# Contents

Remote Control Buttons ............................................. 30  

LCD TV ........................................................................ 31  

Preparation ..................................................................... 33  
  Installation Of The TFT TV To The Wall (optional) .......... 33  

Preparation ..................................................................... 35  
  Features ......................................................................... 35  

Safety Precautions ......................................................... 35  

Before Switching On Your TV ......................................... 37  
  Power Connection ......................................................... 37  
  Connections To The Aerial Input Socket .......................... 37  
  How To Connect Other Devices ....................................... 37  
  Inserting Batteries In The Remote Control Handset ........ 37  

Switching The TV ON/OFF ................................................ 37  
  To switch the TV on: ...................................................... 37  
  To switch the TV off: ..................................................... 37  

Initial Settings ............................................................... 38  
  Initial APS (Automatic Programming System) ................. 38  

Operating The TV .......................................................... 38  
  Operating with the buttons on the TV set ........................ 38  
  Operating With Remote Control .................................... 38  

Menu System ................................................................. 39  
  Picture menu ................................................................. 39  
  Sound menu .................................................................. 40  
  Feature menu ............................................................... 42  
  Install menu ................................................................. 43  
  Program menu .............................................................. 44  
  Source menu ............................................................... 45  

PC Mode ........................................................................ 45  
  Installation ................................................................. 45  
  Menu System in PC mode ............................................. 45  
  PC Picture Position Menu .............................................. 45  
  PC Picture Menu ........................................................ 46  
  Sound Menu ............................................................... 46  
  Feature Menu ............................................................. 46  
  Source Menu ............................................................. 46  
  Sound in PC mode ....................................................... 46  

Other Features .............................................................. 47  
  TV Status ................................................................. 47  
  Mute Indicator ........................................................... 47  
  PIP and PAP modes ..................................................... 47  
  Freeze Picture ............................................................ 47  
  Zoom Modes .............................................................. 48  

Teletext ......................................................................... 49  
  To Operate Teletext ..................................................... 49  
  To Select A Page Of Teletext .......................................... 49  
  To Select Index Page ................................................... 49  
  To Select Teletext With A TV Programme ......................... 49  
  To Select Double Height Text ....................................... 49  
  To Reveal “Concealed” Information ................................. 49  
  To Stop Automatic Page Change ................................... 49  
  To Select A Subcode Page ........................................... 49  
  To Exit Teletext .......................................................... 50  
  To Display The Time ................................................... 50  
  Fastext ...................................................................... 50  

Connect Peripheral Equipment ....................................... 51  
  High Definition ......................................................... 51  
  Via The Scart ............................................................ 51  
  Via Aerial Input ......................................................... 51  
  Decoder ................................................................. 51  
  TV And Video Recorder .............................................. 51  
  Playback NTSC ........................................................ 51  
  Copy Facility ............................................................. 51  
  Search For And Store The Test Signal Of The Video Recorder .................................................. 51  
  Camera And Camcorder .............................................. 52  
  Connect The Decoder To The Video Recorder .................. 52  
  Connecting Headphones ............................................. 52  

Aerial Connection ......................................................... 53  

PC Input Typical Display Modes ..................................... 54  

Tips .............................................................................. 55  

Specifications ............................................................. 56  

- 29 -
Remote Control Buttons

1. \( \bigcirc \) = Stand By
2. \( \Delta \) = Cursor Up
3. \( \triangleright \) = Cursor Right
4. OK / SELECT = Confirm/Freeze Image
5. INFO = Info
6. 0 - 9 = Direct Programme
7. \( \leftarrow \) / EXIT = not used
8. P<P = Vorhergehendes Programm
9. P/CH + = Previous Programme
10. \( \leftarrow \) + = Programme Up
11. DTV / TV = TV / Quit Menu
12. AV = Source Select
   (EXT-1, EXT-2, EXT-3, EXT-4, EXT-4S, EXT-5 und PC)
13. Yellow (FEATURE)= Call Function Menu
14. Blue (INSTALL)= Call Programming Menu
15. \( \square \) = Stop Videotext
16. \( \text{EX} \) = Update Videotext, \( \square \text{EX} \) = PAP-Mode
17. \( \text{GUIDE} \) / GUIDE = Indexpage Videotext
18. \( \text{INF} \) = Show, PC = Call PC Mode
19. \( \text{INF} \) = Enlarge Videotext,
   \( \text{WIDE} \) = Picture format change
20. \( \text{PP} \) = PIP On/Off
21. Teletext
22. \( \text{CLOCK} \) = Clock
23. Red (SOUND) / \( \Delta \) = Call Sound Menu
24. Green (PICTURE) / \( \downarrow \) = Call Picture Menu
25. \( \text{NIGHT} \) = Sound off (Switch to Mute)
26. I-II = Mono/Stereo - Dual A-B
27. \( \text{HOLD} \) = Decrease Volume
28. - P/CH = Programme Down
29. PP = Picture Mode Selection
30. M = Main menu
31. \( \triangleright \) = Cursor down
32. \( \bigcirc \) = Cursor Left
A S-VHS Input      EXT-4S
B Video Input     EXT-4
C Audio Inputs
D Headphone
E VGA Input
F Component Video (YPbPr) Inputs
G Component Audio Inputs
H HDMI Input (EXT-5)
I Scart 1 (EXT-1)
J Scart 2 (EXT-2)
K Aerial
L PC Audio Input
M Power cord input
N Power On/Off switch
Preparation

