Select "On" if the programme has this signal, then you will hear the description sound

┌─ **Note** ─┐
● Also possible to change the settings in Menu list (p. 22 and p. 23).

Display information banner

Display programme information i

Channel   Current time   Category

Programme ──
DVB: Programme Start / Finish time
Analogue: Programme Status

1 BBC ONE WALES   23:35   Profile 1
Corotation Street   Change category
20 : 00 ~ 20 : 55   ◄ Now ►   For info press i
Mute Bad Signal Encrypted   AD Subtitles TXT Multi-Audio 45

Sound mute   Scrambled broadcasting   Subtitle   Off timer
Weak TV signal   Audio description   Teletext   Multiple audio

To change the category ➡ blue
Features available

● Information of another channel ➡

● Information on next programme ➡ (DVB)

● To watch the programme listed in the banner ➡ OK

● Information banner operation ➡ i

1st press
Display banner ➡ 2nd press
Banner + programme synopsis (DVB) ➡ 3rd press
Exit

● To set display timeout
➡ "Banner Display Timeout" (p. 23)

● To hide ➡ EXIT

● Appears also when changing channel.

● "AD", "Subtitles", "TXT", "Multi-Audio" indications are displayed as available on particular channels or services, but may not be available for all individual programmes being broadcast.
Press the i button twice to confirm availability of these functions.

Example:
1 BBC ONE WALES   23:35   All DVB Services
Corotation Street   Change category
20 : 00 ~ 20 : 55   ◄ Now ►   Exit info i
[AD]
AD

Change aspect ratio

Change the aspect ratio (p. 44)   ASPECT

Enjoy viewing the picture at its optimum size and aspect.

Aspect Selection list

Aspect Selection
Auto
16:9
14:9
4:3
Zoom1
Zoom2
Zoom3

● To change the mode

➡ Display Aspect Selection list ASPECT ➡ During the list is displayed, select the mode ➡ Store OK

● To change the mode using the ASPECT button only

➡ ASPECT (Press repeatedly until you reach the desired mode)

Using TV Guide

TV Guide—Electronic Programme Guide (EPG) provides an on-screen listing of programmes currently broadcast and future broadcasts over the next seven days (depending on the broadcaster).
Analogue broadcasts will be listed after DVB broadcasts. "D" means DVB channel and "A" means Analogue channel.

GUIDE

GUIDE

EXIT

OK

RETURN

i

Panasonic

TV

■ **To return to TV**
➡ EXIT
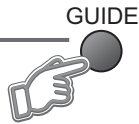
View TV Guide (landscape or portrait)

View "Portrait" to see one channel at a time
View "Landscape" to see many channels

Programme   Current date and time   (TV Guide start page)

| TV Guide : Landscape | | | | Wed 05/08/04 18:50 |

TV Guide date — Fri 6th

Prog.Types — All Types
Category — All Services

TV Guide time

20:00 - 20:30	DIY SOS : We open in the Battersbys				
◄ Time:	19:30	20:00	20:30	21:00	21:30 ►
D 1 BBC ONE	Eastender	DIY SOS	The Bill	Red Cap	
D 7 BBC THR	Hot Wars		Horiday Program		So
D 14 E4	Emmerdal.	Coronation Street		The Bill	
D 70 CBBC Cha	10 O' clock News BBC		Pepsi Char.	Good bye	Hello
D 72 Cartoon	Panorama	Sex And The City		Terminator	
D 105 BBCi	I'm A Celebrity		Pop Idol	News	The
D 719 BBC Radi	Rugby	15 To 1		The Bill	

Channel

Select channel
Change display mode ● ● EXIT
● Select programme   *i* Info
Timer Programming ● RETURN
Page up ∧
Page down ∨
-24 Hr   +24 Hr   Prog.type   Category

Landscape (Displays by broadcaster)

■ **To change the layout**
➡ GUIDE

(Landscape / Portrait)

| TV Guide Portrait | | | | | Wed 12/05/04 10:46 |
| Wed 12th | | | Prog.Types All Types | Category All Services | |

◄ D1 BBC O	D 7 BBC T	D 14 E4	D 70 CBBC	D 72 Cartoo	D 105 BBCi	D719 BBC R ►
19:30 ~ 20:00	Eastender
20:00 ~ 21:00	DIY SOS
21:00 ~ 22:00	The Bill
22:00 ~ 22:00	Red Cap
22:30 ~ 23:00	Live junction
23:00 ~ 23:30	POP 100
23:00 ~ 00:00	Rugby
23:40 ~ 23:55	Cinema info
23:55 ~ 00:30	News

Select programme
Change display mode ● ● EXIT
● Select channel   *i* Info
Timer Programming ● RETURN
Page up ∧
Page down ∨
-24 Hr   +24 Hr   Prog.type   Category

Portrait (Displays by time)

■ **To previous day** (DVB mode)
➡ red

■ **To next day** (DVB mode)
➡ green

■ **To view a programme list of the selected type** (DVB mode)
➡ yellow

Prog. type All Types
All Types
Movies
News
Entertainment
Sport
Children's
Education
Lifestyle
Drama

(Type list)

① select type
② view
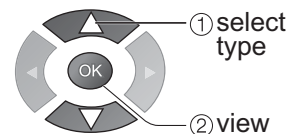
■ **To view a programme list of the selected category**
➡ blue

Category All Services
All Services
All DVB Services
All Analogue Services
Free TV
Pay TV
Radio
Information
Profile 1
Profile 2
Profile 3
Profile 4

(Category list)

Only analogue TV channels are listed

To list favourite channels (p. 29)

① select category
② view
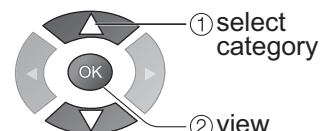
■ **Other useful functions (Operate after viewing TV Guide)**

Watch the programme

Select the channel or programme now on the air

① select
② access

Select "View"
(DVB)

Eastender
19:30- 20:00
View | Timer Programming

① select
② access

(TV screen)

View details of the programme (DVB mode)

Select the programme

select

View details

TV Guide | Wed 05/08/04 18:50

Details

Timer Programming | EXIT | Return to List | RETURN

■**To return to the start page**
➡ i

Timer programming to record (DVB mode)

Select the programme to be broadcast

① select
② set

(Timer Programming screen)

DVB Timer Programming | Wed 05/08/04 18:50

Pos.	Name	Date	Start	End	min.	
1	BBC1	6/8 FR	18:00	20:00	120	Off
3	ITV1	7/8 SA	21:30	22:30	60	Off

Select timer
Edit timer | EXIT | RETURN
Delete

DVB LED will turn on if Timer Programming is set.

ᴗ/I | ⊙ | ☐

DVB LED

● Orange DVB LED
(Rapid blinking during recording)

■ **To check / change / cancel a timer programming event**
➡ "Timer Programming" (p. 36)

■ **To return to TV Guide**
RETURN
➡

Note

● When recording programmes, you must make the proper settings on the external recording equipment connected to the TV.
If a compatible recording equipment with Q-Link or similar technologies is connected to the TV (p. 8) and the "Q-Link Settings" (p. 23) are completed, no setting of the equipment is required.
Also read the manual of the recording equipment.
● If you select the programme now on the air, the confirmation screen whether watching or recording will appear. Select "Timer Programming" to record from the time you finish the Timer Programming setting.

Note

● When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

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Watching VCR, DVD and Satellites

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch the input.
Connect the Satellite receiver and you can watch satellite broadcasts.
To connect the equipment (p. 8 and p. 9)
The Remote Control is capable of operating some functions of selected Panasonic external equipment.
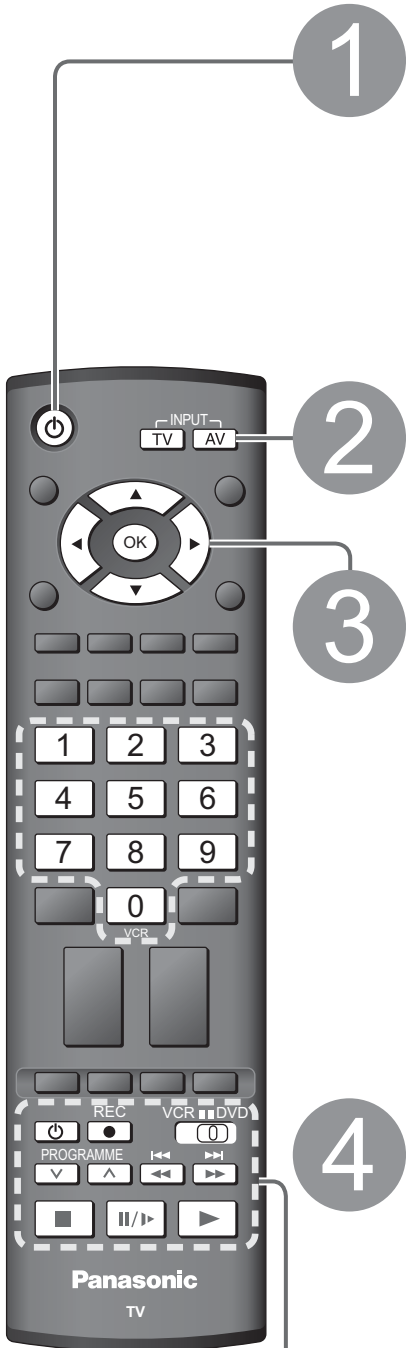
1 Turn the TV on

■ **When connecting with SCART as example 2 or 3** (p. 8 and p. 9)
➡ Receives input signals automatically when playback starts or satellite receiver is switched on
● Input signals are automatically identified by the SCART (pin 8) terminal.
● This function is also available for HDMI connections (p. 41).

■ **If input mode is not switched automatically**
➡ Perform ❷ and ❸
● Dependant on the setup of the equipment

2 Display the Input select menu

AV

3 Select the input mode connected to the equipment

Input Selection
AV1
AV2/AV2S
AV3/AV3S
COMPONENT
PC
HDMI1
HDMI2
TV

② watch
① select
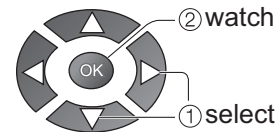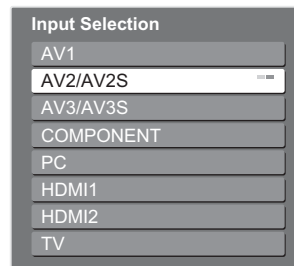
● You can also select the input using the AV button on the remote control or the top panel of the TV.
Press the button repeatedly until the desired input is selected.
● You can label or skip each input modes ➡ "Input Labels" (p. 34)

4 View

Displays the selected mode

AV2
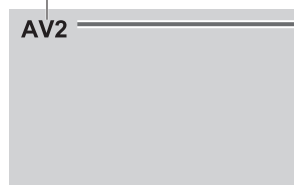
■ **To return to TV**
➡ TV

⊂ Note ⊃

● If the external equipment has an aspect adjustment function, set to "16:9".
● For details, see the manual of the equipment or ask your local dealer.

Screen display

	Terminal	AV1	AV2	Component	PC	HDMI1	HDMI2
Manual input (default setting in "Input Labels")		AV1 AV1-RGB	AV2 AV2-S-Video AV2-RGB	Component	PC	HDMI1	HDMI2
Auto input (EC mode or VIERA Link)		EC/AV1 EC/AV1-RGB	EC/AV2 EC/AV2-S-Video EC/AV2-RGB	—	—	EC/HDMI1 ● Applicable for EC mode and VIERA Link	EC/HDMI2 ● Applicable for VIERA Link

Panasonic equipment connected to the TV can be directly operated with the remote control.

VCR ▮▮DVD	**VCR / DVD switch**∗ Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre
⏻	**Standby** Set to Standby mode / Turn on
▶	**Play** Playback videocassette / DVD
■	**Stop** Stop the operations
◄◄	**Rewind / Skip / Search** VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
►►	**Fast-forward / Skip / Search** VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
❚❚/�	**Pause** Pause / Restart DVD: Press and hold to play at slow speed
PROGRAMME ∨ ∧	**Programme Up / Down** Select programme
REC ●	**Record** Start recording

∗**Setting your remote control to operate Panasonic VCR, DVD, etc.**

① Set the VCR / DVD switch to the appropriate position ➡ VCR ▮▮DVD

② Press and hold ⏻ during the following operations

Enter the appropriate code for the equipment to be controlled, see table below ➡ Press ■

"VCR" position

Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position

Equipment	Code
DVD	70 (default)
Player home theatre	71

Note

● Confirm correct operation after the code changed.
● The codes will be reset to default values if batteries are replaced.
● "DVD" means DVD player, DVD recorders and Recorder home theatre.
● Some operations may not be possible on some equipment models.

