COLOR
TELEVISION

GRUNDIG

GULENAR26HDIP
GULENAR32HDIP
GULENAR37HDIP

ENGLISH

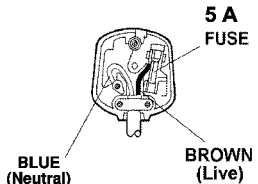# Contents

Important Information

LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.
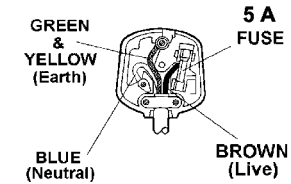
Cleaning the screen and the cabinet...

After turning off the power, clean the screen and the cabinet with a soft, dry cloth. We recommend that you do not use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.

Disposal...

The cold cathode fluorescent lamp in the LCD panel contains a small amount of mercury, when the TV reaches the end of its useful life please dispose of it in accordance with local. Government Regulations or at a recyling centre.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:
Blue - Neutral
Brown - Live

5 A
FUSE

BLUE
(Neutral)

BROWN
(Live)

As the colours in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured blue or black must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown or red must be connected to the terminal which is marked with the letter L or coloured Red.
No connection is to be made to the Earth terminal of the plug.
If a 13 Amp (BS1363) Plug is used, fit an ASTA apporoved 5 A fuse
If your product is fitted with a moulded plug which requires replacement please cut off and dispose of it safely, then rewire as shown above.

IMPORTANT

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

GREEN & YELLOW
(Earth)

5 A
FUSE

BLUE
(Neutral)

BROWN
(Live)

As the colours in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured green and yellow must be connected to the terminal which is marked with the letter E, or by the earth symbol, or coloured green or green and yellow.
The wire which is coloured blue or black must be connected to the terminal which is marked with the letter N or coloured Black.
The wire which is coloured brown or red must be connected to the terminal which is marked with the letter L or coloured Red.
If a 13 Amp (BS1363) Plug is used fit an ASTA approved 5 Amp fuse.
If your product is fitted with a moulded plug which requires replacement please cut off and dispose of it safely, then rewire as shown above.

Superior features of your integrated digital television

This television is capable of receiving and processing all analogue and digital broadcasts. This television set has an integrated analogue and digital receiver.

The digital receiver unit processes signals coming from digital transmitters and converts them into superior audio and visual quality.

The TV guide (applicable for digital broadcasts only) notifies you of any changes on a programme list in the form of brief information and provides the programme lists of all digital broadcasts for the next few days.

You can display detailed information belonging to each programme, if supported by the broadcaster, by pressing one single button.

This television has a highly comprehensive an user-friendly menu structure.

Receiving digital broadcasting channels

You need an outdoor aerial in order to receive digital broadcasts.

Unlike analogue broadcasts, not all digital broadcasts may have their own transmission frequencies.

Instead, many digital broadcasting channels are bundled up at regional or national level in groups called multiplexes.

You can find available tranmission information via the teletexts of various broadcasters or by checking the TV guide or on the Internet.

NOTE:

- HD signals must be connected to the HDMI input or component (YPbPr) inputs. See page 7 for external connections.
- You should check your postcode to make sure that you are in freeview coverage area (www.freewiew.co.uk).

Your Television

Thank you for buying this television which is designed to give you many years of satisfactory service. You may already be familiar with using a television but do please take time to read these instructions. They are designed to familiarise you with the unit's many new features and to ensure you get the very best out of your purchase.

Superior Features

- HD Ready
- Suitable for cable broadcasts (A decoder may be required)
- Freeview channels (Digital TV and Radio)
- PIP (Picture in Picture) Feature from AV
- Wide angle of vision
- 2 Scart sockets, AV socket
- S-VHS and Phono inputs for S-Video connection
- PC connection
- Low energy consumption
- AVL
- Programmable On/Off timer
- Graphic equalizer
- Colour transfer sharpness feature (CTI)
- Black-white transfer sharpness feature (LTI)
- A clear picture made possible by the Digital Comb Filter
- On-screen display of all settings, programme numbers and all operations
- Manual Fine Tuning
- 100 Programme memory
- Infrared Remote Control
- Child Lock
- Ability to watch NTSC video playbacak through scart input
- 26 different menu languages. (O.S.D. only)
- HDMI feature
- HDCP feature
- Digital teletext
- Electronic TV guide (Digital)
- Return to Selected Program (SWAP)
- CI Slot input
- DVB Subtitling
- Favourite channels list (Digital)
- MHEG 5
- OAD (Over Air Download facility)

HDMI™ HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

STAND REMOVAL

- To wall mount or attach LCD TV to a free-standing stand please remove the table stand as follows.
- Cover a table with a soft towel (or other protection to prevent damage to the TV or table)
- Carefully lay the TV front down on the table (always use 2 people to lift the TV)
- Position the table stand so that it hangs over the edge of the table
- Remove the 6 screws that hold the stand to the TV.
- Slide the stand out.
- Attach any new brackets before lifting TV back up.

Note: Keep removed stand and screws safely for future use.

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Safety is Important

Your safety and the safety of others is important. Please, therefore, ensure you read the Safety instructions **before** you operate this television.

Safety instructions

Read all the safety instructions before first use of your TV.

• Position the television so that direct light does not fall on the screen. Excessive light will cause a washed out effect.

• Position the power supply lead and other leads so that they are not likely to be walked on or pinched by things placed on or against them.

• Do not place objects filled with liquid such as vase or flower pot near the television.
• Do not expose the TV to dripping or splashing of liquids.
• Do not place naked flame sources such as lighted candles on the TV.

• Make sure that no naked flame sources, such as lighted candles, are placed on top of the television.
• Do not place the television near heat sources such as radiators, ovens, stoves, etc.

• Do not push, hit or screw into the screen, or the cabinet except when using stand or bracket holes.

• The heat built up in the set escapes through ventilation holes, so do not cover the set by drapes, clothes etc. that may block air circulation. Do not place the television on carpet or soft furnishings.
• Never let children push anything into the holes or slots on the case.

• Clean the TV Screen using a soft dry cloth or chamois leather. Never use abrasive cleaning agents like liquid or aerosol cleaners.
• Remove the mains plug from the socket outlet while cleaning.

• Never apply pressure on the screen when cleaning.
• Never put your screen on hard objects. Your TFT screen may be damaged.

• If you wish to place the television on a shelf or in a wall unit always ensure there is a minimum air gap of 10 cm around the top, sides and rear of the television, to assist ventilation.

• Your TV set is designed to operate with mains voltages 230V AC; 50Hz. Do not connect your TV set to power sources other than the mains supply.
• If you dont use the television for a long period, please remove the mains plug from wall socket outlet.
• To fully disconnect the TV, the mains plug is used as a disconnecting device and therefore should be readily accessible.

Getting started

Remove your Television carefully from the box. You may wish to store the packaging for future use.

In the box
- Mains Lead
- Remote Control
- Batteries
- Instruction Book

Note: Scart, VGA, PHONO and HDMI Leads are not supplied.

Aerial connection

To connect an aerial, plug the aerial lead into the aerial socket on the rear of the TV.

1. The availability of Freeview digital terrestrial services in your home depends on your local transmitter and the configuration of your existing reception equipment.
2. You should have already checked your postcode to see if you are in a Freeview coverage area. If not please contact Freeview
   Call 08708 809980
   orText your postcode to 83331
   or Visit www.freeview.co.uk
3. If you are in a Freeview coverage area but are unable to receive all available channels for your location, it is recommended you have a site survey by a professional aerial installer to ensure aerial aligment and 'line of site' to the transmitter are optimised. If you do not know of a local aerial installer, please call the Confederation of Aerial Industries (www.cai.org.uk) on 0208 902 8998 who will be able to recommend one.
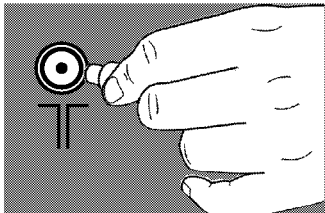
You can use an outdoor or indoor aerial. However, if you use an indoor aerial the quality of the reception may be reduced and adjustment of the aerial may be required when changing programs.

Please note:
If you live in poor reception area or use an indoor aerial you may experience loss or corruption of teletext transmissions and digital signals.