Install Display on solid horizontal surface such as a table or desk.
For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.
This apparatus can be used in tropical and/or moderate climates.

Installation Of The TFT TV To The Wall (optional)

1- To install the TFT TV on the wall, first of all, foot assembly should be removed. (Figure 1). Unscrew the 4 screws (M4 x 6) that attach the foot assembly to the TFT panel and remove the foot assembly from the TFT panel.

2- Place the 4 plastic pins to the circular screw holes at the rear of the TFT and screw them to the TFT panel with 4 (6 x 23) screws.

3- Decide the place on the wall where the TFT panel would be placed. Fix the stencil wall mount (shown in Figure 2) on the wall. The stencil wall mount is used for placing the wall hangers on the wall, properly.

4- Level and mark with a pencil the 4 mounting points on each wall hanger. Drill pilot holes for the plastic anchors (7x30) and then fix the wall hangers with 8 screws (4 x 30).

5- Raise the TFT panel and hang it to the holes on the wall hanger from the 4 hanging screws at the rear of the TFT panel.
FIGURE 2
**Preparation**

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.

Use this apparatus in moderate climates.

**Features**

- Remote controlled colour television.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has 2 Scart sockets for external devices (such as video, video games, audio set, etc.)
- Stereo sound system (German+Nicam).
- Full function Teletext.
  Fastext (1000 Pages), TOP text.
- Headphone connection.
- Direct channel access.
- All programmes can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child Lock.
- Automatic sound mute when no transmission.
- NTSC Playback.
- AV in and S-VHS in are available.
- It has VGA connector for external devices such as computer.
- It has an HDMI connector for Digital Video and Audio. This connection is also designed to accept High Definition signals.
- It has PIP / PAP / PAT functions.
- AVL (Automatic Volume Limiting)
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.

- PLL (Frequency Search)
- PC Input (Support up to WXGA 1366 x 768)
- Stereo PC Audio Input
- Plug & Play for Windows 9X, ME, 2000, XP
- 3D Comb Filter

**Safety Precautions**

1. **Power Source**

The receiver should be operated only from a 230V AC, 50 Hz. outlet. Ensure you select the correct voltage setting for your convenience.

2. **Power Cord**

The power supply cord should be placed so that it is not likely to be walked on or pinched by items placed upon them or against it. Pay particular attention to cord where it enters the plug, power outlet, and the point where it exits from the receiver.

3. **Moisture and Water**

Do not use this equipment in a humid and damp place (avoid the bathroom, the sink in the kitchen, and near the washing machine). Do not expose this equipment to rain or water, as this may be dangerous and do not place objects filled with liquids on top. Avoid from dripping or splashing.

4. **Cleaning**

Before cleaning, unplug the receiver from the main supply, outlet. Do not use liquid or aerosol cleaners. Use soft and dry cloth.

5. **Ventilation**

The slots and openings on the receiver are intended for ventilation and to ensure reliable operation. To prevent overheating, these openings must not be blocked or covered in anyway.

6. **Lightning**

In case of storm and lightning or when going on holiday, disconnect the power cord from the wall outlet.
7. Replacement Part
When replacement parts are required, be sure the service technician has used replacement parts which are specified by the manufacturer or have the same specifications as the original one. Unauthorised substitutions may result in fire, electrical shock, or other hazards.

8. Servicing
Please refer all servicing to qualified personnel. Do not remove cover as this may result in electric shock.

9. Naked Flame Sources
Do not place naked flame sources on the apparatus.

WARNING: When the device is not in use for a long time, disconnect from power.

Instructions for waste disposal:
- Packaging and packaging aids are recyclable and should principally be recycled. Packaging materials, such as foil bag, must be kept away from children.
- Battery, including those which is heavy metal-free, should not be disposed of with household waste. Please dispose of used battery in an environmentally sound manner. Find out about the legal regulations which apply in your area.
- Cold cathode fluorescent lamp in LCD PANEL contains a small amount of mercury, please follow local ordinances or regulations for disposal.

"The LCD panel is very high technology product with about a million thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product."