Viewing Teletext

You can enjoy news, weather forecasts and subtitles, etc. (depending on the broadcaster)

DVB (digital broadcasting) mode

DVB teletext services

DVB teletext services differ greatly from analogue teletext. When you switch to a DVB teletext service, the images you see can contain graphics and text, laid out and controlled in a manner decided by the broadcaster.
● You can check if the programme has teletext information.
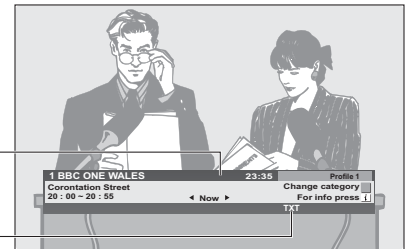
Information banner (p. 13)

Displayed if programme has teletext information

1 BBC ONE WALES   23:35   Profile 1
Corotation Street   Change category
20 : 00 ~ 20 : 55   ◄ Now ►   For info press ⓘ
                                   TXT

1 If in Analogue mode
Select DVB
TV

2 ### Switch to Teletext
TEXT

BBC THREE   17:51 28 Feb
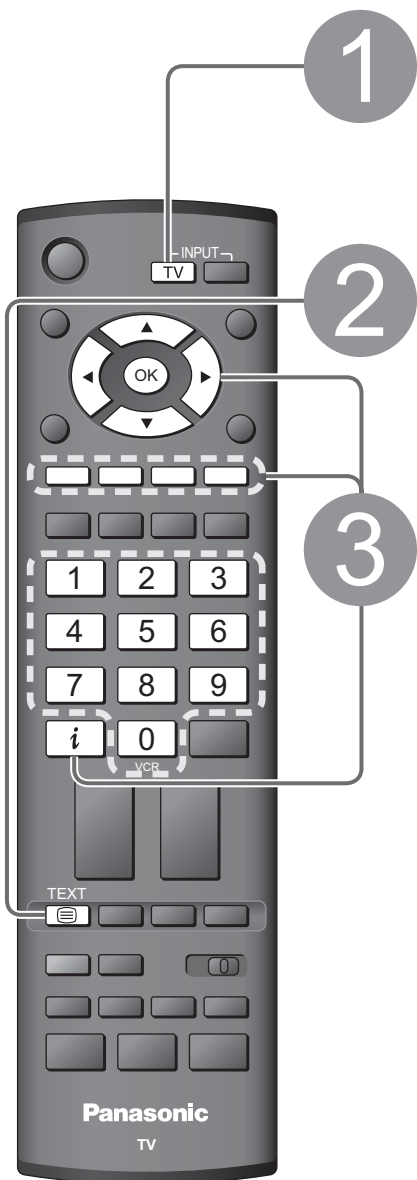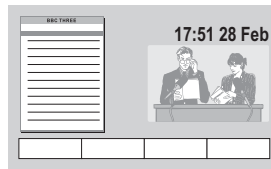
How to use
In all cases, it is possible to navigate the pages using buttons on the remote control, but because the commands available must apply to all manufacturers of DVB equipment, some on screen commands may not correspond exactly to the remote control buttons.
For example:

● When "select" or "go" is displayed ➡ OK

● When "◄", "►", "▲", "▼" symbol is displayed ➡

● When the key words are displayed on colour bar ➡ red green yellow blue

● When options with numbers are displayed ➡ 1 2 3 4 5 6 7 8 9 0 VCR

● When "ⓘ" is displayed ➡ ⓘ (information)

■ **To return to TV** ➡ TEXT

3

TEXT

Panasonic
TV

■ **To change the channel**
OK

Note
● As soon as you switch to a DVB channel with links to a teletext service, software is downloaded in the background to enable the teletext function. This means that when switching to a DVB channel, you should wait for approximately 5 seconds before pressing the TEXT button - this will allow the software to download. If you press the TEXT button before download is complete, there will be a short delay before the text screen is displayed.
● While navigating DVB teletext, you will find there is a short delay when moving between pages while the page downloads. There is often a prompt shown somewhere on the page (for example "Loading") to let you know that this is happening.

Analogue mode

What is FASTEXT mode (default)**?**
In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. 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.

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. ("Store frequently viewed pages", p. 20)

■ **To change mode** ⇒ "Teletext" in Setup Menu (p. 23)

1 If in DVB mode
Select Analogue
TV

2 Switch to Teletext
TEXT
● Displays the index page (content varies depending on the broadcasters)

Sub page number
<< 01 02 03 04 05 06 07 >>
Current page number — **P100** 17:51 28 Feb — Time / date
TELETEXT INFORMATION
Colour bar

3 Select the page

1 2 3
4 5 6
7 8 9
0
VCR
or
up
OK
down
or
red green yellow blue
(Corresponds to the colour bar)

As the blue bar is displayed
MENU

■ **To adjust contrast** ⇒

TEXT
■ **To return to TV** ⇒ (Press twice)
● Press once to have picture and text. Press again to return to TV.

TEXT STTL INDEX HOLD

Panasonic
TV
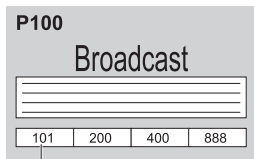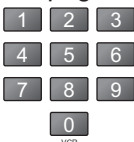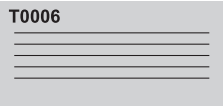
■ **Using Analogue teletext**

Reveal hidden data	Reveal hidden words e.g. quiz page answers MENU ⇒ red ● Re-hide ⇒ red
FULL / TOP / BOTTOM	MENU ⇒ green (TOP) **P100** Broadcast (Expand the TOP half) → (BOTTOM) (Expand the BOTTOM half) → Normal (FULL) **P100** Broadcast

(Continued)

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Viewing Teletext

HOLD	If you wish to hold the current page without updating **Stop automatic updating** HOLD ■ **To resume** ➡ HOLD
INDEX	**Return to the main index page** INDEX ● FASTEXT mode only
Subtitles	**View subtitles by pressing STTL button** STTL ● Factory setting is "P888" (subtitle service) on blue button (List mode).
View in multi window	**Watch TV and Teletext in two windows at once** TEXT ● Operations can be made only in Teletext screen. ● Each time pressed: Teletext ⟶ TV and Teletext ⟶ TV ⟶
Store frequently viewed pages	**Store frequently viewed pages in the colour bar** (List mode only) As page is displayed — Corresponding colour button ➡ OK press and hold **P100** Broadcast / 101 200 400 888 / The number changes to white. ● If you wish to use Subtitles, do not change number on blue button. ■ **To change stored pages** ➡ Colour button you want to change ➡ Enter new page number 1 2 3 4 5 6 7 8 9 0 VCR ➡ OK press and hold
View sub page	**View sub page (Only when teletext is more than one page)** <<01 02 03 04 05 — Appears at top of the screen ■ **To view specific sub page** ➡ MENU ➡ blue T**** Broadcast ➡ Enter the 4-digit number example: P6 0 0 0 6 T0006 ● Sub pages: The number of sub pages varies depending on the broadcasters (up to 79 pages). It may take some time for searching, during which time you can watch TV.
Watch TV while waiting for update	**View the TV picture while searching for a teletext page** Teletext automatically updates itself when new information becomes available. Changes to TV screen temporarily MENU ➡ yellow ➡ P108 — Appears when updating is completed ➡ yellow ➡ View the updated page (You cannot change the channel.) ● The news page provides a function that indicates arrival of latest news ("News Flash").

How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions.
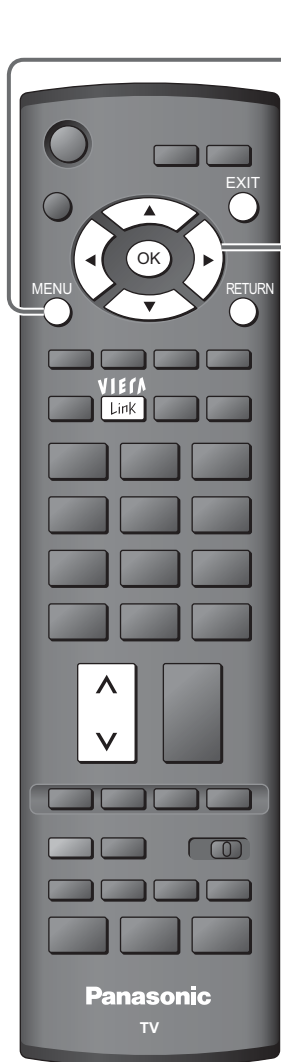
1 **Display the menu**
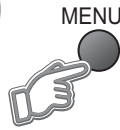
MENU
● Displays the functions that can be set (varies according to the input signal)

2 **Select the menu**
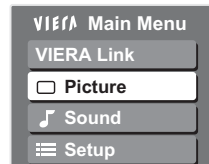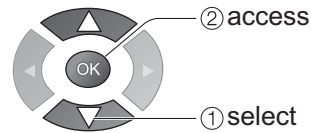
VIERA Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup

(example: Picture Menu)

② access
① select

3 **Select the item**

☐ Picture Menu		1/2
Viewing Mode	◄ Auto	
Contrast		
Brightness		
Colour		
Sharpness		
Tint		
Colour Balance	Warm	
Colour Management	Off	
P-NR	Off	

(example: Picture Menu)

select

4 **Adjust or select**

☐ Picture Menu		1/2
Viewing Mode	◄ Auto	
Contrast		
Brightness		
Colour		
Sharpness		
Tint		
Colour Balance	Warm	
Colour Management	Off	
P-NR	Off	

(example: Picture Menu)

① change
② store or access (Required by some functions)
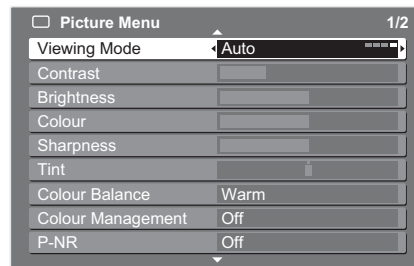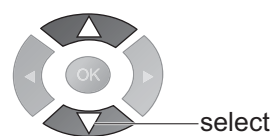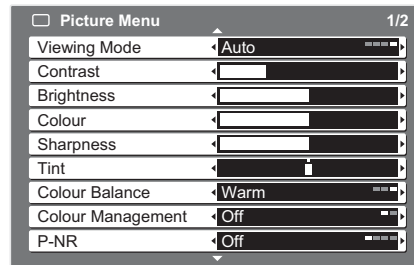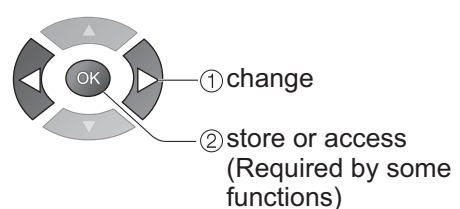
■ To return to TV at any time
EXIT

■ To return to the previous screen
RETURN

Note
● To initialize all settings
➡ "Shipping Condition" (p. 32)

■ Choose from among alternatives

Number and positions of alternatives

Colour Balance ◄ Normal ►
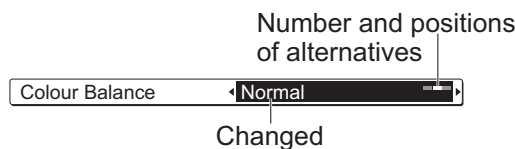
Changed

■ Adjust using the slide bar

Sharpness ◄ ►

Moved

■ Go to the next screen

Tuning Menu Access

Displays the next screen

■ To change menu pages

∧ up
∨ down

Viewing
Advanced

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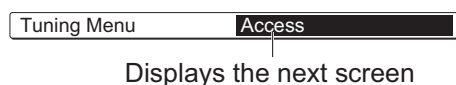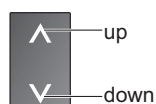
How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	**VIERA Link Control**	Controls the connected Panasonic equipment "Easy control only with VIERA remote control" (p. 41) "Speaker control" (p. 41) ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
	Speaker Selection	
Picture	**Viewing Mode**	Selects four different screen settings **(Dynamic / Normal / Cinema / Auto)** In each Viewing Mode setting, Contrast, Brightness, Colour, Sharpness, Tint (in NTSC only), Colour balance, Colour Management and 3D-COMB can be adjusted and stored to suit your particular viewing requirement (e.g., you may require different settings for viewing sports, films, news etc.) Set for each input signal Changes will be stored automatically. By analysing and processing the incoming picture, all four modes feature automatic enhancement
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste
	Colour Balance	Allows you to set the overall colour tone of the picture **(Cool / Normal / Warm)**
	Colour Management	Automatically adjusts colours to vivid ones **(Off / On)** ● Not valid on PC signal
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise **(Off / Min / Mid / Max)** ● Not valid on PC signal
	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to "On" to display sharper and more accurate colours **(Off / On)** ● For PAL or NTSC signal reception only ● Not valid on RGB, S-Video, components, PC and HDMI ● Analogue mode only
	Reset to Default	Press the OK button to reset the present Picture Mode to the default settings ● P-NR is reset to Off (Analogue) or Min (DVB)
Sound	**Mode**	Select two different sound settings **(Music / Speech)** In each Sound Mode setting, Bass and Treble can be adjusted and stored to suit your particular sound requirement Changes to any settings in a mode will affect all signal sources Sound quality can be improved
	Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
	Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones
	Surround	Surround sound settings **(Off / On)** Provides a dynamic enhancer to simulate improved spatial effects
	Volume Correction	Adjusts volume of individual channel or input mode
	Preferred Multi Audio	Selects the preferred language for DVB multi audio (depending on the broadcaster)
	NICAM	NICAM (Near Instantaneous Companded Audio Multiplex) A format for digital sound over television Reproduces stereo sound **(Off / On)** ● Off if reception is poor (FM monaural sound) ● Analogue mode only
	HDMI1 Input	Select to fit the input signal **(Auto / Digital / Analogue)** (p. 39) Auto : Automatic detection of digital or analogue sound source Digital : HDMI cable connection Analogue : HDMI-DVI adapter cable connection ● HDMI input mode only ● HDMI2 terminal is for digital signal only ● No setting for HDMI2 available
	Audio Description Menu → **Audio Description**	Useful for visually-impaired viewers **(Off / On)** Select "On" to sound the description sound if the programme has the signal
	Volume	Adjusts the volume for audio description
	Speakers	Set to "On" to active the description sound track from TV speakers **(Off / On)**
	Headphones	Set to "On" to active the description sound track from headphones **(Off / On)**
	Reset to Default	Press the OK button to reset the present Sound Mode to the default settings ● Effective to Bass, Treble, Balance and Headphone Volume