Switching on and First Use
1. Connect the mains lead to the socket at the back panel of the LCD TV.
2. Connect the mains plug to a suitable mains socket.
Note 1: Your TV will go to stand-by mode in five minutes if there is no broadcast signal.
Note 2: Your TV is equipped to operate from the control buttons on the cabinet. In case your R/C is broken or the batteries are exhausted.
Note 3:
When not in use disconnect the mains plug from the mains supply.
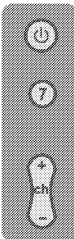
3. Press the **power** button on the cabinet of the TV. The standby indicator will illuminate.
4. Press a numeric button or the **Program Up / Program Down** button on the remote handset or **Program Up / Program Down** on the cabinet of the TV to switch the TV on. The picture will appear after a few seconds.

Please Note:
Do not leave the television in standby unattended or overnight.
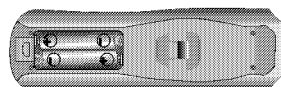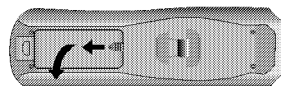**Switching the TV on for the first time**
To install your TV, please read the sections "TV controls " and " Tuning the television ".
Remote Control: Fitting the batteries. Remove the back cover to reveal the battery compartment and make sure you insert the batteries the right way round.
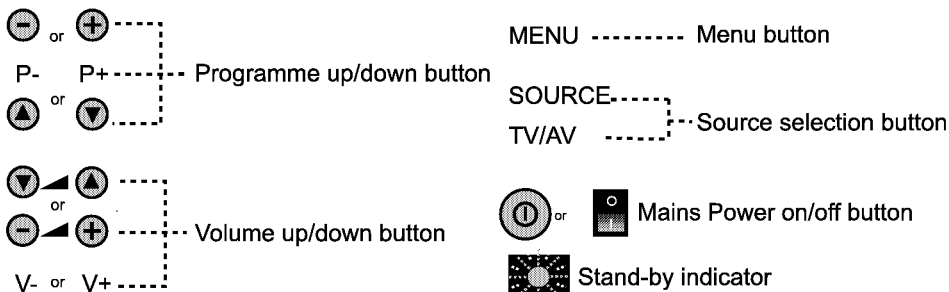Suitable battery types for this remote are UM-4, IEC R03 or AAA 1.5 V.
Do not throw your old batteries into a fire, dispose of them in a designated disposal area. Do not combine a used, old battery with a new one or mix battery types.
The performance of the remote control will deteriorate beyond a distance of 8 metres or outside an angle of 30 degress from the centre of the TV.
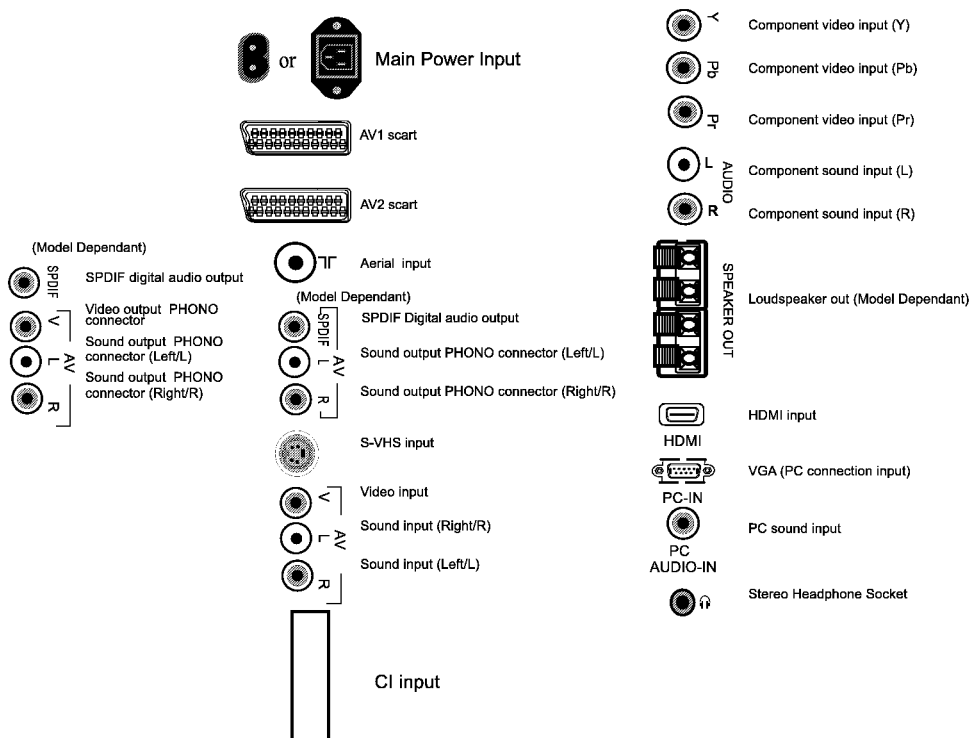
Control unit

TV control panel

⊖ or ⊕ ╍╍╍╌
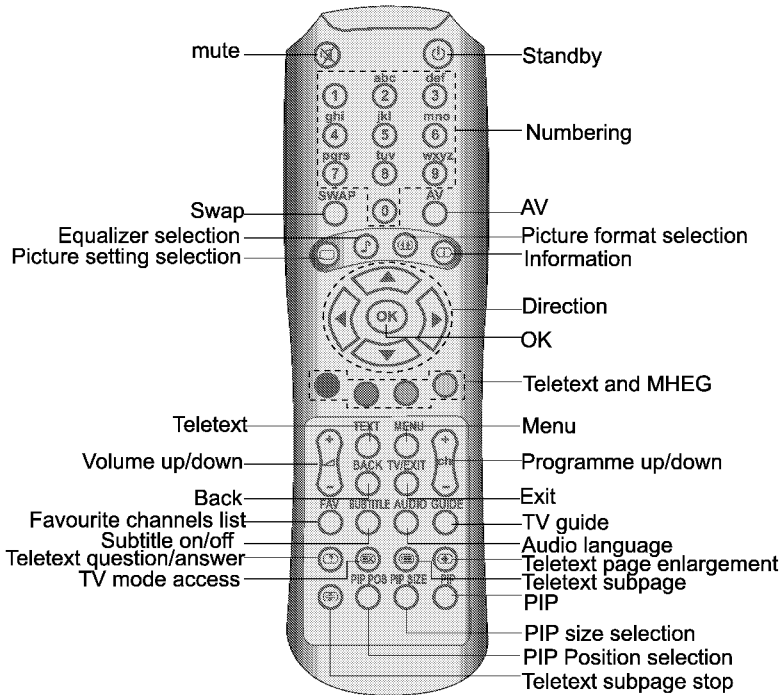P- P+ ╍╍┤╍╍ Programme up/down button
▲ or ▼ ╍╌┘

▼◀▲ ╍╍╌
or
⊖◀⊕ ╍╍┤╌╍ Volume up/down button
V- or V+ ╍╌┘

MENU ╍╍╍╍╍╍ Menu button

SOURCE ╍╍╍╌┐
TV/AV ╍╍╍╍╌┘╌╌ Source selection button

⊕ or ▣ Mains Power on/off button

▓ Stand-by indicator

External Connections

▮ or ⊟ Main Power Input

▦ AV1 scart

▦ AV2 scart

(Model Dependant)
⊚ ₛₚDIF SPDIF digital audio output
⊚ ⌄ Video output PHONO connector
⊙ ⌐ AV Sound output PHONO connector (Left/L)
⊚ ꓤ Sound output PHONO connector (Right/R)

⊙ ⊤ Aerial input
(Model Dependant)
⊚ ₛₚDIF SPDIF Digital audio output
⊙ ⌐ AV Sound output PHONO connector (Left/L)
⊚ ꓤ Sound output PHONO connector (Right/R)

⊚ S-VHS input

⊚ ⌄ Video input
⊙ ⌐ AV Sound input (Right/R)
⊚ ꓤ Sound input (Left/L)

CI input

⊚ ⌄ Component video input (Y)
⊚ ₚb Component video input (Pb)
⊚ ₚr Component video input (Pr)
⊙ L AUDIO Component sound input (L)
⊚ R Component sound input (R)

▦ SPEAKER OUT Loudspeaker out (Model Dependant)

▭ HDMI input
HDMI
⊡ VGA (PC connection input)
PC-IN
⊚ PC sound input
PC
AUDIO-IN
⊚ ∩ Stereo Headphone Socket

Note:
• Please do not use the video PHONO and S-Video connection simultaneously, because these two devices might affect the picture quality of one another.
• RGB offers the best picture quality from the scart.
• HD signals must be connected to the HDMI or component (YPbPr) inputs.