“DO NOT LEAVE YOUR TV AT STAND-BY OR OPERATING WHEN YOU LEAVE YOUR HOUSE”
Before Switching On Your TV

Power Connection

IMPORTANT: The TV set is designed to operate on 230V AC, 50 Hz.

• After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Connections To The Aerial Input Socket

• Connect the aerial or cable TV plug to the Aerial input socket located at the rear of the TV and connect the cable plug coming out from the TV out socket located on the devices (VCR, DVB etc.) to this socket as well.

How To Connect Other Devices

IMPORTANT: Switch off the TV before connecting any external device.

Sockets for external connections are at the rear side of the TV. For connection of other devices via Scart refer to the manuals of the related devices.

Inserting Batteries In The Remote Control Handset

• Remove the battery cover located on the back of the handset by gently pulling downwards from the indicated part.

• Insert two AA/R6 or equivalent type batteries inside. Place the batteries in the right directions.

• Replace the battery cover.

NOTE: Remove the batteries from remote control handset when it is not to be used for a long period. Otherwise it can be damaged due to any leakage of batteries.

Switching The TV ON/OFF

To switch the TV on:

Your TV will switch on in two steps:

1- Connect the power supply cord to the system. Press Power On/Off switch “1” located by the mains input socket. Then the TV switches itself to stand-by mode and the LED on the front of the TV becomes RED.

2- To switch on the TV from stand-by mode either:

Press a digit button on the remote control so that a programme number is selected, or,

Press “0”, “+P/CH” or “P/CH.” button at the top of the TV or press the “0”, “-P” or “P+” button on the remote control, so that last mode switched off is selected.

By either method the TV will switch on and the LED is GREEN.

To switch the TV off:

• Press the “0 (stand-by)” button on the remote control, so the TV will switch to stand-by mode and the LED will become RED.

To power down the TV completely, press On/Off switch “1”, or,

Unplug the power cord from the mains socket.
Initial Settings

Initial APS (Automatic Programming System)

The following menu will be displayed on the screen when you turn your TV on for the first time. APS, searches and sorts all channels and stores them automatically on your TV, according to the transmission of programme systems in your area.

First of all choose Language and Country by using ▲ / ▼ and ◄ / ► buttons. This will affect the sort process in APS. To start APS, press the RED or “OK” button.

After APS is finalized, the programme table will appear on the screen. In the programme table you will see the programme numbers and names assigned to the programmes.

If you do not accept the locations and / or the programme names of programmes, you can change them from the Program Menu. (See page 44)

Operating The TV

You can operate your TV using both the remote control handset and the buttons on the set.

Operating with the buttons on the TV set

Volume setting and programme selection can be made by using the buttons on the control panel at the top of the TV.

Volume Setting

Press the "VOLUME -" button to decrease volume or the "+ VOLUME" button to increase volume, so a volume level scale (slider) will be displayed at the bottom of the screen.

Programme Selecting

Press the "+P/CH" button to select the next programme or the "P/CH-" button to select the previous programme.

Entering The Menu

Press the “MENU” button on the control panel at the top of the TV to enter the menu. "+P/CH" / "P/CH-" and "VOLUME -" / "+ VOLUME" buttons on the TV are used as navigation buttons in the menu.

AV Mode

Press the "TV / AV" button on the control panel at the top of the TV to switch your TV to EXT modes.

Operating With Remote Control

The remote control handset of your TV is designed to control all the functions of your TV. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in Menu System section.
Volume Setting

Press the “V +” button to increase volume. Press the “- V” button to decrease volume. A volume level scale (slider) will be displayed at the bottom of the screen.

Programme Selecting

(Previous or next programme)
• Press the “- P” button to select the previous programme.
• Press the “P +” button to select the next programme.

Programme Selecting (direct access):
Press digit buttons on the remote control handset to select programmes between 0 and 9. The TV will switch to the selected programme after a short delay.
• For a two digit programme number enter the second digit after pressing the first digit within 2 seconds.

Menu System

Your TV has been designed with a menu system to provide easy manipulation of a multifunction system.

Press the “M” button to enter the menu. Press ↓ / ↑ button to select a menu title and then ↓ / ↑ button to select a menu item and ↓ / ↑ or “OK” button to enter the menu item.

You can access the menus directly by pressing the coloured buttons on the remote control:

<table>
<thead>
<tr>
<th>Button</th>
<th>Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Sound Menu</td>
</tr>
<tr>
<td>Green</td>
<td>Picture Menu</td>
</tr>
<tr>
<td>Yellow</td>
<td>Feature Menu</td>
</tr>
<tr>
<td>Blue</td>
<td>Install Menu</td>
</tr>
</tbody>
</table>

• Press the “M” or TV button to return to the previous menu.