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■ Menu list

Menu	Item		Adjustments / Configurations (alternatives)
Setup	**DVB Timer Programming**		Records future programmes (p. 36)
	DVB Profile Edit		Creates list of favourite programmes (p. 29)
	DVB Service List		Skips the unwanted DVB channels (p. 29)
	Q-Link Settings	**Q-Link**	Selects which AV terminal is to be used for data communication between this TV and a compatible recording equipment **(AV1 / AV2)** (p. 38)
		AV1 / AV2 out	Chooses the signal to be transmitted from the TV to Q-Link **(Analogue / DVB / AV1 / AV2 / AV3 / Monitor)** ● Monitor: Image displayed on screen ● Component, PC and HDMI signals cannot be outputted
		Download	Downloads analogue channel information to a Q-Link compatible equipment connected to the TV
	Child Lock		Locks a programme channel to prevent access to it (p. 29)
	Tuning Menu	**Auto Setup**	Automatically sets the channels received in the area (p. 30)
		Analogue Programme Edit	Edits analogue channels (p. 31)
		DVB Manual Tuning	Sets the DVB channels manually (p. 31)
		Analogue Manual Tuning	Sets the analogue channels manually (p. 31)
		Add New DVB Services	Adds new DVB services (p. 31)
		New Service Message	Selects whether to give a notification message when a new DVB service is found (p. 31)
		DVB Signal Condition	Checks the DVB signal condition (p. 31)
	Off Timer		Sets the time the TV automatically turns Off **(Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)**
	Power on Preference		Set to "TV" to view picture from TV tuner. Set to "AV" to view input from an external equipment connected to a SCART terminal, e.g. satellite receiver **(TV / AV)** ● The external equipment must be switched on and sending a control signal for automatic switching at power on to occur
	Teletext		Analogue teletext display mode **(FASTEXT / List)** (p. 19)
	Preferred Subtitles		Selects the preferred language for DVB subtitles (depending on the broadcaster) ● To display subtitles ➡ p. 13
	Shipping Condition		Resets all settings, for example, when moving house (p. 32)
	Owner ID		Inputs the owner ID (p. 33)
	Common Interface		Uses to watch pay-TV (p. 27)
	System Update		Downloads new software to TV (p. 27)
	Input Labels		Labels or skips each input terminals (p. 34)
	Banner Display Timeout		Sets how long the information banner (p. 13) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments
	VIERA Link		Sets to use VIERA Link functions **(Off / On)** (p. 40)
	Software Licence		Displays the software licence information
	System Information		Displays the system information of this TV

● A different menu will be displayed while PC is used. (p. 35)
● Only available items can be selected.

● How to Use Menu Functions (picture, sound quality, etc.)

Advanced

How to Use Menu Functions

■**Overview**

● How to operate (p. 21)

VIErA Main Menu

- **VIERA Link**
- ▭ **Picture**
- ♪ **Sound**
- ≡ **Setup**

VIERA Link Menu

| VIERA Link Control | Recorder |
| Speaker Selection | Home Cinema |

(p. 41)

The menu of the accessed equipment

▭ Picture Menu 1/2

Viewing Mode	Auto
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
Colour Management	Off
P-NR	Off

▭ Picture Menu 2/2

3D-COMB	Off
Advanced PC Settings	Access
Reset to Default	Set

(p. 22)

········ Only available in NTSC
········ Not available in PC
········ Not available in PC
········ Only available in NTSC / PAL
········ Only available in PC

Advanced PC Settings

R-Gain	
G-Gain	
B-Gain	
Gamma	2.2
Reset to Default	Set

(p. 35)

♪ Sound Menu 1/2

Mode	Music
Bass	
Treble	
Balance	
Headphone Volume	
Surround	Off
Volume Correction	
Preferred Multi Audio	English
NICAM	Off

♪ Sound Menu 2/2

HDMI1 Input	Auto
Audio Description	Access
Reset to Default	Set

(p. 22)

········ Only available in DVB
········ Only available in Analogue
········ Only available in DVB

Audio Description Menu

Audio Description	Off
Volume	
Speakers	Off
Headphones	Off

(p. 22)

Only available in PC

PC Setup

Input Resolution	VGA
Clock	
H-pos	
V-pos	
Clock Phase	
Sync	H & V
Reset to Default	Set

(p. 35)

≡ Setup Menu 1/2

PC Setup	Access
DVB Timer Programming	Access
DVB Profile Edit	Access
DVB Service List	Access
Q-Link Settings	Access
Child Lock	Access
Tuning Menu	Access
Off Timer	Off
Power on Preference	TV
Teletext	FASTEXT

≡ Setup Menu 2/2

Preferred Subtitles	English
Shipping Condition	Access
Owner ID	Access
Common Interface	Access
System Update	Access
Input Labels	Access
Banner Display Timeout	3 seconds
VIERA Link	On
Software Licence	Access
System Information	Access

(p. 23)

Only available in DVB ·········
Only available in DVB ·········
Only available in DVB ·········

Only available in Analogue ·········

Only available in DVB ·········

Only available in DVB ·········

NTSC (National Television System Committee): One of television signal used in USA, etc.

DVB Timer Programming   Wed 05/08/04 18:50

Pos.	Name	Date	Start	End	min.	☐
1	BBC1	6/8 FR	18:00	20:00	120	Off
3	ITV1	7/8 SA	21:30	22:30	60	Off

(p. 37)

Profile Editor

All DVB Services	Profile 1
1 BBC One Wales	
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi	
719 BBC Radio Wales	
720 BBC Radio Cymru	

(p. 29)

DVB Service List

70	CBBC Channel	☑
72	Cartoon Nwk	☑
105	BBCi	☑
719	BBC Radio Wales	☐
720	BBC Radio Cymru	☐
1	BBC ONE Wales	☐
7	BBC THREE	☑

(p. 29)

Q-Link Settings

Q-Link	◄ AV2
AV2 out	◄ DVB
Download	Access

(p. 23)

Child Lock

| Change PIN | Access |
| Service List | |

(p. 29)

Analogue Programme Edit

Prog.	Chan.	Name
1	CH33	1 2 3
2	CH21	X Y Z
3	CH21	F T P
4	CH60	
5	CH21	4 5 6

(p. 31)

DVB Manual Tuning

Frequency	[CH21]	474.00 MHz
Signal Quality	0	10
Signal Strength	0	10

Prog.	Channel	Service Name	Net ID.	TS ID.	Quality

Stopped

(p. 31)

Auto Setup - Digital and Analogue

| Digital Scan | 21 | 68 |
| Analogue Scan | 21 | 68 |

Channel	Service Name	Type	Quality
62	CBBC Channel	DVB	10
62	BBC Radio Wales	DVB	10
62	BBC Radio Cymru	DVB	10
62	E4	DVB	10
62	Cartoon Nwk	DVB	10
29		Analogue	–
33	BBC1	Analogue	–

This will take about 3 mins.

(p. 31)

Analogue Manual Tuning

| Programme | 1 | [CH33] |
| Manual Tuning 21 | | 68 |

(p. 31)

Add New DVB Services

| Please wait! | 21 | 68 |

Prog.	Channel	Service Name	Net ID.	TS ID.	Quality

This will take about 3 mins.

(p. 31)

Only available in Analogue ··········
Only available in DVB ·········
Only available in Analogue ·······
Only available in DVB ·······
Only available in DVB ······
Only available in DVB ······

Tuning Menu

Auto Setup	Access
Analogue Programme Edit	Access
DVB Manual Tuning	Access
Analogue Manual Tuning	Access
Add New DVB Services	Access
New Service Message	◄ On
DVB Signal Condition	Access

(p. 30)

DVB Signal Condition

DVB Programme	[70] CBBC Channel
Signal Quality	
Signal Strength	
	0 5 10

(p. 31)

Shipping Condition

All tuning data will be erased
Are you sure?
Are you sure?

(p. 32)

Owner ID

Please enter new PIN

| PIN | * * * * |

(p. 33)

Common Interface

| Slot 1: | Module inserted |

(p. 27)

System Update

| Auto Update Search in Standby | ◄ On |
| System Update Search Now | |

(p. 27)

Input Labels

AV1	◄ DVD
AV2/AV2S	AV2/AV2S
AV3/AV3S	AV3/AV3S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2

(p. 34)

DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.

1 If in Analogue mode
Select DVB

TV

2 **Display the menu**

MENU

3 **Select "Setup"**

VIErA Main Menu
VIERA Link
☐ Picture
♪ Sound
≔ Setup

②access
OK
①select

4 **Select "Common Interface" or "System Update"**

≔ Setup Menu	2/2
Preferred Subtitles	English
Shipping Condition	
Owner ID	
Common Interface	Access
System Update	Access
Input Labels	
Banner Display Timeout	3 seconds
VIERA Link	On
Software Licence	

②access
OK
①select

5 **Set**

■ **To return to TV**
➡ EXIT

Panasonic
TV

The Common Interface Module menu provides access to software contained on Common Interface (CI) Modules.
This TV receiver works only Pay TV modules complying with CI standard.

Pay-TV

Common Interface

Caution
- Turn Off Mains power On / Off switch whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
- Do not insert the module up side down.

CI slot
Insert or remove straightly and completely
CI module

Rear of the TV
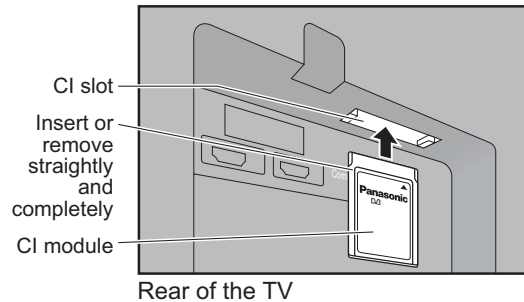
① **Insert the CI module (optional)**
- The features that appear on screen are dependent on the contents of the selected CI module.
- Normally pay-TV services will appear without ② and ③.
  If pay-TV services does not appear, perform ② and ③.
- For more details, see the manual of the CI module, or check with the broadcaster.

② **Access "Common Interface"**

Common Interface	
Slot 1:	Module inserted

OK —— access
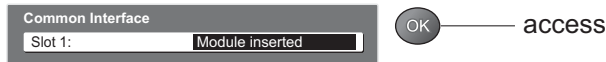
③ **Follow the on-screen instructions**
example: select, go ➡ OK ◀ ▶ ▼ ▲ ➡ ⊙

Coloured characters ➡ red green yellow blue

- On-screen operation guide may not correspond to the remote control buttons.

Update TV's software system

System Update

Download new software to TV.
- For details (p. 45)

If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set "Auto Update Search in Standby" to Off.

Select "Auto Update Search in Standby" and then set "On" or "Off"

System Update	
Auto Update Search in Standby	On
System Update Search Now	

② set
① select

- On: Automatically performs a search in standby and downloads an update, if any software updates are available

■ **To update immediately**
Select
"System Update Search Now"

② access
① select
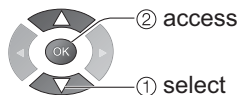
Searches for an update (for several min.) and displays a corresponding message if any

Download

OK

- Download may take for about 20 min.

Editing Channels

You can make your favourite channel lists, skip unwanted channels and control channel audience.