External connection table

Panel size	26	32	37
Panel type	26 16:9 TFT-LCD WXGA	32 16:9 TFT-LCD WXGA	37 16:9 TFT-LCD WXGA
Scart 1	STD.	STD.	STD.
Scart 2	STD.	STD.	STD.
Headphone	STD.	STD.	OPT.
Audio/Video PHONO (Input)	STD.	STD.	STD.
Audio Output Phono L+R	STD.	STD.	STD.
S-Video socket	STD.	STD.	STD.
SPDIF output	STD.	STD.	OPT.
(Video/Audio) Component input	STD.	STD.	STD.
HDMI input	STD.	STD.	STD.
VGA input	STD.	STD.	STD.
PC sound input	STD.	STD.	STD.
CI Slot	STD.	STD.	STD.

STD: STANDARD

Remote Control

mute

Standby

Numbering

Swap

AV

Equalizer selection

Picture format selection

Picture setting selection

Information

Direction

OK

Teletext and MHEG

Teletext

Menu

Volume up/down

Programme up/down

Back

Exit

Favourite channels list

TV guide

Subtitle on/off

Audio language

Teletext question/answer

Teletext page enlargement

TV mode access

Teletext subpage

PIP

PIP size selection

PIP Position selection

Teletext subpage stop

SWITCHING ON

Basic functions

Turning on and off

Turn on your television by pressing the switch »⏻« on the television.
The TV will switch to the standby mode and the standby indicator lamp will light.
Turn on the television by using »1...0« or »🔊«, »🔉«.
A spinning sand timer logo will appear on the screen for a short period of time, after which the normal picture will be displayed. During this short period the digital board is being initialised.
To bring the television to the standby mode, press the key »⏻«.
To turn off the television completely, press the switch »⏻« on the TV. This saves energy.

Channel selection

Enter the one-digit or multiple-digit channel number stored in the memory by pressing the keys » 1...0« on the remote control.

Use the keys »🔊«, »🔉« to navigate between channels.
Selecting the AV channel positions
Press the key »AV« to select the AV channels, and the » Source Table« menu will be displayed. Using the keys »◄«, »►« select the AV channel you will use, then press the key »OK«.

Sound settings

Adjust the level of volume by using the key »🔊« or »🔉« .

mute
Use the key »🔇« to turn off the sound (mute) and to turn it back on.

Selecting broadcasting channels from a list

You can select broadcasting channels from various lists (e.g., all broadcasting channels, favourite channels).

Press the key »⏺«[FAV] to view a list of broadcasting channels. »All Programmes« will be displayed on the list of broadcasting channels.

Press the keys »◄«, »►« to select a broadcasting channel, and the key »OK« to watch.

Press the key » ⏺ «[TV/EXIT] to exit the application.

Picture settings

With the key »⏺« you can choose the picture setting you desire among the options »USER«, »SOFT«, »NATURAL« or »RICH«.

– You can change the »USER« picture setting; see the section titled "PICTURE SETTINGS" on page 21.

Sound settings

Press the key »⏺« to choose the »USER«, »MUSIC«, »SPORTS«, »CINEMA« or »SPEECH« sound setting.
– You can change the »USER« sound setting; see the part titled "EQUALIZER" on page 20.

Swap function

This function enables you to switch from the programme you are watching and the program you have chosen most recently. For example; if you have switched to Programme 11 while watching Programme 1, press the key » ⏺ «[SWAP] to switch back to Programme 1. To switch back to Programme 11, press the key »⏺«[SWAP] again.

PR 01 ➡ ⏺[SWAP] PR 11 ➡ ⏺[SWAP] PR 01

INITIAL STARTUP
Searching for TV channels

The television is equipped with an automatic channel search system. Following a search you can sort the TV channels according to your preference. (For digital channels this can only be performed in "Favourites") There is a memory of 899 digital channels and a memory of 100 analogue channels where you can store broadcasting channels received through the aerial or the cable connection.
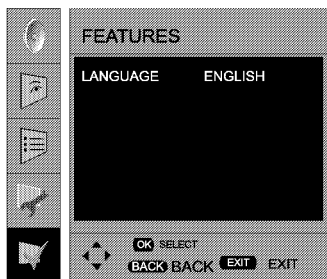
Turn on your television by using the switch »⏻« located on the TV set, then press the keys »CH+«, »CH-« or the numbering keys on your remote control. A spinning sand timer logo will appear on the screen for a short period of time. This is normal operation and during this time the digital board is being initialised. The »FEATURES« menu will be displayed on the screen. Select the menu language and press the key »⊛«. »Please check antenna cable« message will appear on screen for a short period. This is a reminder to ensure the aerial is connected. The automatic digital channel search will start. Once the message »DONE« is displayed on the screen, the digital channel search is finished. You can exit the search function by pressing the key »⬤« (green).

When you press the key »Ö« , the Analogue Setup menu will be displayed on the screen. Move to the »COUNTRY SELECTION« menu by pressing the key »⊛«. Complete the Country Selection by using the keys »⟨▲⟩«, »⟨▼⟩«, »⟨◀⟩«,»⟨▶⟩« and press the key »⊛«; the Automatic Analogue Channel Search will start. When the automatic search is finished, the Programme Table will be displayed on the screen.

Searching for digital broadcasting channels
Automatic search

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »SETUP« menu, and press the key »⊛« to confirm your selection. Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »DIGITAL SETUP« and press the key »⊛« to confirm your selection.

– The »DIGITAL« menu will be displayed on the screen.Select »Automatic Search« with »⟨▲⟩«, »⟨▼⟩« and press »⊛« to confirm.Depending on the number of TV channels received, the automatic search may take a few minutes. Once the message »DONE« is displayed, the search is finished.

When the search is over, new TV or radio broadcasting channels are automatically added to the end of the channels list.

Press the key »⬤« (green) to exit the channel search function.

Press the key » Ö « to terminate the setting operation.

Manual search
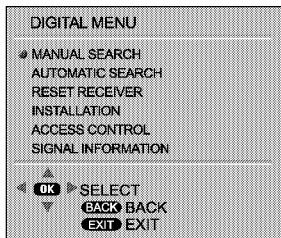
Go to the »SETUP« menu from the main menu. Press the key »⊕« to confirm your selection. Using the keys »⬧«, »⬧« select the option »DIGITAL SETUP« and press the key »⊛« to confirm your selection.
– "DIGITAL MENU" is displayed.

Using the keys »⬧«, »⬧« select the option »MANUAL SEARCH« and press the key »⊛« to confirm your selection.

– "MANUAL SEARCH" menu is displayed.
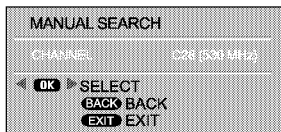
Press the keys »⬧«, »⬧« to select a channel number, and the key »⊛« to confirm your selection.
The search will start.

– Once the message »DONE« is displayed, the search is finished.

When the search is over, new TV or radio broadcasting channels are automatically added to the end of the channels list. Press the key »⬤« (green) to exit the channel search function, and the » DIGITAL MENU « will be displayed. Press the key » Ⓞ « to terminate the setting operation.

Resetting The TV

This function enables you to erase the broadcasting channels list and all personal settings.
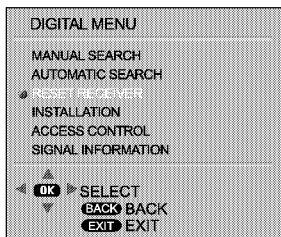
Press »Ⓞ« to open and display the »MAIN MENU«. Select »SETUP« with »⬧«, »⬧« and press »⊛« to confirm. Press »⊛« again and the »Digital Menu« appears. Select »RESET RECEIVER« with »⬧«, »⬧« and press »⊛« to confirm.

You will be asked for a password in order for the operation to be completed. Use the keys »0« – »9« to enter the password 1234, then confirm it with the key »⬤« (green). "DIGITAL MENU" is displayed. All settings in your television are reset.

Press the key » Ⓞ « to exit the »DIGITAL MENU«.

Installation

Selecting the audio language

You can select an audio language you prefer for all digital broadcasting channels, provided it is supported by the broadcast. Unless you make a selection, the language supported by the broadcaster will be selected automatically.