Picture menu

By pressing ↓ / ↑ button, select the first icon. Picture menu appears on the screen.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Cinema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>62</td>
</tr>
<tr>
<td>Brightness</td>
<td>24</td>
</tr>
<tr>
<td>Sharpness</td>
<td>10</td>
</tr>
<tr>
<td>Colour</td>
<td>32</td>
</tr>
<tr>
<td>Colour Temp</td>
<td>Warm</td>
</tr>
<tr>
<td>Noise Reduction</td>
<td>Off</td>
</tr>
<tr>
<td>Film Mode</td>
<td>Off</td>
</tr>
<tr>
<td>3D Comb</td>
<td>Off</td>
</tr>
<tr>
<td>Reset</td>
<td></td>
</tr>
</tbody>
</table>

Mode

By pressing ↓ / ↑ button, select Mode. Press ↓ / ↑ button to choose one of these options: Natural, Cinema and Dynamic. Picture Mode can be directly changed via pressing the “PP” button on the remote control.

Contrast

By pressing ↓ / ↑ button, select Contrast. Press ↑ button to increase contrast. Press ↓ button to decrease contrast. Contrast level can be adjusted between 0 and 63.

Brightness

By pressing ↓ / ↑ button, select Brightness. Press ↑ button to increase brightness. Press ↓ button to decrease brightness. Brightness level can be adjusted between 0 and 63.

Sharpness

By pressing ↓ / ↑ button, select Sharpness. Press ↑ button to increase sharpness. Press ↓ button to decrease sharpness. Sharpness level can be adjusted between 0 and 31.
Colour
By pressing ↑ / ↓ button, select **Colour**. Press ▶ button to increase colour. Press ◀ button to decrease colour. Colour level can be adjusted between 0 and 99.

Hue
This item is displayed in picture menu when the TV receives an NTSC signal. By pressing ↑ / ↓ button, select **Hue**. Press ▶ button to increase hue level. Press ◀ button to decrease hue level. Hue level can be adjusted between -31 and 31.

Colour Temp
By pressing ↑ / ↓ button, select **Colour Temp**. Press ◀ / ▶ button to choose one of these options: **Cool**, **Normal** and **Warm**.

Noise Reduction
This item is used to reduce the image noise and improve the picture quality at weak signals.

By pressing ↑ / ↓ button, select **Noise Reduction**. Press ◀ / ▶ button to set Noise reduction level to Off, Low, Medium or High.

Film Mode
Films are recorded at a different number of frames per second to normal television programmes.

By pressing ↑ / ↓ button, select **Film Mode**. Press ◀ / ▶ button to set this feature On or Off. Turn this feature on when you are watching films to see the fast motion scenes clearly.

3D Comb
3D Comb is used to improve colour transitions and colour quality of pictures.

By pressing ↑ / ↓ button, select **3D Comb**. Press ◀ / ▶ button to set this feature On or Off.

Reset
By pressing ↑ / ↓ button, select **Reset**. Press ◀ / ▶ or “OK” button to reset the picture modes to factory default settings.

Sound menu
By pressing ◀ / ▶ button, select the second icon. Sound menu appears on the screen.

**Volume**
By pressing ↑ / ↓ button, select **Volume**. Press ▶ button to increase volume level. Press ◀ button to decrease volume level. Volume level can be adjusted between 0 and 63.

**Equalizer**
By pressing ↑ / ↓ button, select **Equalizer**. Press ◀ / ▶ or “OK” button to enter equalizer menu.
In equalizer menu the sound mode can be changed to User, Pop, Rock, Jazz, Flat and Classic by pressing ↑ / ↓ button. Equalizer menu settings can be changed only when Sound Mode is User. Select the desired frequency by ↑ / ↓ button and increase or decrease the frequency gain by pressing ↓ / ↑ button.

Press the “M” button to return to the previous menu.

**Balance**

By pressing ↑ / ↓ button, select Balance. Press ↑ button to increase balance to the right. Press ↓ button to increase balance to the left. Balance level can be adjusted between -31 and 31.

**Headphone**

By pressing ↑ / ↓ button, select Headphone. Press ↓ / ↑ or “OK” button to enter headphone menu.

### Volume

By pressing ↑ / ↓ button, select Volume. Press ↑ button to increase hp volume level. Press ↓ button to decrease hp volume level. Headphone volume level can be adjusted between 0 and 63.

**Sound Mode**

By pressing ↑ / ↓ button, select Sound Mode. Press ↓ / ↑ button to change sound mode.

Sound mode is used to identify sound mode of the headphone and can be set to mono, stereo, dual a or dual b according to the transmission.

**Balance**

By pressing ↑ / ↓ button, select Balance. Press ↑ button to increase balance to the right. Press ↓ button to decrease balance to the left. Balance level can be adjusted between -31 and 31.