1 **Select DVB or Analogue**

TV
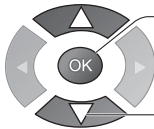
● "DVB Profile Edit" and "DVB Service List" are available in DVB mode only.

2 **Display the menu**

MENU

3 **Select "Setup"**

VIErn Main Menu
VIERA Link
☐ Picture
♪ Sound
☰ Setup

②access

OK
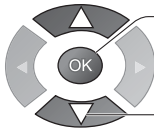
①select

4 **Select "DVB Profile Edit", "DVB Service List" or "Child Lock"**

☰ Setup Menu	1/2
DVB Timer Programming	
DVB Profile Edit	Access
DVB Service List	Access
Q-Link Settings	
Child Lock	Access
Tuning Menu	
Off Timer	Off
Power on Preference	TV
Teletext	FASTEXT

②access

OK

①select

Panasonic
TV

■ **To return to TV**

➡ EXIT

5 **Set**

Create your favourite channel list (Profile) from various broadcasters (up to 4: Profile 1 to 4).
The list is added to "Category" in TV Guide (p. 14) and information banner (p. 13) and then easily accessed.

A channel is added

List favourite channels

DVB Profile Edit

(DVB mode)

① **Select a channel and add it to the list**

Profile Editor	
All DVB Services	Profile 1
1 BBC One Wales	
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi	
719 BBC Radio Wales	
720 BBC Radio Cymru	

select

● To add all channels to the list ➡ yellow

Profile Editor	
All DVB Services	Profile 1
1 BBC One Wales	1 BBC One Wales
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi	
719 BBC Radio Wales	
720 BBC Radio Cymru	
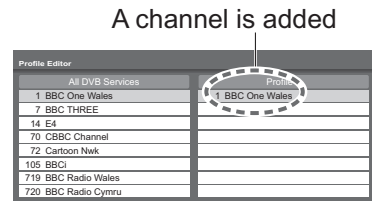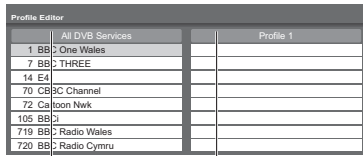
To change the category ➡ red

To display another Profile ➡ blue

green

■ To edit Profile

Select the field of Profile to edit and:

● To name the Profile ➡ red ➡ Select the character ➡ OK

● To move the channel ➡ green ➡ Select the new position ➡ Confirm green ➡ OK

● To delete the channel ➡ yellow   ● To delete all channels ➡ blue

② **Store**

OK   ● Channel numbers (known as logical channel numbers) cannot be changed, due to broadcast restrictions.

Skip unwanted channels

DVB Service List

(DVB mode)

You can hide unwanted services. The deleted services cannot be displayed except in this function.
Use this function to skip unwanted services.

Select a service and add / delete

DVB Service List		
70	CBBC Channel	☑
72	Cartoon Nwk	☑
105	BBCi	☑
719	BBC Radio Wales	☐
720	BBC Radio Cymru	☐
1	BBC ONE Wales	☐
7	BBC THREE	☑

② add / delete

① select

☑ :add

☐ :delete (skip)

Control channel audience

Child Lock
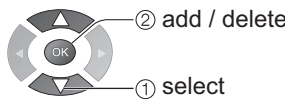
You can lock specific channels and control who watches them.
(When a channel is selected, a message appears; by entering the PIN number, you can watch the channel.)

① **Enter the PIN number (4 digits)**

Child Lock-PIN Entry	
Please enter new PIN	
PIN	* * * *

● Enter the PIN number twice at first setting.
● Make a note of the PIN number in case you forget it.

② **Select "Service List"**

Child Lock	
Change PIN	
Service List	Access

② access
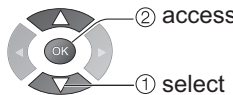
① select

③ **Select the channel to be locked**

Child Lock Service List		
Service Name	Type	Lock
1 BBC One Wales	DVB	
7 BBC THREE	DVB	🔒
14 E4	DVB	
70 CBBC Channel	DVB	
72 Cartoon Nwk	DVB	
105 BBCi	DVB	🔒
719 BBC Radio Wales	DVB	
720 BBC Radio Cymru	DVB	

② set

① select

Appears when the channel is locked
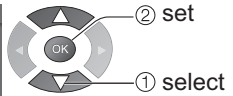
● To cancel
  ➡ Select the locked channel
  ➡ OK

● To lock all channels ➡ yellow

● To cancel all channel locks ➡ blue

■ To change the PIN number
Select "Change PIN" in ② and enter a new PIN number twice.

<hr>

Note

● Setting "Shipping Condition" (p. 32) erases the PIN number and all settings.

Tuning Channels

You can re-tune all TV channels when moving house or search for new services which may have recently started broadcasting.

1 Select DVB or Analogue

TV

- "DVB Manual Tuning", "Add New DVB Services", "New Service Message" and "DVB Signal Condition" are available in DVB mode only.
- "Analogue Programme Edit" and "Analogue Manual Tuning" are available in Analogue mode only.

2 Display the menu

MENU

3 Select "Setup"

VIE*A* Main Menu
VIERA Link
Picture
Sound
Setup

② access
① select

4 Select "Tuning Menu"

Setup Menu	1/2
DVB Timer Programming	
DVB Profile Edit	
DVB Service List	
Q-Link Settings	
Child Lock	
Tuning Menu	Access
Off Timer	Off
Power on Preference	TV
Teletext	FASTEXT

② access
① select

5 Select a function and set

Tuning Menu	
Auto Setup	Access
Analogue Programme Edit	Access
DVB Manual Tuning	Access
Analogue Manual Tuning	Access
Add New DVB Services	Access
New Service Message	◄ On ■ ►
DVB Signal Condition	Access

② access
① select

■ **To return to TV**

➡ EXIT

Set DVB and Analogue channels automatically

Auto Setup

Automatically set the DVB and Analogue channels received in the area.
If a Child Lock PIN number (p. 29) has been set, it must be entered.

Start Auto Setup

Auto Setup
All tuning data will be erased
Start Auto Setup ●EXIT ●RETURN

OK ➡

Settings are made automatically

Auto Setup - Digital and Analogue		
Digital Scan	21	68
Analogue Scan	21	68

Channel	Service Name	Type	Quality
62	CBBC Channel	DVB	10
62	BBC Radio Wales	DVB	10
62	BBC Radio Cymru	DVB	10
62	E4	DVB	10
62	Cartoon Nwk	DVB	10
29		Analogue	–
33	BBC1	Analogue	–

This will take about 3 mins.
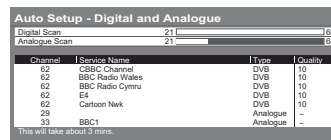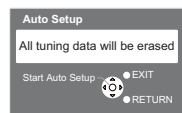
- All previous settings are erased.
- The analogue settings are downloaded to a Q-Link compatible equipment connected to the TV.

- When the operation is completed, the digital broadcast of programme number "1" will appear. If no DVB services are found, the analogue broadcast will appear.
- If tuning has not done completely ➡ "DVB Manual Tuning", "Analogue Manual Tuning"

For Auto Setup, using the buttons on the top of the TV

F | –/∨ +/∧ | TV | AV

① Press repeatedly until "Auto Setup" appears

F

② Access "Auto Setup"

TV

③ Start "Auto Setup"

TV

■ **To return to TV** ➡ F

Edit Analogue channels

Analogue Programme Edit

- Delete
- Add
- Move
- Change name

Edit the analogue programme position settings

① **Select the channel to edit**

Analogue Programme Edit		
Prog.	Chan.	Name
1	CH33	1 2 3
2	CH21	X Y Z
3	CH21	F T P
4	CH60	
5	CH21	4 5 6

Cursor

select

● To change channel number
  ➡ "Analogue Manual Tuning"

Name
Channel

```
-3 FTP                               23:35          Profile 1
Corotation Street                           Change category
                                            For info press i
```

② **Edit**

■ **To delete** ➡ red
  ➡ After confirming, press red

■ **To add** ➡ green
  ➡ After confirming, press green

■ **To move** ➡ yellow
  ➡ Select new position ➡ yellow

■ **To change the name of the broadcaster displayed when selecting channels**

Analogue Programme Edit		
Prog.	Chan.	Name
1	CH33	1 2 3
2	CH21	X Y Z
3	CH21	F T P
4	CH60	
5	CH21	4 5 6

Select the "Name" field

Enter the "User Input" mode — red

Select the character

OK Set

(Maximum: five characters)

Set DVB channel manually

DVB Manual Tuning

Normally use "Auto Setup" or "Add New DVB Services" for the DVB channel setting.
If tuning has not done completely, use this function.

```
DVB Manual Tuning
Frequency                    [CH21]          474.00 MHz
Signal Quality        0                              10
Signal Strength       0                              10
Prog.  Channel  Service Name      Net ID.  TS ID.  Quality




                          Stopped
```

① select channel

② search

● All services found will be added to the DVB Service List (p. 29) automatically.

Set Analogue channel manually

Analogue Manual Tuning

Set Analogue channel manually after Auto Setup.
If a VCR is connected with only the RF cable, select programme position "0".
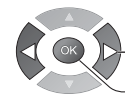
```
Analogue Manual Tuning
Programme       1                          [CH33]
Manual Tuning  21                              68
```

Select the programme position

```
1 2 3
4 5 6
7 8 9
  0
 VCR
```

Select the channel

∧ ∨

Search and store

① search
② store

Add DVB channel automatically

Add New DVB Services

Any new services found will be added to the DVB Service List (p. 29) automatically.

```
Add New DVB Services
Please wait!          21                        68
Prog.  Channel  Service Name      Net ID.  TS ID.  Quality




This will take about 3 mins.
```

OK — start

● The new service is added with the current settings saved as they are.

Display a notification message

New Service Message

Selects whether to give a notification message when a new DVB service is found. **(Off / On)**

```
New DVB service found!
Press OK to start Auto Setup.
Press EXIT to Ignore.
Selecting Auto Setup will delete
current Profile and Childlock settings
```

● Selecting OK (Auto Setup) will delete current Profile and Childlock settings.

Check DVB signal

DVB Signal Condition

Selects a channel and checks the DVB signal condition.
Use for adjusting the direction of the aerial.

● To change the programme during the menu appears ➡ ∧ ∨

```
DVB Signal Condition
DVB Programme    [70] CBBC Channel
Signal Quality
Signal Strength
                  0      5     10
```

Signal Quality:
● Green bar ➡ Good
● Yellow bar ➡ Poor
● Red bar ➡ Bad (Check the aerial)

Restore Settings

Resets the TV to its original condition, i.e. no channels tuned in.
All settings other than "Owner ID" (channels, picture, sound quality, etc.) are reset.

1 Display the menu

MENU

2 Select "Setup"

VIErA Main Menu
| VIERA Link |
| Picture |
| Sound |
| **Setup** |

②access

①select

3 Select "Shipping Condition"

Setup Menu	2/2
Preferred Subtitles	English
Shipping Condition	Access
Owner ID	
Common Interface	
System Update	
Input Labels	
Banner Display Timeout	3 seconds
VIERA Link	On
Software Licence	

②access

①select

■ **To return to TV**

➡ EXIT

4 Set

① Check the message and initialise

Shipping Condition

All tuning data will be erased
Are you sure?
Are you sure?