INSTALLATION

AUDIO   ENGLISH
SUBTITLE   ENGLISH
SERVICE PREFERE. SUBTITLES
DATA SERVICE   ENGLISH
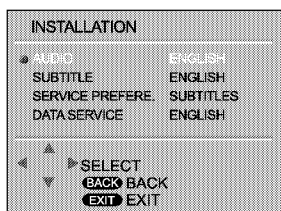
◄ ► SELECT
▲ ▼ BACK BACK
   EXIT EXIT

Go to the »SETUP« menu from the main menu. Press the key »⊙« to confirm your selection. Using the keys »▲«, »▼« select the option »DIGITAL SETUP« and press the key »⊙« to confirm your selection.
– "DIGITAL MENU" is displayed.

Using the keys »▲«, »▼« select the option »INSTALLATION« and press the key »⊙« to confirm your selection. The "INSTALLATION" menu is displayed.

Using the keys »▲«, »▼« select the »AUDIO« row. Select the language by pressing the key »◄« or »►« . Press the key »⊙ (TV/EXIT) « to terminate the setting operation.

Selecting the subtitle language

You can select a subtitle language you prefer for digital broadcasting channels, provided it is supported by the broadcast. Unless you make a selection, the language supported by the broadcaster will be selected automatically. Press the key (SUBT) on the remote control in order to activate subtitles. If the programme does not have subtitles in the selected language, no subtitles will be displayed although having been activated with the subtitle key (SUBT) on the remote control.
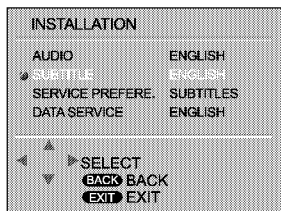
INSTALLATION

AUDIO   ENGLISH
SUBTITLE
SERVICE PREFERE. SUBTITLES
DATA SERVICE   ENGLISH

◄ ► SELECT
▲ ▼ BACK BACK
   EXIT EXIT

Go to the »SETUP« menu from the main menu. Using the keys »▲«, »▼« select the option »DIGITAL SETUP« and press the key »⊙« to confirm your selection.
– the "DIGITAL MENU" is displayed.

Using the keys »▲«, »▼« select the option »INSTALLATION« and press the key »⊙« to confirm your selection.
– the "INSTALLATION" menu is displayed.

Using the keys »▲«, »▼« select »SUBTITLE«. Select the language by pressing the key »◄« or »►« . Press the key »⊙ (TV/EXIT) « to terminate the setting operation.

Note: The subtitle mode can be selected as on or off by using the key »⊙ (SUBTITLE) « .

Service preference

You can select the service preference as »DATA SERVICE«, or, »SUBTITLE«. When data service is selected, MHEG (Interactive text) is available if the transmission programme has this data. If data service is not selected this function will operate even if the transmission programme, is carrying this data. When subtitles is selected subtitles are displayed in the preferred language selected, if not selected the subtitle button on remote control will not work.
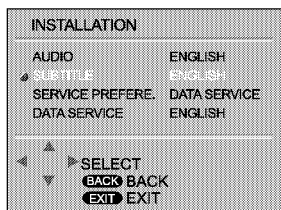
Go to the »SETUP« menu from the main menu. Press the key »⊛« to confirm your selection. Using the keys »△«, »▽« select the option »DIGITAL SETUP« and press the key »⊛« to confirm your selection.
-the "DIGITAL MENU" is displayed.

Using the keys »△«, »▽« select the option »INSTALLATION« and press the key »⊛« to confirm your selection. The »INSTALLATION« menu is displayed.

Using the keys »△«, »▽« select the option »SERVICE PREFERENCE« and select »DATA SERVICE« or »SUBTITLES« by using the key »◁« or »▷«. Press the key » ○ « to terminate the setting operation.

Data Service

In some areas you may be able to select a preferred language for the data service if it is available in the transmission. Therefore the MHEG (Interactive digital text) data can be displayed in English, Gaelic or Welsh. If not available English will be automatically selected as the default language.
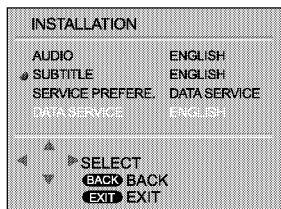
Press the key »○« to open and display the »MAIN MENU«.

Using the keys »△«, »▽« select the option » setup and press the key »⊛« to confirm your selection.
Press the key »⊛« to select DIGITAL SETUP.
The "DIGITAL MENU" is displayed. Using the keys »△«, »▽« select the option »INSTALLATION« and press the key »⊛« to confirm your selection. The " INSTALLATION" menu will be displayed.

Using the keys »△«, »▽« select the option »DATA SERVICE« and select by using the key »◁« or »▷«. Press the key » ○ « to terminate the setting operation.
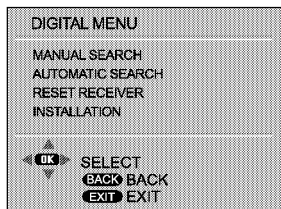
Information related to the top up TV module and smart card can be viewed in the digital menu.To access this information follow the procedure below.

Press »○ « to open and display the»MAIN MENU«
From the setup menu select »DIGITAL SETUP« with »△«, »▽« and press »⊛« to confirm.

The »DIGITAL MENU« appears.
Select »ACCESS CONTROL« with »△«, »▽« and press »⊛« to confirm the card.

Signal information
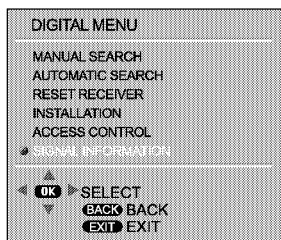
Go to the »SETUP« menu from the main menu. Press the key »⊚« to confirm your selection.Using the keys »◄▲►«, »◄▼►« select the option »DIGITAL SETUP« and press the key »⊚« to confirm your selection.
-the »DIGITAL MENU« is displayed.

Using the keys »◄▲►«, »◄▼►« select the option »SIGNAL INFORMATION« and press the key »⊚« to confirm your selection.

Notes:
The lower part of the menu shows signal properties. The longer the bar indicating »QUALITY« or »SIGNAL INTENSITY« towards the right, the better the signal. The signal level depends not only on the settings of your receiver unit but also on the currently active broadcasting channel. Keep this in mind when adjusting your aerial by using the signal level indicator. Press the key » ⊙ « to terminate the setting operation.

Features related to digital broadcasting channels

You can block unwanted broadcasting channels (parent control) or create a list of favourite channels.

Child Lock (blocking channels)

You can block any channel that is not appropriate for your children. To do this;

Press the key »⊙ « to open and display the main menu. Select the option "PROGRAMME TABLE/DIGITAL" from the programme table menu and press the key »⊚«. The Programme Table will be displayed. Using the keys »◄▲►«, »◄▼►« select the TV channel you wish to block, then confirm your selection by pressing the blue button on the remote control.A key sign »⊶┳« will be shown against each channel which is locked.

Creating a favourite channels list

Go to the »PROGRAMME TABLE« menu from the main menu. Using the keys »◄▲►«, »◄▼►« select the option »PROGRAMME TABLE/DIGITAL« and press the key »⊚« to confirm your selection.

-The "EDIT CHANNELS - TV" menu will be displayed.

You can select favourite channels and store up to four lists. Using the keys »◄▲►«, »◄▼►« select the broadcasting channel and press the keys »1« - »4« to enter the favourites list from 1-4.
-Press again the corresponding number in order to remove it.
-You can add the selected broadcasting channel to multiple favourite channels lists.
Press the key » ⊙ « to terminate the setting operations.

Displaying a TV and radio channels list

Go to the »PROGRAMME TABLE« menu from the main menu.Press the key »⊛« to confirm your selection. Using the keys »◁▷«, »▽⊙« select the option »PROGRAMME TABLE/DIGITAL« and press the key »⊙« to confirm your selection.

--The "EDIT CHANNELS" menu will be displayed.

You can switch between favourite channels lists, radio channel lists if any, and the programme table, by pressing the key »●« (green). Radio channels may be available together with digital broadcasts. You can switch between radio and TV channel lists by pressing the key »●« (red). TV channels are not displayed in the radio mode.

Note:
Favourite channels must be created in order for a favourite channel list to be displayed.

Changing the order of channels (Favourite channels only)
You can change the order of digital channels in favourite channels lists.

Go to the »PROGRAMME TABLE« menu from the main menu.Press the key »⊛« to confirm your selection. Using the keys »◁▷«, »▽⊙« select the option »PROGRAMME TABLE/DIGITAL« and press the key »⊙« to confirm your selection.