Press the “M” button to return to the previous menu.

**Sound Mode**

By pressing ↑ / ↓ button, select Sound Mode. Press ↓ / ↑ button to change the mode.

You can select Mono, Stereo, Dual A or Dual B mode, only if the selected channel supports that mode.

In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.

**AVL**

Automatic Volume Limiting (AVL) function adjusts the sound to obtain fixed output level between programs, having different sound levels.

Pressing ↓ / ↑ button will turn this feature on or off.

**Effect**

You can use this feature to switch the sound effect on or off. If the current sound system is Mono and the sound effect is switched on, then the sound will be heard as if it is Stereo. If the current sound system is Stereo, switching this effect on will give a more spatial effect.

Pressing ↓ / ↑ button will turn this feature on or off.
Dynamic Bass

Dynamic Bass is used to increase bass effect of the TV set. By pressing ↑ / ↓ button, select Dynamic Bass. By pressing ↓ / → button set Dynamic bass to Low, High or Off. It is not recommended to select High if listening at high volume levels.

Feature menu

By pressing ↓ / → button, select the third icon. Feature menu appears on the screen.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep Timer</td>
<td>Off</td>
</tr>
<tr>
<td>Child Lock</td>
<td>Off</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
<tr>
<td>Ext-2 Out</td>
<td>EXT - 1</td>
</tr>
<tr>
<td>Default Zoom</td>
<td>Panoramic</td>
</tr>
<tr>
<td>Menu Background</td>
<td>Translucent</td>
</tr>
<tr>
<td>Menu Timeout</td>
<td>30 sec</td>
</tr>
<tr>
<td>Teletext Language</td>
<td>West</td>
</tr>
</tbody>
</table>

Sleep Timer

By pressing ↑ / ↓ button, select Sleep Timer. The timer can be programmed between Off and 2 hours in steps of 10 minutes by pressing ↓ / → button. If sleep timer is activated, at the end of the selected time, the TV automatically goes into stand-by mode.

Child Lock

You can use this feature to prevent children from turning the TV on or changing programmes or adjustments etc. without remote control.

The child lock feature can be set by ↓ / → button to either On or Off. When Off is selected, there will be no difference in the operation of your TV. When On is selected, the TV can only be controlled by the remote control handset. In this case the control panel buttons, except the Power on/off button, at the rear side of the TV will not work. If one of these buttons is pressed, “Child Lock On” will be displayed on the screen.

Language

By pressing ↑ / ↓ button, select Language. By pressing ↓ / → button, you can select the language.

Ext-2 Out

By pressing ↑ / ↓ button, select Ext-2 Out. You can set Ext-2 Out to TV, EXT-1, EXT-3, EXT-4, EXT-5 or PC by pressing ↓ / → button.

Note: Only audio output is available for EXT-3, EXT-5 and PC. The other options have both audio and video outputs.

Default Zoom

By pressing ↑ / ↓ button, select Default Zoom. You can set Default Zoom to Panoramic, 4:3 or 14:9 Zoom by pressing ↓ / → button.

If there is no WSS or aspect ratio (picture size) information and zoom mode is selected as Auto by pressing the “WIDE” button, then the zoom mode will automatically change to Default Zoom setting. See also Zoom Modes on page 48.

Menu Background

By pressing ↑ / ↓ button, select Menu Background. You can change menu background to Translucent or Opaque by pressing ↓ / → button.

Menu Timeout

By pressing ↑ / ↓ button, select Menu Timeout. Press ↓ / → button to change menu timeout to 15 sec, 30 sec or 60 sec.
Teletext Language

By pressing ▲ / ▼ button, select Teletext Language. Press ◀ / ▶ button to change Teletext Language to West, East, Cyrillic, Turk/Gre or Arabic. This will normally be set to West for Western Europe.

Install menu

By pressing ◀ / ▶ button, select the fourth icon. Install menu appears on the screen.

| Program | 1 |
| Band | C |
| Channel | 12 |
| Colour System | AUTO |
| Sound System | BG |
| Fine Tune | 0 |
| Search | 224.25 |
| VCR | Off |
| Store Program | |

Program

By pressing ▲ / ▼ button, select Program. Press ◀ / ▶ button to select the program number. You can also enter a number via digit buttons on the remote control. There are 100 program storage between 0 and 99.

Band

Band can be selected either “C” or “S” by pressing ◀ / ▶ button.

Channel

Channel can be changed by ◀ / ▶ button or Digit Buttons.

Colour System

By pressing ▲ / ▼ button, select Colour System. Press ◀ / ▶ button to change the colour system to PAL, SECAM, PAL60 or AUTO.