Confirm ● EXIT
● RETURN

OK — set

Restore Settings

Shipping Condition

② Follow the on-screen instructions
● "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)

■ **To re-tune TV channels only, e.g. after moving house**
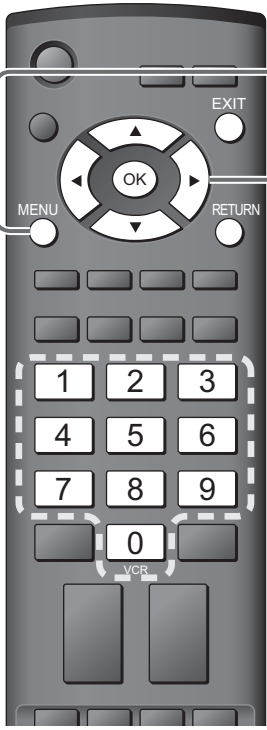➡ "Auto Setup" (p. 30)

Owner ID

Entry of the security code (PIN number) and "personal information" (your name, address and post code).
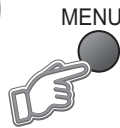In the unfortunate event of theft it will help the Police to determine the owner.
If you have skipped the Owner ID input in "Auto Setup" (p. 10), and input it later, start from ❶.
If you input the Owner ID in "Auto Setup" (p. 10), perform ❹.
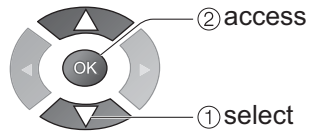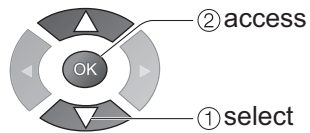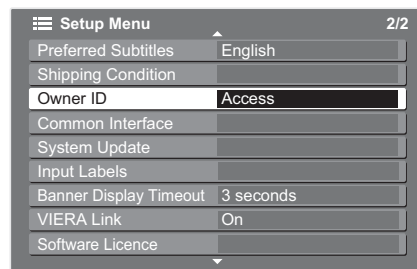
1 Display the menu

MENU

2 Select "Setup"

VIErA **Main Menu**
VIERA Link
☐ Picture
♪ Sound
≡ **Setup**

② access
① select

3 Select "Owner ID"

≡ Setup Menu	2/2
Preferred Subtitles	English
Shipping Condition	
Owner ID	Access
Common Interface	
System Update	
Input Labels	
Banner Display Timeout	3 seconds
VIERA Link	On
Software Licence	

② access
① select

■ **To return to TV**

→ EXIT

4 Set

Input owner ID

Owner ID

① Enter the PIN number (4 digits)

Owner ID
Please enter new PIN
PIN   * * * *

●EXIT
●RETURN   0 – 9 PIN entry
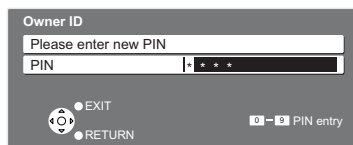
● Enter the PIN number twice at first setting.
● Make a note of the PIN number in case you forget it.

② Enter your name, address, and post code, in that order

Select the entry field

Enter the "User Input" mode (OK)

Select the character

(OK) Set

RETURN Store

To check the "personal information" stored

F Hold down for about 3 sec.

↓
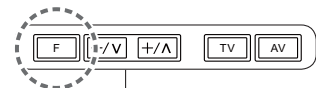
Displays the information on the screen (for several sec.)

Owner ID
NAME   A
HOUSE NO
POSTCODE
EXIT

● The PIN number is not displayed.

■**To change the PIN number**

Select the "PIN" field   ② access   ① select   ➡ Enter a new PIN number twice

33

Input Labels

For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment.
(To select the input mode ➡ p. 16)

1 Display the menu

MENU

2 Select "Setup"

VIEr∧ Main Menu
| VIERA Link |
| Picture |
| Sound |
| Setup |

②access
①select

3 Select "Input Labels"

Setup Menu   2/2
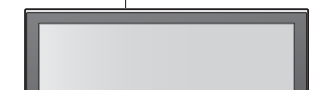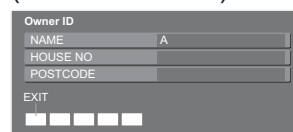| Preferred Subtitles | English |
Shipping Condition	
Owner ID	
Common Interface	
System Update	
Input Labels	Access
Banner Display Timeout	3 seconds
VIERA Link	On
Software Licence	

②access
①select

■ To return to TV

EXIT
➡

4 Select a input terminal and set

Input Labels
AV1	◄ DVD ►
AV2/AV2S	AV2/AV2S
AV3/AV3S	AV3/AV3S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2

②set
①select

The labels you set will be displayed in "Input Selection" menu (p. 16) or banner.
● If "Skip" is selected, you cannot select the mode.

■ User Input
You can name each input terminals freely.

Select "User Input"

①select
②access

Set characters

User Input
Name

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z		0	1	2	3	4	5	6	7	8	9	!	:	#
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	(	)	+	-	.	*	_							
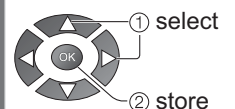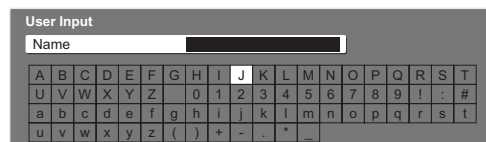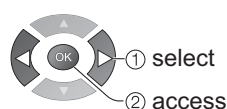
①select
②store

(maximum: ten characters)

Panasonic
TV

Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected. To connect PC (p. 42)

1 **Select the external input**

> AV

2 **Select "PC"**

Input Selection
AV1
AV2/AV2S
AV3/AV3S
COMPONENT
PC
HDMI1
HDMI2
TV

② access

① select

● Corresponding signals (p. 46)
● If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

■ **To return to TV**

➡ TV

■ **PC menu setting** (changed as desired)
● To make settings ➡ "How to Use Menu Functions" ① to ④ (p. 21)

Menu	Item		Adjustments / Configurations (options)
Picture	**Advanced PC Settings**	R-Gain	Adjusts the white balance for red areas
		G-Gain	Adjusts the white balance for green areas
		B-Gain	Adjusts the white balance for blue areas
		Gamma	**(2.0 / 2.2 / 2.5)**
Setup	**PC Setup**	Input Resolution	Switches to a wide view ● VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) ● Options change depending on signals
		Clock	Set to the minimum level if noise occurs
		H-pos	Adjusts horizontal position
		V-pos	Adjusts vertical position
		Clock Phase	Eliminates flicker and distortion ● Adjust after Clock adjustment ● Set to the minimum level if noise occurs
		Sync	Chooses another synchronous signal if the image is distorted **(H & V / On G)** ● H & V : by the horizontal and vertical signals from your PC On G : by the green signal from your PC (if available)

● Other items ➡ p. 22 and p. 23

Recording Controls (DVB mode)
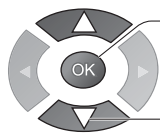
Timer Programming from Menu
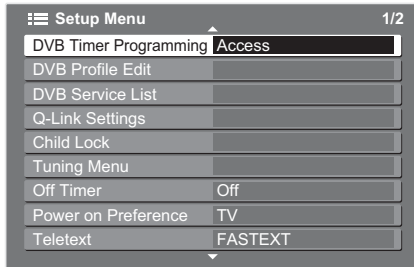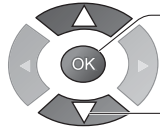
The Timer programming menu allows you to choose programmes that you wish to record. At the correct time, the DVB system will switch on and tune to the correct station (even if the TV is in Standby mode). If the recording equipment is compatible with Q-Link or similar technologies (p. 38) and connected to the TV's AV2 terminal using a SCART cable (p. 42), you do not need to programme the device – the DVB system will control the recording process.
TV Guide may also be used to set timer programmes. (p. 14)

1 If in Analogue mode
Select DVB
TV

2 **Display the menu**
MENU

3 **Select "Setup"**

VIErA **Main Menu**
| VIERA Link |
| Picture |
| Sound |
| Setup |

② access
① select

4 **Select "DVB Timer Programming"**

Setup Menu	1/2
DVB Timer Programming	Access
DVB Profile Edit	
DVB Service List	
Q-Link Settings	
Child Lock	
Tuning Menu	
Off Timer	Off
Power on Preference	TV
Teletext	FASTEXT

② access
① select

5 **Set**

6 **Store**
OK —— store

■ **To return to TV**
➡ EXIT

■ **To stop recording**
➡ GUIDE ➡ EXIT

(Caution)

● The TV must either be On or in standby.
● For preparations of a recording equipment, read the manual of equipment.
● No other DVB channel can be selected during recording. However you can watch analogue channels.
● It may not be possible to record an encrypted programme (which is copy-protected).

① **Start making the settings**

② **Repeat the operations as below, and set items in the order of ❶ to ❺**

start

select the item

set

● ❶, ❸ and ❹ can also be entered with numeric buttons.

Set timer programming details

Previous timer programming event

Current timer programming event

DVB Timer Programming				Wed 05/08/04 18:50	
Pos. Name	Date	Start	End	min.	📷
1 BBC1	6/8 FR	18:00	20:00	120	Off
3 ITV1	7/8 SA	21:30	22:30	60	Off

❺ Subtitles (Off / Auto)

● Recording time (automatic display)

❶ Channel

❹ Ending time

❷ Date

❸ Starting time

one day ahead

daily or weekly (press repeatedly)

● Daily SU-SA: Sunday to Saturday
● Daily MO-SA: Monday to Saturday
● Daily MO-FR: Monday to Friday
● Weekly SA/FR/TH/WE/TU/MO/SU: Same time on the same day every week

■**To change a timer programming event**

➡ Select the programme to be changed using [arrows/OK] and press OK
➡ Correct as necessary (as above)

■**To cancel a timer programming event**

➡ Select the programme to be deleted using [arrows/OK] and press red ➡ OK

■**Direct TV recording:**
You can record the current programme to DVD Recorder or VCR immediately. (p. 38)

Note

● Confirm the DVB LED lights (Orange). If not, a timer programming is not available.
● A message will appear if you try to programme a timer event which overlaps an already programmed event.
● 2 min. before the starting time: a reminder message appears.

(To remove the message ➡ OK ; To cancel the programming ➡ EXIT)

● 10 sec. before the starting time: in DVB mode, the TV automatically selects the programmed channel.
● Cancelling the programming may not be valid immediately before the starting time. In this case, directly operate the recording equipment to cancel recording.

TV Guide–Electronic Programme Guide (EPG)–Timer Recording

① **View TV Guide** GUIDE

● There are two styles of display for TV Guide (Landscape / Portrait)

② **Select the programme to be broadcast**
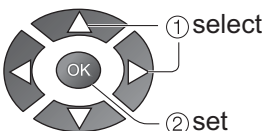
① select

② set

DVB Timer Programming				Wed 05/08/04 18:50	
Pos. Name	Date	Start	End	min.	📷
1 BBC1	6/8 FR	18:00	20:00	120	Off
3 ITV1	7/8 SA	21:30	22:30	60	Off

Select timer
Edit timer ● EXIT
● RETURN
■ Delete

(Timer Programming screen)

DVB LED will turn on if Timer Programming is set.

ப/l   ⊙   ⬛
⬛   ⬛

DVB LED
● Orange DVB LED
(Rapid blinking during recording)

■ **To check / change / cancel a timer programming event** ➡ "Timer Programming" (above)

Q-Link Functions

Q-Link connects the TV and VCR / DVD recorder, enables easy recording and playback.

■ **Condition**
- Use the VCR / DVD recorder with the following logos:
  "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic", or "SMARTLINK"
- Connect the equipment to this TV's AV1 or AV2 terminal via a "fully-wired" SCART cable. (p. 42)
- Q-Link terminal setup in Setup menu (Q-Link, AV1 / AV2 out). (p. 23)

■ **Download analogue channel settings**
- Perform Auto Setup. (p. 30)
  When first using this TV, see "Auto Setup". (p. 10)
- Perform download to the equipment. (p. 23)

■ **Features available**
Some recording equipments are not applicable. Read the manuals of the equipment.

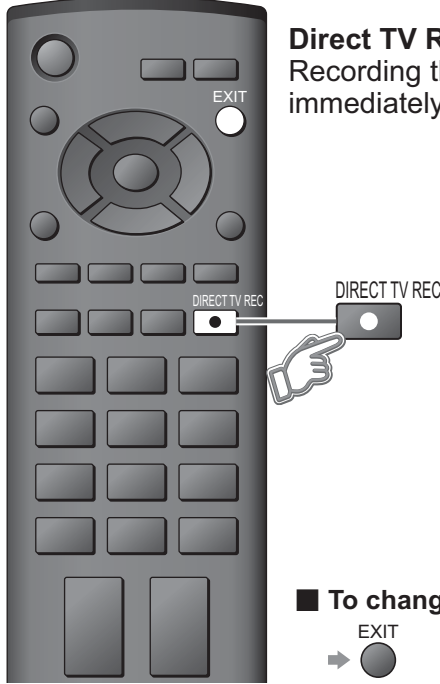|	
What you see is What you record	**Direct TV Recording:** Recording the current programme in VCR / DVD recorder immediately. EXIT DIRECT TV REC DIRECT TV REC • When Direct TV Recording is performed, the recording equipment is automatically turned on if it is in Standby mode. • The recording equipment is recording from its own tuner. You can turn the TV off during recording (Analogue only). • If you turn the TV off during recording from an AV source, the recording will be stopped. • When Direct TV Recording is performed while watching DVB channel, the DVB programme position is locked and no other DVB channel can be selected. However you can watch analogue channels. ■ **To change DVB channel, stop recording** EXIT ➡
Information / Message	Recording information or if recording is not possible, a message is displayed. (Only when the programme number is "0" or "AV mode" for some equipment.)
Power on link and Easy playback	When VCR or DVD recorder starts playback or direct navigator / function menu for the equipment are activated, the TV is turned on and input mode is switched automatically so that you can view the content. (Only when TV is in Standby mode.)
Power off link	When TV is set to Standby mode, the recording equipment is also automatically set to Standby. (Only when the videocassette or DVD is not active.)