--The "EDIT CHANNELS-TV" menu will be displayed. (If you wish to switch to radio channels, press the key »●« (red).) Keep pressing on the key »●« (green) until the menu in which you wish to make a change is selected.
The option "MOVE" in yellow will be displayed in the menu. Using the keys »◁▷«, »▽⊙« select the channel you wish to change.
Press the key »●« (yellow) to change the channel. The channel is now selected. Choose a new location for the selected channel and press again the key »●« (yellow) to confirm. Press the key »⊙« to terminate the setting operation.

Note:
The channel is put in its previously selected location.

TV GUIDE

The electronic TV guide offers an overview of all programmes that will be broadcast in the next week (only for digital stations).

Press the key »Ⓞ « to view the station information.
-Information about the current and following program appears.

Please note:
Not all broadcasting stations supply a detailed TV guide.
Many broadcasters do not supply any information.

Scroll through the station information with »◆«, »▼«. Press the key »◉« to display all programmes. With »◀«, »▶ « choose the required program and press the key »◉« to read the guide information. Select the next page with »◀« or »◀« Press »Ⓞ « to exit the TV guide.

Searching for analogue broadcasting channels

Autoprogramming
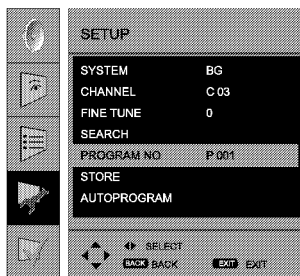
Press the key »Ⓞ « and using the keys »◀«, »▶« select "Analog TV" and press the key »◉« to confirm selection.
Press the key »Ⓞ « the "MAIN MENU" is displayed.

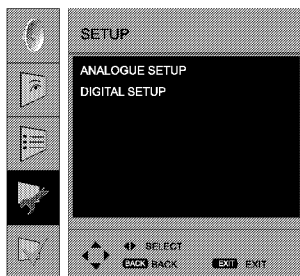Using the keys »◀«, »▶« select the option »SETUP« and press the key »◉« to confirm your selection.

Select the option »PROGRAM NO« with the keys »◀«, »▶« and enter channel numbers starting from the point they should be stored at by using the key »◀« or »◀«.

Using the keys »◀«, »▶« select the »AUTOPROGRAM« row and press the key »◉«.
– the "COUNTRY SELECTION" menu is displayed.
Select your country from the list and press the key »◉«.
–The automatic channel search is displayed.
–Depending on the number of TV channels received, the automatic search may take a few minutes.

You can cancel the search by pressing the key »Ⓞ «.
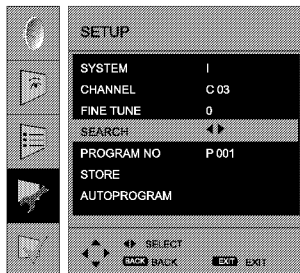
Manual channel setting

Go to the »SETUP« menu from the main menu. Press the key »⊙« to confirm your selection. Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »ANALOGUE SETUP« and press the key »⊙« to confirm your selection. Using the keys »⟨▲⟩«, »⟨▼⟩«, select the option »SYSTEM« and select system I for uk use by using the key »⟨◄⟩« or »⟨►⟩«.
S e l e c t   t h e   option »PROGRAM NO« with the keys »⟨▲⟩«, »⟨▼⟩« and select the channel to be stored in the memory by using the key »⟨◄⟩« or »⟨►⟩«.
Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »SEARCH« and start the search by using the key »⟨◄⟩« or »⟨►⟩«.

SYSTEM	I
CHANNEL	C 03
FINE TUNE	0
SEARCH	◄►
PROGRAM NO	P 001
STORE	
AUTOPROGRAM	

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »STORE« and press the key »⟨◄⟩« or »⟨►⟩« to confirm your selection. The message "STORED" will appear on the screen. Press the key »TV/EXIT« to terminate the setting operation.

Fine-tuning analogue TV channels

The television adjusts itself according to the best possible reception. In areas where the signal is weak, you may have to fine-tune manually.
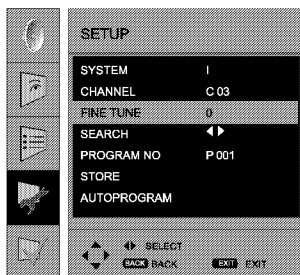
SYSTEM	I
CHANNEL	C 03
FINE TUNE	0
SEARCH	◄►
PROGRAM NO	P 001
STORE	
AUTOPROGRAM	

Go to the »SETUP« menu from the main menu. Press the key »⊙« to confirm your selection. Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »ANALOGUE SETUP« and press the key »⊙« to confirm your selection.
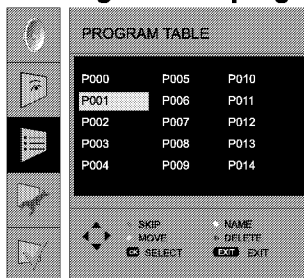
Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »FINE TUNE« and adjust by using the key »⟨◄⟩« or »⟨►⟩«.

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »STORE« and press the key »⊙« to confirm your selection. The message "STORED" will appear on the screen.
Press the key »TV/EXIT« to terminate the setting operation.

Searching for analogue TV channels by entering channel numbers

SYSTEM	I
CHANNEL	C 03
FINE TUNE	0
SEARCH	◄►
PROGRAM NO	P 001
STORE	
AUTOPROGRAM	
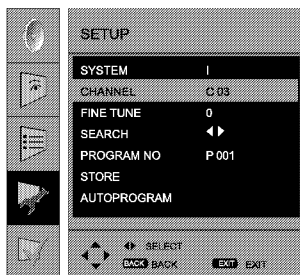
Use the keys »0« – »9« to choose the broadcasting channel location between 1-100.
Go to the »SETUP« menu from the main menu. Press the key »⊙« to confirm your selection.

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »ANALOGUE SETUP« and press the key »⊙« to confirm your selection.

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »CHANNEL« and specify the channels by using the key »⟨◄⟩« or »⟨►⟩«. Press the key »⊙« to choose between » S« (cable channel) and » C« (terrestrial broadcasting channel). You can enter the channel number directly by using the keys »1...0«.

Using the keys »⟨▲⟩«, »⟨▼⟩« select the option »STORE« and press the key »⊙« to confirm your selection. Press the key »TV/EXIT« to terminate the setting operation.

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Features related to analogue broadcasting channels

You can erase any channel stored more than once in the memory during automatic search. In addition, you can store channels in different locations in the memory, skip channels, enter or change names for channels.

Deleting a stored programme

Go to the »PROGRAMME TABLE« menu from the main menu. Press the key »⊙« to confirm your selection. Select the option »PROGRAMME TABLE-ANALOGUE« and press the key »⊙« to confirm. – "PROGRAMME TABLE" menu is displayed.

Using the keys »▲«, »▼« select the channel you wish to delete. Press the key »■« (blue) twice to delete the channel. All following broadcasting channels will be moved to an upper location.

Changing the location of a stored programme

In the »PROGRAMME TABLE« menu, go to the broadcasting channel to be changed, by using the keys »▲«, »▼« . Select the channel by using the key »■« (green) . Using the keys »▲«, »▼« select the new channel position and press the key »■« (green) to confirm. All following broadcasting channels will be moved to an upper location.

Naming the programmes (maximum 5 characters)

In the »PROGRAMME TABLE« menu, select the broadcasting channel, by using the keys »▲«, »▼«. Highlight the channel with key »■« (yellow). Using the keys »▲«, »▼« select the keys and the digits, move them to the next position with the key »◄« or »►«, and repeat the procedure. Store the channel name with »■« (yellow).

Skipping a stored programme

Using the keys »▲«, »▼« you can mark any TV channel to be skipped in the programme table. Press the key »■« (red) after selecting the channel. The channel will now be displayed on red background. You can undo the channel selection by pressing the red key again. A skipped channel can be directly accessed using the numeric buttons on the remote control. However, it cannot be selected by using the »⊕«, »⊖« buttons. In this case the next available channel will be displayed.

Child Lock (blocking channels)

You can block any channel that is not appropriate for your children.

Go to the »FEATURES« menu from the main menu. Using the keys »▲«, »▼« select the »CHILD LOCK« row and or choose as on or off by using the key »◄« or »►«. Press the key »TV/EXIT« to terminate the setting operation.