If Sound System is set to I, SECAM is not available for the Colour System.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Sound System

By pressing ▲ / ▼ button, select Sound System. Press ◀ / ▶ button to change the sound system to BG, DK, I, L or LP.

Fine Tune

By pressing ▲ / ▼ button, select Fine Tune. Press ◀ / ▶ button to adjust the tuning.

Search

By pressing ▲ / ▼ button, select Search. Press ◀ / ▶ button to start program searching. The searching will stop when a signal is found. You can also enter a frequency value directly by pressing the digit buttons.

VCR (Video Cassette Recorder)

- This item can be seen in all modes except EXT-3, EXT-5 and PC.
- If you want to watch a VCR source from one of these modes, then it will be better to set VCR mode “on”. For this, while the cursor is on this item press the ◀ / ▶ buttons to set it “On”.
- If you want to watch a DVD, then you must set this item “Off”.

Store Program

By pressing ▲ / ▼ button, select Store Program. Press ◀ / ▶ or “OK” button to store the adjustments. “Program Stored” will be displayed on the screen.
Program menu

By pressing ↓ / ↑ button, select the fifth icon. Program menu appears on the screen.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>ITV</td>
<td>11</td>
</tr>
<tr>
<td>02</td>
<td>ZDF</td>
<td>12</td>
</tr>
<tr>
<td>03</td>
<td>CH5</td>
<td>13</td>
</tr>
<tr>
<td>04</td>
<td>C - 02</td>
<td>14</td>
</tr>
<tr>
<td>05</td>
<td>C - 05</td>
<td>15</td>
</tr>
<tr>
<td>06</td>
<td>C - 06</td>
<td>16</td>
</tr>
<tr>
<td>07</td>
<td>C - 08</td>
<td>17</td>
</tr>
<tr>
<td>08</td>
<td>C - 21</td>
<td>18</td>
</tr>
<tr>
<td>09</td>
<td>C - 23</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>C - 35</td>
<td>20</td>
</tr>
</tbody>
</table>

By moving the cursor in four directions you can reach 20 programmes in the same page. You can scroll the pages up or down by pressing the navigation buttons to see all the programmes in TV mode (except the AV mode).

By cursor action, programme selection is done automatically.

Name:

To change the name of a decided programme, select the programme and press the RED button.

The first letter of the selected name starts to blink. Press ↑ / ↓ button to change that letter and ← / → button to select the other letters. By pressing the RED button, you can store the name.

Insert:

Select the programme which you want to insert by navigation buttons. Press the GREEN button. By navigation buttons move the selected programme to the decided programme space and press the GREEN button again.

Delete:

To delete a programme, press the YELLOW button. Pressing the YELLOW button again erases the selected programme from the programme list, and the programmes below shift one up.

APS (Automatic Programming System)

When you press the BLUE button for APS, the following warning screen will be displayed.

Press the BLUE button to cancel APS if you do not want to delete your existing programme list.

To continue APS, first select the country by pressing ↓ / ↑ button and then press the RED or “OK” button.

After APS is finalized, the programme table will appear on the screen.
Source menu

By pressing \( \downarrow / \uparrow \) button, select the sixth icon. Source menu appears on the screen.

In source menu, highlight a source by pressing \( \uparrow / \downarrow \) button and switch to that mode by pressing \( \downarrow / \uparrow \) or "OK" button.

PC Mode

Installation

- Power off both Computer and Display before making any connections.
- Set your PC’s resolution correctly before connecting to the TV. See the table on page 54 for supported modes.
- Use a D-SUB cable to connect the TV’s PC input to the computer’s RGB output terminal.

![15 Pin Mini D-Sub Connector](image)

- Tighten the screws of the Display cable until the connectors are fastened securely (finger-tighten only).

In TV mode, you can directly enter the PC mode via pressing the PC button.

Menu System in PC mode

Press the "M" button. The menu will be displayed in the middle of the screen.

PC Picture Position Menu

By pressing \( \downarrow / \uparrow \) button, select the first icon. PC Picture Position menu appears on the screen.

<table>
<thead>
<tr>
<th>Autoposition</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>H Position</td>
<td>50</td>
</tr>
<tr>
<td>V Position</td>
<td>50</td>
</tr>
<tr>
<td>Dot Clock</td>
<td>50</td>
</tr>
<tr>
<td>Phase</td>
<td>50</td>
</tr>
</tbody>
</table>

Autoposition

If you shift the picture horizontally or vertically to an unwanted position, use this item to put the picture into correct place automatically.

- Select Autoposition item by using \( \uparrow / \downarrow \) buttons.
- Press \( \uparrow \) or “OK” button.

Warning: Auto position adjustment recommended to be done with the full screen image for the proper adjustment.

H (Horizontal) Position

This item shifts the image horizontally to right hand side or left hand side of the screen.