- "DATA LOGIC" (a trademark of Metz Corporation)
- "Easy Link" (a trademark of Philips Corporation)
  Read the manuals of the equipment too.
- "Megalogic" (a trademark of Grundig Corporation)
- "SMARTLINK" (a trademark of Sony Corporation)

HDMI Functions

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.
HDMI-compatible equipment (∗1) with an HDMI or DVI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.
About connections, see "External Equipment" (p. 42).

<div style="border:1px solid; display:inline-block; padding:2px 10px;">Note</div>

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI1 terminal via a DVI to HDMI adapter cable (∗2).
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal (HDMI1: use COMPONENT-AUDIO terminals).
- Audio settings can be made on the "HDMI1 Input" menu screen. (p. 22)
- Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz
- HDMI2 terminal is for digital audio signal only.
- Use with a PC is not assumed.
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- An equipment having no digital output terminal may be connected to the input terminal of either "Component", "S-VIDEO", or "Video" to receive analogue signals.
- The HDMI input terminal can be used with only the following image signals:
  480i, 480p, 576i, 576p, 720p, 1080i and 1080p. Match the output setting of the digital equipment.
- For details of the applicable HDMI signals, see p. 46.

(∗1): The HDMI logo is displayed on HDMI-compliant equipment.
(∗2): Enquire at your local digital equipment retailer shop.

■ Summary of Control functions

Connecting with an HDMI cable to Panasonic equipment with VIERA Link function, you can control the equipment (p. 40). You can use VIERA Link and Q-Link functions together.

Function \ Connection	VIERA Link and Q-Link (HDMI) (SCART)	VIERA Link only (HDMI)	Q-Link only (SCART)
Easy playback	O	O	O
Power on link	O	O	O
Power off link	O	O	O
Speaker control	O (not via SCART)	O	–
Easy control only with VIERA remote control	O (not via SCART)	O	–
Direct TV Recording	O (not via HDMI)	–	O
Analogue channel download	O (not via HDMI)	–	O

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HDMI Functions

∗Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 2" function.

Connections to some Panasonic equipment (DVD Recorder DIGA, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cables allow you to interface them automatically.

The equipment with "HDAVI Control" function enables the following operations:
- Easy playback (p. 41)
- Power on link (p. 41)
- Power off link (p. 41)
- Speaker control (p. 41)

In addition, the equipment with "HDAVI Control 2" function enables the following operation:
- Access and control the connected equipment by VIERA remote control (p. 41)

These features are limited to models incorporating Panasonic's "HDAVI Control" and "VIERA Link". VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.

Refer to individual manuals for compatibility information. About applicable equipment, consult your local Panasonic dealer or refer to the URL: www.panasonic.co.uk

■ HDMI cable

This function needs an HDMI compliant (fully wired) cable. Non-HDMI-compliant cables cannot be utilized. It is recommended that you use Panasonic's HDMI cable. Recommended part number:
- RP-CDHG15 (1.5 m)
- RP-CDHG30 (3.0 m)
- RP-CDHG50 (5.0 m)

■ Preparations

Setup the equipment to enable this function. Read the manuals of the equipment.
About connections, see "External Equipment" (p. 43). Read the manuals of the equipment too.

■ For the first time / When adding new equipment, reconnecting equipment or changing setup
After connection turn the equipment on and then switch the TV on.
Select the input mode to HDMI1 or HDMI2 (p. 16), and make sure that an image is displayed correctly.

1 Display the menu

MENU

2 Select "Setup"

VIErA Main Menu
VIERA Link
☐ Picture
♩ Sound
≡ Setup

② access
① select

3 Select "VIERA Link"

≡ Setup Menu	2/2
Preferred Subtitles	English
Shipping Condition	
Owner ID	
Common Interface	
System Update	
Input Labels	
Banner Display Timeout	3 seconds
VIERA Link	◄ On ►
Software Licence	

select

4 Set to "On"
(default is On)

set

40

You can control some functions of the connected Panasonic equipment with this TV remote control (point the remote control at the TV's signal receiver).
● If you cannot access the menu, check the settings and the equipment (p. 40).
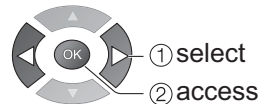
Access and operate the menu of the equipment

① **Display "VIERA Link Menu"** ➡ [VIERA Link]

② **Select "VIERA Link Control"**

VIERA Link Menu	
VIERA Link Control	◄ Recorder
Speaker Selection	Home Cinema

select

③ **Select the equipment you want to access**
● "Home Cinema" means Player theatre, Recorder theatre and Amplifier.

① select
② access

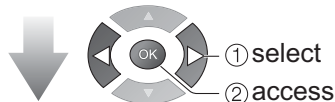
■ **When the equipment with "HDAVI Control 2" function is connected**

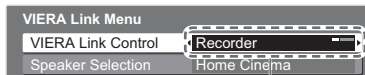| VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera

Displayed the kind of the connected equipment.
Select the kind of the equipment and access.

① select
② access

The menu of the accessed equipment
(Input mode will be changed automatically)

■ **When the equipment with "HDAVI Control" function is connected**

VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

Recorder / Player / Home Cinema / Video Camera

Displayed the kind of the connected equipment. But you cannot access it. Use its own remote control to operate the equipment.

■ **When other kind or other manufacturer of the equipment is connected**

VIERA Link Menu	
VIERA Link Control	Others
Speaker Selection	Home Cinema
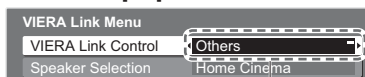
Others

"Others" is displayed.
You cannot access it. Use its own remote control to operate the equipment.

---

④ **Operate the menu of the equipment**
● Available VIERA remote control buttons (depending on the connected equipment):

▲▼	Move the cursor / select the menu	EXIT ●	Exit the menu
◄OK►	Move the cursor / access / adjust	OPTION	Display the operation guide for the equipment The same functions with the OPTION button of the equipment
OK	Store / Set / Access		
RETURN ●	Return to the previous menu	red green yellow blue	Access when the key words are displayed on colour bar

● About the operations for the equipment, read the manual of the equipment.

Access and control the connected equipment by VIERA remote control

---

Easy playback

Automatic Input switching-When the connected Panasonic equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is returned.

Power on link

When the connected Panasonic equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.)

Power off link

When TV is set to Standby mode, the connected Panasonic equipment is also automatically set to Standby.
● This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

Speaker control

You can control the theatre speaker with TV's remote control.
This function is available when Panasonic Amplifier or Player theatre is connected.
● If you cannot access the menu, check the settings and the equipment (p. 40).

① **Display "VIERA Link Menu"** ➡ [VIERA Link]

② **Select "Speaker Selection"**

VIERA Link Menu	
VIERA Link Control	Recorder
Speaker Selection	◄ Home Cinema

select
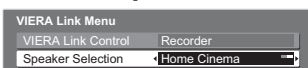
③ **Set to "Home Cinema" or "TV"**

set

■ **Home Cinema**
Amplifier or Player theatre will be automatically turned on (if it is in Standby mode) and the sound is from theatre speakers connected to the equipment.
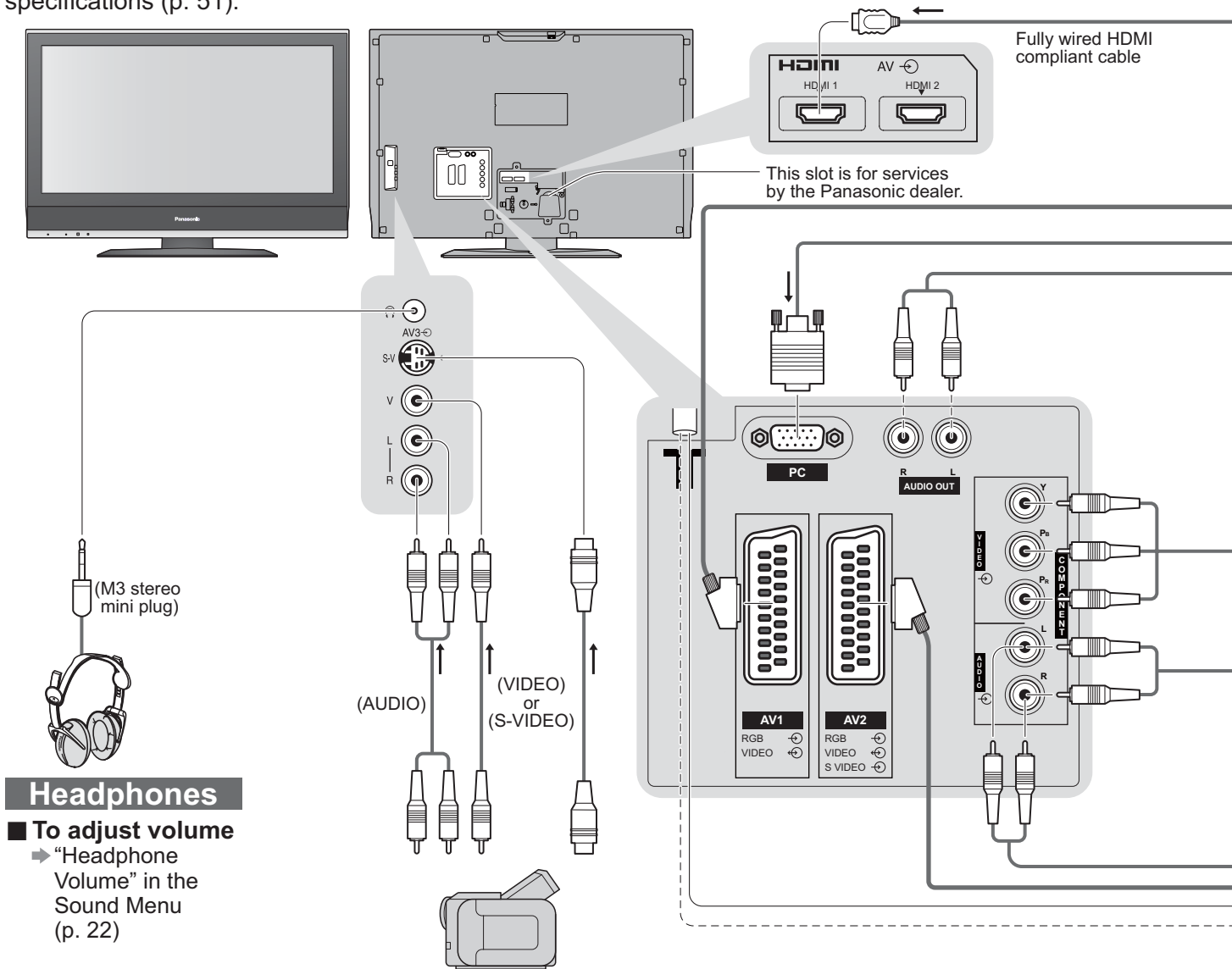
Volume up / down ➡ + / −

Mute ➡ 🔇

● The sound of TV speakers is mute.
● When the equipment is turned off, TV speakers will be active.

■ **TV**
TV speakers are active.