Note: The symbol »🔒« will be displayed on the upper left corner of the channel for which child lock is activated.

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Sound settings

SOUND	
VOLUME	▬▬▬
BALANCE	▬▬▬
SOUND TYPE	MONO
SOUND MODE	NORMAL
AVL	OFF
SUBWOOFER	ON
EQUALIZER	
HEADPHONE	▬▬▬

◄► SELECT
BACK EXIT

Press the key »MENU ◉« to open the "SOUND« menu.
– "SOUND" menu is displayed.

Volume
This is where the standard volume adjustment is made. It is the volume level after the TV is switched on.

Using the keys »▲«, »▼« select the »VOLUME« row and make the adjustment with »◀« or »▶«.

Balance

Using the keys »▲«, »▼« select the »BALANCE« row and make the adjustment with »◀«
or »▶«.

AVL

TV channels broadcast at different intensities of volume.
The automatic volume level (AVL) function means keeping the volume at a certain level while you navigate among channels.
Using the keys »⬅«, »➡« select the option »AVL« from the sound menu. Using the key »◀« or »▶« select the option »on«.

Equalizer

The Equalizer offers you five sound settings, with four preprogrammed settings (Music, Sports, Cinema and Speech) and one (user) setting that can be adjusted according to your preference. Using the keys »⬅«, »➡« select the option »EQUALIZER« and change the equalizer mode with the key »◀« or »▶«.

Using the keys »⬅«, »➡« select the option »EQUALIZER« and press the key »OK« to confirm.
– The "EQUALIZER" menu is displayed.

Using the keys »⬅«, »➡« select the sound adjustment option »USER« and press the key »OK« to confirm.
-» 0.1« frequency band is activated.

Enter the value by using the keys »⬅«, »➡« and select the next frequency band by pressing the key »◀« or »▶«. Press the key »○ « to save the setting. Press the key »TV/EXIT« to finish the setting.

Headphone

Connect the headphones to the headphone input socket located on your TV, you can listen to broadcast sounds through the headphone independently from the TV. To raise or lower the headphone volume level, select the »headphone« row from the sound menu by using the keys »⬅«, »➡«. You can adjust the level of volume with the keys »◀«, »▶« . Simply press the key »⊗« on your remote control when you want to hear the sound through the headphone only.

-20-
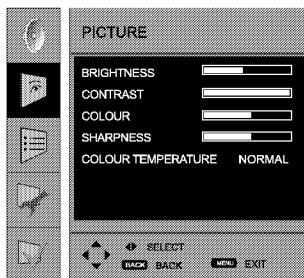
Picture settings

Go to the »PICTURE« menu from the main menu. Press the key »⊙« to confirm your selection. Using the keys »◁«, »▷« select the option »BRIGHTNESS«, »CONTRAST«, »COLOUR«, »SHARPNESS« or »COLOUR TEMPERATURE« and adjust by using the key »◁« or »▷«.
Press the key »TV/EXIT« to finish the setting.

Adjusting the picture features
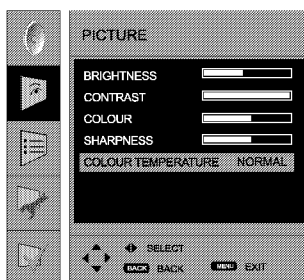
You can adjust the picture to suppress interference. To suppress interference, you can use one of the following three settings. »NORMAL«, »WARM« and »COOL«.

Using the keys »◁«, »▷« select the »COLOUR TEMPERATURE« from the picture menu and make the adjustment with »◁« or »▷«. Press the key »TV/EXIT« to finish the setting.

IMPORTANT NOTE:
Combined Filter (Digital Comb Filter), LTI (Luminance Transient Improvement) and CTI (Colour Transient Improvement) features are provided in your TV as standard features. These features are selected as "On" by default in order to increase picture quality and cannot be modified by the user.

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Features

Changing the menu language
You can change the language of the OSD menu.
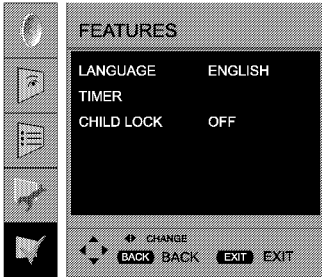
Press the key »⬜« to open and display the main menu. Using the keys »▲«, »▼« select the »FEATURES« menu and press the key »OK« to confirm.
– The "FEATURES" menu is displayed.

Using the keys »▲«, »▼« select the option »LANGUAGE«.

Select the language with the key »◄« or »►«.
Press the key »TV/EXIT« to terminate the setting operation.

Timer

On and off times can be set from the » TIMER« menu. After the specified time period is over, the television will either switch to the standby mode or it will be turned on from the standby mode. In »Program«, you can enter the channel that the television will switch on in.
Using the keys »▲«, »▼« select the option »TIMER« and press the key »OK« to confirm your selection.

Using the keys »▲«, »▼« select »CLOCK«, »ON TIME«, »OFF TIME« or »PROGRAM NO«.

Enter the Clock, On Time, Off Time and Program No by using the numbering keys »1...0«. Press the key »TV/EXIT« to terminate the setting operation.

Clock: Use the numeric keys to enter the current time.

On time: Using the numeric keys enter the time at which you wish your TV to be turned on (the TV must be in the standby mode).

Off time: Using the numeric keys enter the time at which you wish your TV to be turned off (standby mode).

Source: Use the key "SOURCE" for switching between Digital-Analogue channels.

Picture format

Smart picture

You can select one of the pre-stored and non-adjustable default settings in the memory by pressing the key »☺« on your remote control without entering the Picture menu. Soft, Natural and Rich are fixed values. User indicates the values stored by yourself.

Tint

When NTSC video is entered via Scart, you can make the Colour Tone adjustment. The tint option is not seen in the menu when you have not entered such a video type. When NTSC video is entered via Scart, this option becomes active and it is seen in the Picture menu.

Picture format

With this option, you can watch any broadcast picture in a format of your choice. You can view them in Automatic, 16:9 14:9, Subtitle, Letterbox and 4:3 formats. The picture format can be selected as 16:9 or 4:3 in COMP/HDMI/PC modes. In addition, the picture will appear in the 16:9 format when the PIP is on or while in the positions TXT-TXT/MIX. You can perform the same operation also with the format selection key »☺« on your remote control without entering the picture menu. The selected format will apper in the lower centre of screen for a short while.

Wide Screen Display

TV programmes can be displayed in different formats according to the broadcast made. Pressing »☺« button, select the feature Letterbox, Subtitle, Automatic,16:9,14:9 or 4:3.

Please Note: When the MENU button is pressed, the picture size will change while the menu is displayed on the screen. This ensures that the visible sections of the menus on the screen do not extend over the edges.

14:9
This is the movie format.

Letterbox
While watching a "Letter box formatted" film / video cassette, this setting will remove or minimise the black stripes on the background by zooming in and without diffusing the picture.

Subtitle
If the subtitles are transmitted in a "letterbox formatted" broadcast, then this setting will push the picture upwards in order to ensure that the entire text can be displayed.

Automatic
Some movie channels can automatically broadcast in the 16:9 format. If you would like to see this format automatically, select AUTOMATIC. In that case, the expression AUTO 16:9 will appear on your screen.

16:9
Use this setting for watching the broadcasts in wide screen DVD, wide screen display video cassette or 16:9 format. Since various screen formats such as 16:9, 14:9, 20:9 etc. are used, black stripes may form on the lower and upper parts of the screen.

4:3
Use this setting to watch the broadcasts in the 4:3 format.

As the use of certain special functions in order to change picture sizes for mass display or commercial purposes (modifying the height and width etc.) will be deemed an infringement of picture copyrights, criminal proceedings may be executed as required by relevant laws.

FREEZE

With this feature, you can freeze the programme picture you are watching. To do this, press the key »⊛« on your remote control while there are no menus on the screen. The program picture will freeze until the same key is pressed for a second time.

Note: The Freeze feature also freezes the PIP screen while there is a PIP picture on the screen.

Using the PIP (Picture in Picture) Feature

Press the key »◯« on your remote control. The PIP window appears on the screen. According to the selected source, a window will be opened inside the main picture and a sub-screen will be displayed. You can return to the PAP mode by pressing the key »◯« again. You can switch back to the normal mode by pressing the key »◯« in the PAP mode.

To change the source on the PIP screen in the PIP or PAP mode, you can use the up/down »△«, »▽«direction keys.