- Select H Position item by using \( \uparrow / \downarrow \) button.
- Use \( \downarrow / \uparrow \) button to adjust the value.
V (Vertical) Position
This item shifts the image vertically towards the top or bottom of the screen.
• Select V Position item by using up / down button.
• Use left / right button to adjust the value.

Dot Clock
Dot Clock adjustments correct interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.
• Use left / right button to adjust the value.

Phase
Depending on the resolution and scan frequency that you input to the TV Set, you may see a hazy or noisy picture on the screen. In such a case you can use this item to get a clear picture by trial and error method.
• Use left / right button to adjust the value.

PC Picture Menu
By pressing left / right button, select the second icon. PC Picture menu appears on the screen.

![PC Picture Menu]

Contrast, Brightness and Colour Temperature adjustments in this menu are identical to adjustments defined in TV picture menu.

When Colour Temp is Manual, you can also adjust the R,G,B items. R, G and B adjust the TV image colour in PC mode. You can change the TV colour to your desired colour: R (Red), G (Green), B (Blue)
Select Reset and press left / right or “OK” button to reset the picture modes to factory default settings.

Sound Menu
By pressing left / right button, select the third icon. Sound menu appears on the screen.
The items in this menu are described at Sound menu starting page 40.

Feature Menu
By pressing left / right button, select the fourth icon. Feature menu appears on the screen.
The items in this menu are described at Feature menu starting page 42.

Source Menu
By pressing left / right button, select the fifth icon. Source menu appears on the screen.
In source menu, highlight a source by pressing up / down button and switch to that mode by pressing left / right or “OK” button.

Sound in PC mode
• Connect the PC’s Audio output to the TV’s PC Audio In socket with an audio cable.
Other Features

TV Status

Programme Number, Programme Name, Sound Indicator and Zoom Mode are displayed on the upper right side of the screen when a new programme is entered, button is pressed.

Mute Indicator

It is placed in the upper left side of the screen when enabled.

To cancel mute, there are two alternatives; the first one is pressing the button and the second one is increasing/decreasing the volume level.

PIP and PAP modes

Press the button to switch to PIP mode.
At PIP Mode, a small picture (PIP picture) is displayed on the main picture. There are 1 size and 4 positions (upper left, upper right, bottom left and bottom right)(optional) available for the PIP window. You can use button to change the PIP position. Aspect Ratio of the PIP window is fixed and 4:3.
When PIP Mode is entered, the default active window is PIP window and the active window is indicated by a white frame around it. The active window can be changed by pressing button. The status info OSD belongs to active window. The place of the status OSDs are same for both windows.

By pressing "P+" or ".-P" button or directly entering the channel number, you can watch the channel you want at the active window.

Press the button to select the source for active window.

Press "M" button to see the main menu in PIP mode. Items change due to the case whether the active window is PIP window or main window.

You can see the available sources in source menu.

Press the button again to exit the PIP mode.

Press the button to switch to PAP mode.
At PAP Mode, two pictures with equal sizes are displayed on the screen. Aspect Ratios of the windows are fixed.
When you switch to PAP Mode, Main window in PAP Mode is displayed on the right side of the screen. The active window can be changed by pressing button.

By pressing "P+" or ".-P" button or directly entering the channel number, you can watch the channel you want at the active window.

Press the button to select the source for active window.

Press "M" button to see the main menu in PAP mode. Items change due to the case whether the active window is PAP window or main window.

You can see the available sources in source menu.

In PAP mode:

Press the teletext button to display the teletext page of the channel at the main window. It is displayed at the left window. Press the teletext button or TV button to exit from teletext.

Press the button again to exit the PAP mode.

Freeze Picture

You can freeze the picture on the screen by pressing the OK button. At PIP and PAP layouts; only the main picture can be frozen.
**Zoom Modes**

Zoom mode can be changed by pressing the **WIDE button**. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following ZOOM modes.

**Note:** You can only choose 4:3 and FULL in PC mode.

**Auto:**

When a **WSS (Wide Screen Signalling)** signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the ZOOM mode according to the WSS signal.

* When the **AUTO** mode does not function correctly due to poor WSS signal quality or when you want to change the ZOOM mode, change to another ZOOM mode manually.

**Full:**

This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.

* For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the **Full** mode to restore the picture to its original shape.

**Cinema:**

This zooms up the wide picture (16:9 aspect ratio) to the full screen.

**16:9 Subtitle:**

This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.

---

**“Default Zoom” Modes:**

**4:3**

Use to view a normal picture (4:3 aspect ratio) as this is its original shape.

**14:9 Zoom:**

This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.

**Panoramic:**

This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.

The top and bottom of the picture are slightly cut off.