● HDMI Functions

Advanced

41

External Equipment

These diagrams show our recommendations for how to connect the TV to your various equipment.
For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 51).
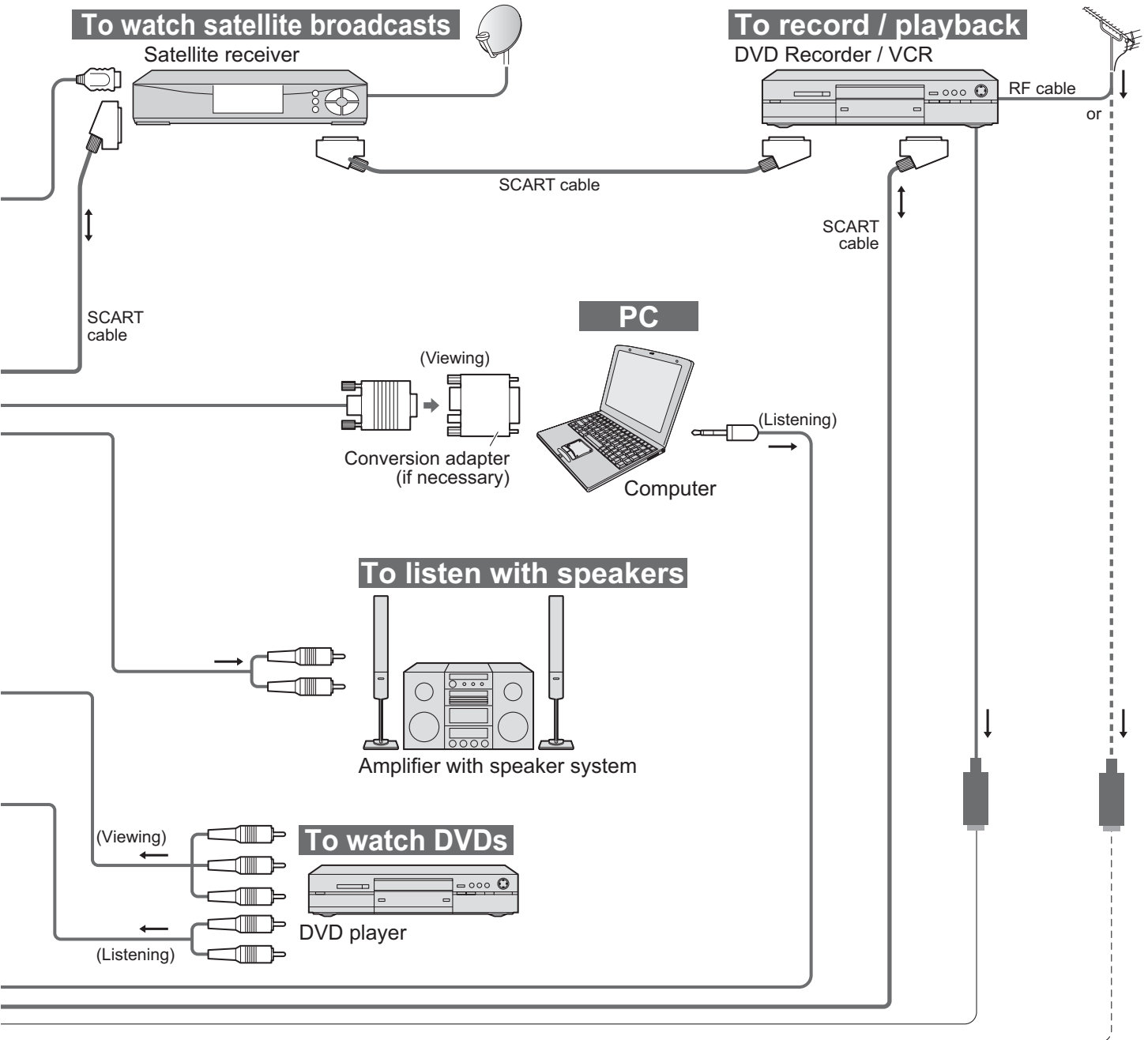
Fully wired HDMI compliant cable

HDMI 1 / HDMI 2

This slot is for services by the Panasonic dealer.

(M3 stereo mini plug)

Headphones

■ **To adjust volume**
➡ "Headphone Volume" in the Sound Menu (p. 22)

(AUDIO)

(VIDEO) or (S-VIDEO)

PC

AUDIO OUT

AV1 / AV2

Camcorder / Game equipment

■Types of connectable equipment to each connector

Connector Recording / Playback (equipment)	AV1	AV2	AV3 (Side of TV)	COMPONENT Y PB PR L R	AUDIO OUT	HDMI	
						1	2
■To record / playback videocassettes / DVDs (VCR / DVD recorder)	○	○					
■To watch DVDs (DVD player)	○	○	○	○		○	○
■To watch camcorder images (Video camera)	○	○	○			○	○
■To watch satellite broadcasts (Set top box)	○	○	○			○	
■To play games (Game equipment)	○	○	○				
■To use amplifier with speaker system					○		
■Q-Link	○	○					
■Direct TV Recording	○	○					
■VIERA Link						○	○

○: Recommended Connection

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To watch satellite broadcasts

Satellite receiver

SCART cable

SCART cable

To record / playback

DVD Recorder / VCR

RF cable

or

SCART cable

PC

(Viewing)

Conversion adapter
(if necessary)

Computer

(Listening)

To listen with speakers

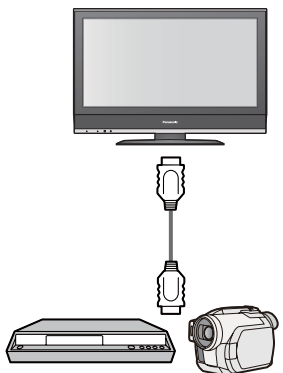Amplifier with speaker system

(Viewing)

To watch DVDs

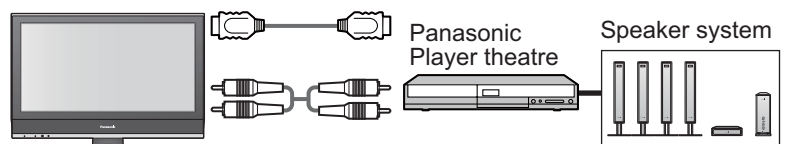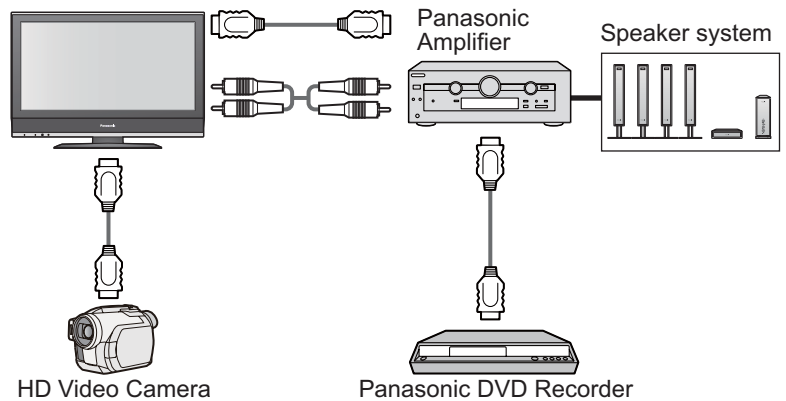DVD player

(Listening)

VIERA Link (p. 40)

● Use fully wired HDMI compliant cable.
● Read the manuals of the equipment too.

■ **Easy playback, Easy control
only with VIERA remote control**

Panasonic DVD Recorder,
HD Video Camera, etc.

■ **Home Cinema**

Panasonic
Amplifier

Speaker system

HD Video Camera

Panasonic DVD Recorder

Panasonic
Player theatre

Speaker system

Technical Information

Aspect Ratio

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 13)

■Auto: Auto aspect determines the best aspect ratio to use to fill your screen. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If Auto aspect detects a widescreen signal it switches into the appropriate 16:9 or 14:9 widescreen mode. If Auto aspect does not detect a widescreen signal then this advanced TV enhances the picture for optimum viewing pleasure.
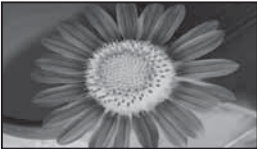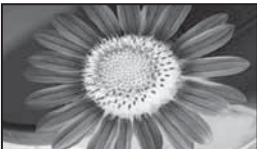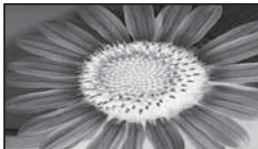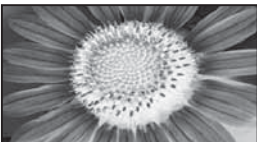
The text shown on the screen indicates how Auto aspect determined which ratio to use:

"WIDE" appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a SCART terminal. Auto aspect switches to the appropriate 16:9 or 14:9 widescreen ratio. This function will also work in any aspect mode. "Auto" appears in the top left of the screen if black stripes above and below the picture are detected. Auto aspect chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

				Aspect modes					Aspect Control Signal							
									Widescreen signal (WSS)				Control signal through SCART (pin 8) or HDMI terminal			
Signal name		Auto	16:9	14:9	4:3	Zoom1	Zoom2	Zoom3	TV	AV1	AV2	AV3	Component	AV1	AV2	HDMI 1	HDMI 2
TV/AV1/AV2/AV3	PAL	O	O	O	O	O	O	O	O	O	O	O	–	O	O	–	–
	PAL 525/60	O	O	O	O	O	O	O	–	–	–	–	–	O	O	–	–
	DVB	O	O	O	O	O	O	O	O	–	–	–	–	–	–	–	–
	M.NTSC	O	O	O	O	O	O	O	–	–	–	–	–	O	O	–	–
	NTSC(AV input only)	O	O	O	O	O	O	O	–	–	–	–	–	O	O	–	–
Component/HDMI SD	525(480)/60i	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	525(480)/60p	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	625(576)/50i	O	O	O	O	O	O	O	–	–	–	–	O	–	–	O	O
	625(576)/50p	O	O	O	O	O	O	O	–	–	–	–	O	–	–	O	O
HD	750(720)/50p	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	750(720)/60p	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/50i	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/60i	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/50p	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
	1125(1080)/60p	O	O	O	O	O	O	O	–	–	–	–	–	–	–	O	O
PC input		–	O	–	O	–	–	–	–	–	–	–	–	–	–	–	–

Note

● The ratio varies depending on the programme, etc. If the ratio is greater than the standard "16:9", black bands may appear at the top and bottom of the screen.

● If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR. (See the VCR manual.)

● Aspect mode can be memorized for SD (Standard definition) and HD (High definition) signals separately.

● To select the ratio manually: (Only "16:9" or "4:3" in PC mode)

Auto
The best ratio is chosen and the picture expanded to fill the screen.

16:9
Directly displays the image at "16:9" without distortion (anamorphic).

14:9
Displays the image at the standard "14:9" without enlargement.

4:3
Displays the image at the standard "4:3" without distortion.

Zoom1
Displays a "16:9" letterbox or "4:3" image without distortion.

Zoom2
Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.

Zoom3
Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

Updating the DVB software

From time to time, a new version of software for DVB mode may become available for download to enhance performance or operations of the TV.
A notification banner will appear when you tune to one of the BBC channels, or you can search for a new version software by using the "System Update Search Now" function (p. 27).

To start downloading press "OK", this may take up to 20 minutes to complete.
To ignore the new software press "EXIT", but this banner will keep appearing during the period of new software availability, usually 2 to 3 days.

To download any new software automatically, ensure that the "Auto Update Search in Standby" function in the System Update menu is set to "On" (p. 27).
The TV will then download new software automatically at night if it is left in standby without any timer programme in progress.

Note
● During software download and update, DO NOT switch off the TV.
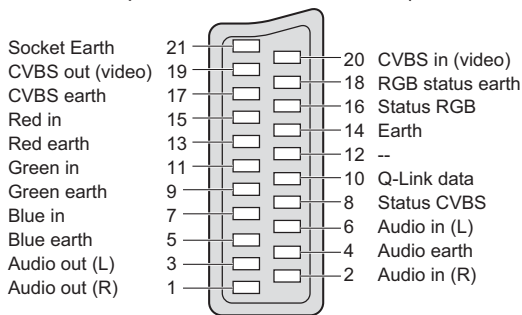
VIERA Link "HDAVI Control™"

HDMI connections to some Panasonic equipment allow you to interface them automatically. (p. 40)

● This function may not work normally depending on the equipment condition.
● Image or sound may not be available for the first few seconds when the playback starts.
● Image or sound may not be available for the first few seconds when Input mode is switched.
● Volume function will be displayed when adjusting the volume of the equipment.
● Easy playback is also available by using the remote control for Amplifier or Player theatre. Read the manuals of the equipment.
● If you connect the same kind of equipment at once (for example: one DIGA to HDMI1 / another DIGA to HDMI2), VIERA Link is available for the terminal with the smaller number.
● "HDAVI Control 2" is the newest standard (current as of February, 2007) for Panasonic's HDAVI Control compatible equipment. This standard is compatible with Panasonic's conventional HDAVI equipment.

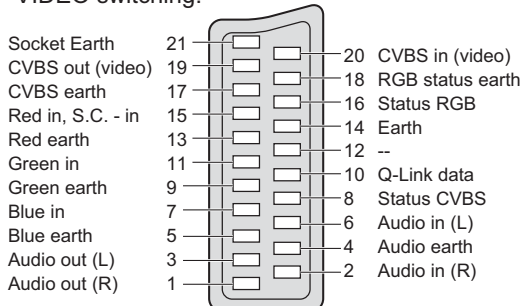## SCART, S-VIDEO and HDMI terminal information

■ AV1 SCART terminal
(RGB, VIDEO, Q-Link)
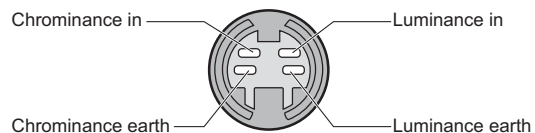Suitable inputs for AV1 include RGB (Red / Green / Blue).