Note1: All the sources can be selected in the PIP mode while there is TV or AV on the screen. However, only TV/AV can be watched while there is COMP/HDMI/PC on the main screen. **Note2:** The PIP source information available in the TV/AV mode and the PIP source information available in the COMP/HDMI/PC mode are separate. Therefore, the PIP source also changes once the main screen has been switched from TV/AV to COMP/HDMI/PC.

PIP Position

With this option, you can change the position in which the PIP window is displayed on the screen. To do this, you can change the PIP Position by pressing the key »◯ « while there is a PIP picture on the screen.

PIP Size

With this option, you may zoom in and out the PIP window size. To do this, you can change the PIP Size by pressing the key »◯ « while there is a PIP picture on the screen.

PAT Mode (Picture and teletext) Feature

Press the key »◯« and then »⊛« on your remote control while watching a broadcast on your television, and you can enter the PAT (Picture and teletext) mode. With this feature, you can also follow the teletext broadcast if there is also a teletext broadcast in the programme that is being watched. To exit this mode, press the key »◯ « on your remote control.

Teletext (Analogue)

Being one of the most important TV broadcasting services today, Teletext renders TV usage more advantageous.

In short, teletext means transmitting various up-to-date information in the form of texts and graphics along with TV broadcast.

To be able to receive a quality teletext broadcast, a good aerial system and a broadcast that is not weak, with no reflections and interference from other channels, are required. Even during a highly clear reception, it is normal for some characters or tabs to be lost. Such situations will be automatically improved in a short time under normal circumstances.

If you press the key »Ⓞ« on a channel that does not have Teletext broadcast, the message "NO TELETEXT AVAILABLE" will appear on the screen. In order to switch your television to the teletext broadcast, press the key »Ⓞ« on a channel that has teletext broadcast. To switch back to the television broadcast, press the same key. Once you have switched to the teletext broadcast, first the index page will be displayed (Page 100). On this page, you can see the titles of the topics and the numbers of their initial pages in that teletext broadcast.

Page selection

To be able to view the page you would like on the screen, enter the number of that page by using the numbering keys. You can see the number you have entered on the left side of the upper title row.

When you wish to skip the pages one by one, you can go to the next page by pressing the key »⟨⟩« and back to the previous page by pressing the key »⟨⟩«. To return to the Index page, press the key »⟨⟩«.

Teletext display key (MIX) in the TV picture

By pressing this key, you can watch the teletext information and the TV broadcast one above the other and together. This way, you can follow a channel's teletext information during the regular TV broadcast. To return to the Teletext broadcast, press the key »Ⓞ«; to return to the TV broadcast, press again the key »Ⓞ«.

Page enlargement key (DOUBLE)

»Ⓞ« Using this key, you can watch the top half of the teletext page in the enlarged format. To be able to view the bottom half of the page as enlarged, press the same key again. When you press the key »Ⓞ« for the third time, the page will be restored to its normal size.

Stop key (HOLD)

Some information is arranged in multiple pages and broadcast in the automatic cycle mode by the broadcaster. For example; on a text of four pages, the pages are indicated with the figures 01, 02, 03 and 04 at the bottom of the page. To view one of these pages for a longer time, press the key »Ⓞ«. When you press the same key again, the cycle continues.

Subpage key (SUB)

If a broadcaster that makes teletext broadcast provides the subpages of any teletext page, page numbers will appear starting from 01 at the bottom of the screen. Using the key »⊕«, you can switch to the subpages. In that case, the row 'sub page' is displayed inside "red -" and "green +" frames at the bottom row. You can select the subpages by pressing the "RED" and "GREEN" keys. You can exit the subpage by pressing again the same key.

Temporary TV display key (UPDATE)

This key has been designed so that you do not have to switch to the television display and wait for the page search while looking for a desired page in the teletext broadcast. You can switch to the television display by pressing the key »⊕« while Teletext is looking for the desired page. Once the page you would like is found, the number of that page will appear on the screen.

Question - answer key (REVEAL)

Sometimes, a teletext page contains a hidden answer such as a game or a riddle. To reveal the hidden answer, press the key »⊕«.

Clock

The Clock function of the key »⊕« : when you want to check the time while watching any television channel, press the the key »⊕«. In that case, a clock will appear on the upper right corner of the screen. You can erase the time information off the screen by pressing the same key.

Fastext

The coloured keys on the remote control are for the fastext feature.

When you select any page, the titles of various subjects may be displayed on the screen in four different colours or inside coloured frames (red, green, yellow and blue).

By pressing the button corresponding to the relevant colour on the remote control, you can access the subject of your choice without waiting.

Note: The Fastext feature is not available in all teletexts broadcasts. The broadcaster determines whether or not it will be broadcast.

Toptext (optional)

At the bottom of the teletext screen is a row of subject headings in yellow and blue. Pressing yellow or blue buttons on the remote control, selects the related Subject. Next page can be selected by pressing the red button and previous page can be selected by pressing the green button.

Troubleshooting

Symptom	Possible cause	Solution
The screen is lit (fuzzy) but there is no broadcasting channel	Aerial cable	Aerial cable connected?
	Station not programmed	Start station scan
Weak picture contrast	Display settings incorrect	Adjust brightness, contrast and colour
	Station problem	Test with another channel
Interference caused by other devices	Interference caused by other devices	Change the location of the device
Shadow, reflection	Channel setting	Automatic or manual channel adjustment/fine-tune
	Aerial	Check the aerial cable and the system
No colour	Colour intensity at lowest level	Turn up the colour
	TV standard setting (if setting option is available)	Choose the correct colour standard
	Station problem	Test with another channel
Picture with no sound	Volume level at lowest value Mute selected	Turn up the volume
	Station problem	Test with another channel
No/bad teletext	TV channel (no teletext) or aerial system	Test another channel for fine-tune and shaded pictures
	Station signal too weak	Check the aerial system
The remote control is not functioning.	No optical connection	Hold the remote control in the direction of the television
	Remote control batteries	Check the batteries, replace if necessary
	Operating condition undefined	Shut down the TV for about 2 minutes by using the mains switch
Channel is not displayed	Child lock active	Disable child lock

Headphones (optional)

The headphones must have an impedance of between 8 and 32 ohms and have a 3.5 mm stereo jack plug. Plug the headphone jack into the headphone socket of the TV.
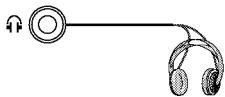
NOTE 1: Please see page 7 for connection position.
NOTE 2: Please see page 20 for headphone instruction.

High definition - HD ready

Your television can receive high-definition signals (HDTV). You can connect the input sources (HDTV set-top box or HDTV DVD player) to the (**HDMI**) socket (digital HDTV signal).

This ensures that you can view digital HDTV programmes, even if they are copy-protected (HDCP High-Definition Copy Protection).

NOTE: For products that are not HD-Ready (720p/1080i), HD performance cannot be expected.

External equipment connection:

SCART SOCKET

VCR/VCD

DVD/PVR

SATELLITE DECODER

CAMCORDER

VIDEO GAME
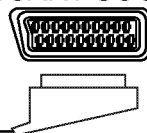
HDMI input

HDMI

In order to be able to connect an external device, your TV is equipped with 7 inputs including aerial input as follows:
1-Aerial input
2-VGA input
3-HDMI input
4-YUV component input
5-S-VHS input
6-SCART input
7-PHONO input
You can connect your external device supporting the suitable inputs to your TV via these inputs.

By pressing the (☼) button on your remote control, select the input AV1 or AV2 to which you connected your device.

INPUT

Your LCD television can also be used as a PC monitor.

PC Connection

Connect the VGA lead connector to the PC-IN on the rear of your television using a suitable cable (not supplied with your television). Using a suitable cable, you can also listen to the sound from your PC by connecting the sound output of your PC to the PC AUDIO-IN input behind your television.

Switching to the PC mode

For your LCD-TV to switch to the monitor (PC) mode, press the (♦) on your remote control. To switch back from the PC mode to the TV mode, use the (♦) button on your remote control.

PC Settings

In the PC mode, enter the picture setting menu by pressing either the »○« or Green »⟨⟩« button. In order to make the necessary adjustments in this menu, you can use the Right-left, Up-down direction »◁«, »◁«, »△«, »▽« buttons on your remote control.

Brightness and contrast adjustments can be made in addition to the settings listed below.