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	Q-Link data
Green earth	9		8	Status CVBS
Blue in	7		6	Audio in (L)
Blue earth	5		4	Audio earth
Audio out (L)	3		2	Audio in (R)
Audio out (R)	1			

■ AV2 SCART terminal
(RGB, VIDEO, S-VIDEO, Q-Link)
AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

Socket Earth	21		20	CVBS in (video)
CVBS out (video)	19		18	RGB status earth
CVBS earth	17		16	Status RGB
Red in, S.C. - in	15		14	Earth
Red earth	13		12	--
Green in	11		10	Q-Link data
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			

■ AV3 S-VIDEO 4 pin terminal

Chrominance in — Luminance in
Chrominance earth — Luminance earth

■ HDMI terminal

Hot Plug Detect	19		18	+5V Power
DDC/CEC Ground	17		16	SDA
SCL	15		14	Reserved (in cable but N.C. on device)
CEC	13		12	TMDS Clock−
TMDS Clock Shield	11		10	TMDS Clock+
TMDS Data0−	9		8	TMDS Data0 Shield
TMDS Data0+	7		6	TMDS Data1−
TMDS Data1 Shield	5		4	TMDS Data1+
TMDS Data2−	3		2	TMDS Data2 Shield
TMDS Data2+	1			

● Technical Information

FAQs, etc.

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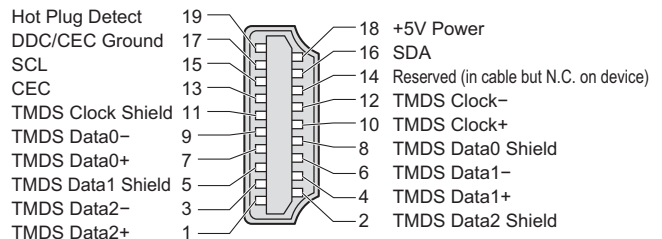
Technical Information

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals, see below.
- Max. display resolution

Aspect	4:3	1,024 × 768 pixels
	16:9	1,366 × 768 pixels

- D-sub 15-pin connector signal
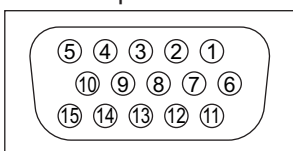
Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Input signal that can be displayed

COMPONENT (Y, P_B, P_R), HDMI

∗ Mark: Applicable input signal

Signal name	COMPONENT	HDMI
525 (480) / 60i	∗	∗
525 (480) / 60p	∗	∗
625 (576) / 50i	∗	∗
625 (576) / 50p	∗	∗
750 (720) / 60p	∗	∗
750 (720) / 50p	∗	∗
1,125 (1,080) / 60i	∗	∗
1,125 (1,080) / 50i	∗	∗
1,125 (1,080) / 60p		∗
1,125 (1,080) / 50p		∗

PC (D-sub 15P)

| Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 400 @70 Hz	31.47	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
852 × 480 @60 Hz	31.44	59.89
1,024 × 768 @60 Hz	48.36	60.00
1,024 × 768 @70 Hz	56.48	70.07
1,024 × 768 @75 Hz	60.02	75.03
1,024 × 768 @85 Hz	68.68	85.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,366 × 768 @60 Hz	48.39	60.04
Macintosh13" (640 × 480)	35.00	66.67
Macintosh16" (832 × 624)	49.73	74.55
Macintosh21" (1,152 × 870)	68.68	75.06

Note
- Signals other than above may not be Displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- Applicable input signal for PC is basically compatible to VESA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem.
If problem still persists, please contact your local Panasonic dealer or Panasonic Customer Care Centre
for assistance. For details (p. 52)

White spots or shadow images (noise)
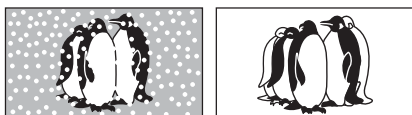
● Check the position, direction, and connection of the aerial.

Neither image nor sound is produced

● Is the TV in "AV mode"?
● Is the mains lead plugged into the socket outlet?
● Is the TV turned On?
● Check Picture Menu (p. 22) and volume.
● Check all required SCART cables and connections are firmly in place.

Auto aspect

● Auto aspect is designed to provide you with the best aspect ratio to use to fill your screen. For user control please see p. 44.

S-Video / black and white picture

● Using AV button please confirm your selection is S-Video I.e. AV2/AV2S (p. 16).

No programmes shown on TV Guide

● Check the DVB transmitter.
● Adjust the direction of the aerial to another transmitter installed nearby.
● Check the analogue broadcast.
  If the image quality is poor, check the aerial and consult your nearest dealer.

On Screen messages - I.e. EC/AV1

● You can simply clear these by pressing the i button . Press again to redisplay.

Direct TV record / Q-Link functions not recording

● Please confirm SCART cable and connection. Also please set "AV1 / AV2 out" in the Setup Menu (p. 23).

There may be red spots, blue spots, green spots and black spots on the screen

● This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, green, blue or black. Please note this does not affect the performance of your LCD.

The LCD panel moves slightly when it is pushed with a finger

Clattered sound might be heard

● There are some looseness around the panel to prevent the damage to the panel.
  The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.

● Frequently Asked Questions
● Technical Information

FAQs, etc.

FAQs

Problem		Actions
Screen	**Chaotic image, noisy**	● Set "P-NR" in the Picture Menu (to remove noise). (p. 22) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	● Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 22)
	Blurry or distorted image (no sound or low volume)	● Reset channels. (p. 30)
	Unusual image is displayed	● Turn off the TV with Mains power On / Off switch, then turn it on again.
Sound	**No sound is produced**	● Is "Sound mute" active? (p. 7) ● Is the volume set to the minimum?
	Sound level is low or sound is distorted	● Sound signal reception may be deteriorated. ● Set "NICAM" (p. 22) in the Sound Menu to "Off". (Analogue only)

● Due to the digital reception technologies involved, quality of the DTV signals may be relatively low in some cases, despite good reception of analogue programmes.

Problem		Actions
DVB	**Interference or frozen / disappearing image in DVB**	● Check "DVB Signal Condition". (p. 31) If "Signal Quality" or "Signal Strength" are displayed in red, check aerial. If problem persists, consult your local Panasonic dealer. ● Turn the TV off with the Mains power On / Off switch, then turn it On again.
HDMI	**Sound is unusual**	● Set the sound setting of the connected equipment to "2ch L.PCM". ● Check the "HDMI1 Input" setting in the Sound Menu. (p. 22) ● If digital sound connection has a problem, select analogue sound connection. (p. 39)
	Pictures from external equipment are unusual when the equipment is connected via HDMI	● Is the HDMI cable connected properly? (p. 42) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 46) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	**TV goes into "Standby mode"**	● Off Timer function is activated. ● The TV enters "Standby mode" about 30 min. after broadcasting ends.
	The remote control does not work	● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?
	An error message appears	● Follow the message's instructions. ● If the problem persists, contact the authorized Service Centre.

On screen messages

Message		Meaning / Action
All tuning data will be erased	▶	● "Shipping Condition" will erase all tuning data (p. 32). ● "Auto Setup" will be erased all present DVB and Analogue tuning datas (p. 30).
Are you sure ?	▶	● Make sure the operation is with your desire.
Are you sure you want to delete this timer ? Press OK to delete timer Press Exit to return	▶	● Make sure the deleting programme event is with your desire.
Bad Signal	▶	● The signal is weak. Check the aerial.
DOWNLOAD IN PROGRESS PLEASE WAIT	▶	● Q-Link channel download is in progress.
Feature not available	▶	● Check the Q-Link connection and setting (p. 38). ● The impossible source (Component / HDMI / PC) to be record.
Invalid DVB Channel	▶	● Invalid DVB channel is selected.
Invalid system time. Please exit !	▶	● Cannot get the time information. Check the connection of the RF cable.
Max. number of Timers already set !	▶	● Maximum timer programming event is 8.
New DVB Service Found! Press OK start Auto Setup Press EXIT to Ignore. Selecting Auto Setup will delete current Profile and Childlock settings	▶	● There is a new DVB station.
New version 1.90 found. Do you really want to update the software and reboot the system ? Press OK to download the new version Press EXIT to Ignore	▶	● There is a new software available.
No DVB Service found	▶	● No DVB signal can be found in Auto Setup.
No module inserted	▶	● Check the CI module inserted completely (p. 27).
No recording - Check Tape or Disc	▶	● The tape or disc may be "write protected", missing or damaged. The equipment may already be recording.
No recording - UNKNOWN REASON	▶	● The recording cannot be done by any reason. Check the equipment. ● Disc or tape may be full.
No Service	▶	● The station stops the services.
No Signal	▶	● Check the connection of the RF cable.

● On screen messages
Frequently Asked Questions

● FAQs, etc.

On screen messages

Message	Meaning / Action
No stations found **Please insert the aerial**	▶ ● No analogue signal can be found in Auto Setup.
PIN incorrect !	▶ ● The PIN number you entered is wrong.
Please check aerial or local **DVB service availability.** **Press OK to start Auto Setup**	▶ ● Please follow the message. If it is still failed, consult your local Panasonic dealer.
Please check settings and connections on **HDMI devices.**	▶ ● Communication error in VIERA Link function (p. 40).
Please wait.	▶ ● A function is in progress.
Recording in progress	▶ ● The recording equipment is recording the programme signal from its own tuner. You can turn the TV off and leave the equipment recording in the normal way.
Shipping condition completed. **TV can now be switched off.**	▶ ● "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)
Software successfully updated **Press EXIT to continue**	▶ ● The software updating is finished.
Software Update failed. Please try again later. **Press EXIT to continue**	▶ ● Perform "System Update Search Now" in System Update (p. 27). If it is still failed, there may not be the new software.
This service is locked ! **Press OK to enter PIN**	▶ ● The selected channel is locked in Child Lock (p. 29).
Timer already expired !	▶ ● Starting time in Timer Programming is already past. Set correctly (p. 37).
Timer Event Due to Start **DVB 1: BBC1 has been** **Programmed for recording at 20:00**	▶ ● This message will appear 2 minutes before timer programming event due to start.
Timer incorrect !	▶ ● Set Starting and Ending times in Timer Programming correctly (p. 37).
Timer overlap !	▶ ● The timer programme events are overlapped. Cannot record other channel at the same time. Check the Starting and Ending times in Timer Programming (p. 37).
Tuner Locked **Please stop recording to operate**	▶ ● If you want to unlock, cancel Direct TV Recording (p. 38) or Timer Programming (p. 36).
Unable to download, Check Equipment	▶ ● The tape or disc is active. Stop the equipment and try again.

Specifications

		TX-26LXD70	TX-32LXD70
Power Source		AC 220-240 V, 50 / 60 Hz	
Power Consumption	Average use	102 W	138 W
	Standby condition	0.4 W (Without DVB recording) / 19 W (With DVB recording)	
Display panel	Aspect Ratio	16:9	
	Visible screen size	66 cm (diagonal) 575 mm (W) × 323 mm (H)	80 cm (diagonal) 697 mm (W) × 392 mm (H)
	Number of pixels	1,049,088 (1,366 (W) × 768 (H))	
Sound	Speaker	120 mm × 60 mm × 2 pcs	
	Audio Output	20 W (10 W + 10 W)	
	Headphones	M3 (3.5 mm) stereo mini Jack × 1	
PC signals		VGA, SVGA, XGA SXGA ‥‥‥ (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz	
Receiving Systems / Band name		PAL I :UHF E21-68 PAL 525/60 :Playback of NTSC tape from some PAL Video recorders (VCR) or NTSC disc playback from DVD player and recorder. DVB :Digital terrestrial services via UHF aerial input. M.NTSC :Playback from M.NTSC Video recorders (VCR). NTSC (AV input only) :Playback from NTSC Video recorders (VCR).	
Aerial - Rear		UHF	
Operating Conditions		Temperature : 0 °C - 35 °C Humidity : 20 % - 80 % RH (non-condensing)	
Connection Terminals	AV1 (Scart terminal)	21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)	
	AV2 (Scart terminal)	21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)	
	AV3 VIDEO	RCA PIN Type × 1 1.0 V[p-p] (75 Ω)	
	AV3 S-VIDEO	Mini DIN 4-pin Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)	
	AV3 AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]	
	COMPONENT VIDEO Y / PB, PR	Y 1.0 V[p-p] (including synchronization) PB, PR ±0.35 V[p-p]	
	COMPONENT AUDIO L - R	RCA PIN Type × 2 0.5 V[rms]	
	Others HDMI1 / 2	TYPE A Connectors ● This TV supports "HDAVI Control 2" function.	
	Others PC	HIGH-DENSITY D-SUB 15PIN R,G,B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)	
	Output AUDIO L - R	RCA PIN Type × 2 0.5 V[rms] (high impedance)	
Dimensions (W × H × D)		657 mm × 525 mm × 216 mm (With TV Stand) 657 mm × 473 mm × 117 mm (TV only)	791 mm × 615 mm × 248 mm (With TV Stand) 791 mm × 563 mm × 117 mm (TV only)
Mass		14.0 kg Net	17.5 kg Net

Note ● Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.
● This equipment complies with the EMC standards listed below.
EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.

Index

● Specifications ● Index
On screen messages

FAQs, etc.

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union
This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Sales and Support Information

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

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The model number and serial number of this product may 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

Panasonic (U. K.) Ltd.

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