X. Position: Horizontal position setting
Y. Position: Vertical position setting

Clock Frequency: This is the pixel clock frequency. User can narrow down or enlarge the display by selecting a desired value.

Phase: Using the right/left direction »◁«, »◁« keys, you can ensure that the colors and shapes are exactly consolidated on the PC image.

Automatic configuration: The most suitable geometric settings in accordance with the input mode are configured by this function. For this application, simply select the Automatic Position tab and press the (⊙) button. You can adjust the sound of the source you have connected to the Audio-In input of the TV using the buttons »◁« / »◁«.

Switching to the HDMI mode

Connect your HDMI source to the HDMI input on the rear your TV using connector located on your PC or your digital video-transmission device and a suitable cable (not supplied wit the TV).

Note1: To be able to watch an image in the HDMI mode, it is necessary that your computer be equipped with a HDMI supported screen card.

You may see on the screen the resolution information by pressing the »⊛« button.

Note2: To connect a RGB-supported external device to your television, it is necessary that you use a RGB supported Scart cable. If your external device is supported in that case, you can set the output as RGB.

Note3: It is necessary that the decoder device be equipped with a tuner so that you can connect a decoder through a PHONO connection.

HDCP support: Your set supports HDCP feature. To use this feature, you must set up a connection to your TV set's HDMI video port and select HDMI by pressing the AV key on your remote.

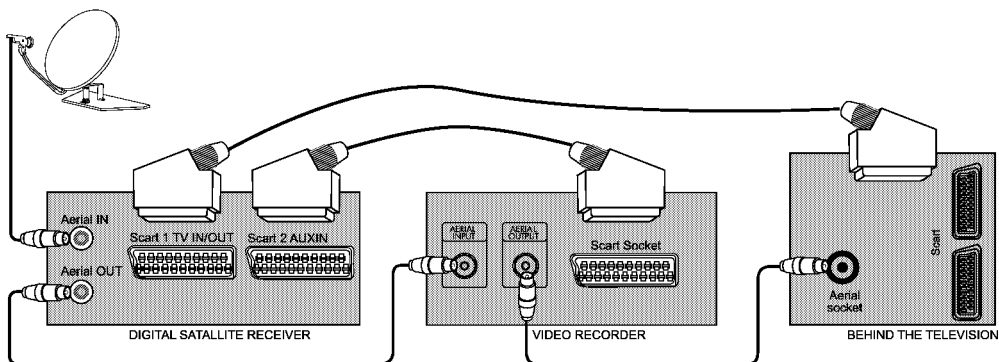## Connecting a Video recorder device and a digital satellite receiver Using scart and aerial leads.

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Table of technical specifications

SCREEN SIZE	26"	32"	37"
Panel type	26", 16:9 Active matrix TFT	32", 16:9 Active matrix TFT	37", 16:9 Active matrix TFT
Sound output	2x7 W	2x10 W	2x10 W
Power consumption	125 W	150 W	175 W
Stand-by power consumption	1,5 W	1,5 W	1 W
Teletext page	12	12	12

X: Model Dependant

General technical

Power supply
AC: ....**230V 50 Hz**
Programme memory: **100**
RF Aerial input: ....**75 Ohm (Co-axial)**
Loudspeaker impedance: ....**4 Ohm**
Sound systems:..**Mono/Stereo**
Batteries: ....**2xUM - 4, IEC R03 or AAA 1.5V**
Received channels: ....**VHF (Band I channel 2-4)**
                                                                            VHF (Band III channel 5-12)
                                                                            UHF (Channel 21-69)
                                                                            Cable TV (S1-S20/S21-S41)
Received broadcasting systems............................**PAL BG**
                                                                            PAL SECAM BG
                                                                            PAL SECAM BG DK/DK'
                                                                            PAL SECAM BG LL'
                                                                            PAL I
                                                                            DVB-T Freeview

Note: For UK broadcasts use PAL I.

"This symbol is known as the "Crossed-out Wheelie Bin Symbol". When this symbol is marked on a product, it means that the product should not be disposed of with your general household waste. Only discard electrical/electronic items in separate collection schemes which cater for the recovery and recycling of the materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment".

Warning:
This is a class A product. This product may cause radio interference in home environment; in such a case, the user may have to remedy this and should contact a specialist dealer for advice.

MAIN UK TRANSMITTER STATIONS
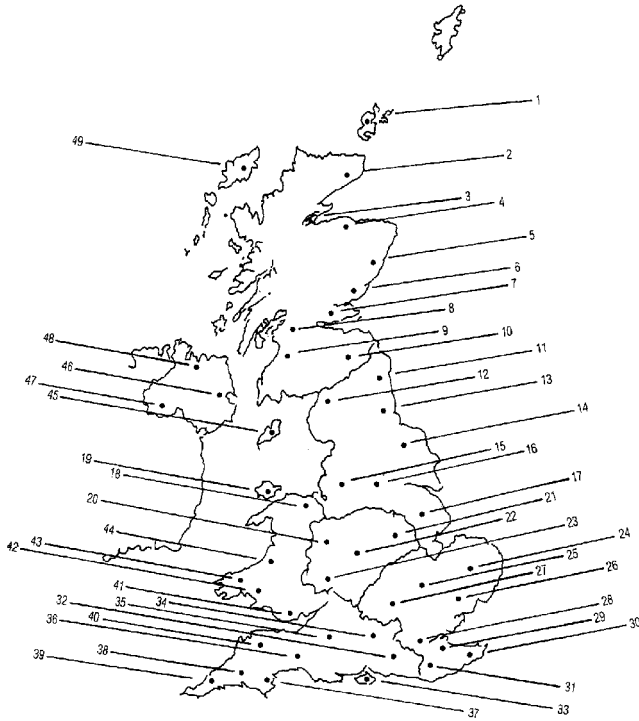
UHF CHANNELS

Regional Main Stations	BBC1	BBC2	ITV	CH4	CH5	Map
North West						
Caldbeck	30	34	28	32	56	12
Winter Hill	55	62	59	65	48	15
Douglas (IOM)	68	66	48	56	56	45
North						
Belmont	22	28	25	32	56	17
Emley Moor	44	51	47	41	37	16
North East						
Bilsdale West Moor	33	26	29	23	35	14
Chatton	39	45	49	42		11
Pontop Pike	58	64	61	54	56/68	13
Midlands (West)						
Ridge Hill	22	28	25	32	35	23
Sutton Coldfield	46	40	43	50	37	22
The Wrekin	26	33	23	29	25	20
Midlands (East)						
Waltham	58	64	61	54	35	21
South West						
Beacon Hill	57	63	60	53		37
Caradon Hill	22	28	25	32		38
Huntshaw Cross	55	62	59	65	67	40
Redruth	51	44	41	47	37	39
Stockland Hill	33	26	23	29		36
Channel Islands						
Fremont Point	51	44	41	47		
West						
Mendip	58	64	61	54	37	35
South						
Hannington	39	45	42	66	35	34
Midhurst	61	55	58	68		32
Rowridge	31	24	27	21		33

STATIONS CT D

	BBC1	BBC2	ITV	CH4	CH5	Map
Bluebell Hill	40	46	43	65		29
Crystal Palace	26	33	23	30	37	28
Dover	50	56	66	53		30
Heathfield	49	52	64	67		31
Oxford	57	63	60	53	49	27
East						
Sandy Heath	31	27	24	21	39	25
Sudbury	51	44	41	47	35	26
Tacolneston	62	55	59	65	52	24
Scotland						
Angus	57	63	60	53	37	6
Black Hill	40	46	43	50	37	8
Craigkelly	31	27	24	21	48	7
Darvel	33	26	23	29	35	9
Durris	22	28	25	32	67	5
Eitshal (Lewis)	33	26	23	29		49
Keelylang Hill	40	46	43	50		1
Knock More	33	26	23	29		4
Rosemarkie	39	45	49	42		3
Rumster Forest	31	27	24	21		2
Selkirk	55	62	59	65	52	10
Wales						
Blaenplwyf	31	27	24	21	56	44
Carmel	57	63	60	53		42
Llanddona	57	63	60	53		19
Moel-y-Parc	52	45	49	42		18
Preseli	46	40	43	50	37	43
Wenvoe	44	51	41	47		41
N.IRELAND						
Brougher Mountain	22	28	25	32	37	47
Divis	31	27	24	21	31	46
Limavady	55	62	59	65		48

GULENAR26HDIP
GULENAR32HDIP
GULENAR37HDIP

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