**Teletext**

Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

**To Operate Teletext**

- Select a TV station where Teletext is being transmitted.
- Press the button. Usually the list of contents (index) is displayed on the screen.

**To Select A Page Of Teletext**

- Press the appropriate digit buttons for the required Teletext page number.
  The selected page number is displayed in the top left corner of the screen. The Teletext page counter searches until the selected page number is located, the desired page is then displayed on the screen.
- Press the or “P +” button to move the Teletext screen forward one page at a time.
- Press the or "- P" button to move the Teletext screen backward one page at a time.

**To Select Index Page**

- To select the page number of the index (generally page 100), press the button.

**To Select Teletext With A TV Programme**

- Press the button. The text is now superimposed over the programme on the screen.

- Press the button again to return to the Teletext page.

**To Select Double Height Text**

- Press the button for the top half of the information page to be displayed in double height text.
- Press the button again for the bottom half of the information page to be displayed in double height text.
- Press the button once more for the full page of normal height text.

**To Reveal “Concealed” Information**

- Pressing the button once will reveal answers on a quiz or games page.
- Pressing the button again will conceal the revealed answers.

**To Stop Automatic Page Change**

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

- Press the button to stop the automatic page change.
- Press the button again to allow the next page to be displayed.

**To Select A Subcode Page**

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press the button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press the button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.
• Press the  button to display the selected Teletext page.

**To Exit Teletext**

• Press the  button. The screen will switch to TV mode.

**To Display The Time**

• While watching a TV programme with Teletext transmission press the  button. The current time information, captured from Teletext will be displayed on the screen.
• If the programme being watched does not have Teletext transmission, no information will be displayed.

**Fastext**

Your TV supports the 1000 page Teletext system. When the page number of any of the 1000 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically. If the requested page is not in memory, the system will search for the requested page number and save the 1000 pages including the requested page into memory after finding it.
• Press the  button to move the Teletext screen forward one page at a time.
• Press the  button to move the Teletext screen backward one page at a time.

**For Fastext**

The subject-heading for the information may have a particular colour.
• Press an appropriate RED, GREEN, YELLOW or BLUE button in order to reach the relevant page quickly.

---

**For TOP text**

TOP text mode of operation will be activated automatically according to the transmission.
• If TOP text transmission is present, colour coded buttons will appear in status row.
• If TOP text transmission is not present, status row will not appear.

The subject-heading for information may be located in coloured box.

In Top mode the  or  commands will request the next or previous page respectively. If TOP text transmission is not available, in case of operation of these commands, wraparound occurs. For example page 100 appears to be one greater than page 199.
Connect Peripheral Equipment

There is a wide range of audio and video equipment that can be connected to your TV. The following connection diagrams show you where the different (Optional) equipment should be connected at the rear side of the TV.

High Definition

Your LCD Television is capable of displaying High Definition pictures from devices such as a High Definition Satellite Receiver or DVD Player. These devices must be connected via the HDMI socket (EXT-5) or Component Socket (EXT-3). These sockets can accept either 720p or 1080i signals.

Note: For proper connection of a device to HDMI input of your TV via using a DVI-to-HDMI cable, use PC Audio In input for sound connection.

Via The Scart

LCD TV has 2 Scart sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Scart sockets to the TV, use SCART 1 or SCART 2.

If an external device is connected via the Scart sockets, the TV will be switched to AV mode automatically.

• Do not connect Digital Set Top Box devices via Scart 1. Use Scart 2.

Via Aerial Input

If you want to connect to your TV, peripherals like video recorders or decoders, but the device you want to connect does not have a Scart socket, you should connect it to the Aerial input of the TV.

If the VCR is connected via Aerial input it is suggested to use Programme 0.

Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

• Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

• Connect the decoder to the TV with a Scart cable to SCART 1.

TV And Video Recorder

To use this option you can;

• Connect an NTSC VCR player to a Scart socket at the rear side of the TV.
• Connect an NTSC VCR player to RCA Jacks at the side of the TV.

Then, press AV button to select appropriate source.

Copy Facility

Source selection for VCR recording.

• Select Feature menu.
• Select Ext-2 Out by pressing ◄ / ► button.
• Select a source to copy the picture from that source.

Search For And Store The Test Signal Of The Video Recorder

• Unplug the aerial cable from the aerial socket of your video recorder.
• Switch on your TV and put the video recorder on the test signal. (See the booklet for your video recorder.)
• Enter the Install menu and select search.
• Search for the test signal of your video recorder in the same way as you searched for and stored the TV signals. Store the test signal under programme number 0.

• Replace the aerial cable in the aerial socket of your video recorder once you have stored the test signal.

Camera And Camcorder

To Connect To AV Input

Connect your camera or camcorder to AV (EXT-4) input at the right side of the TV.

• Connect your equipment to the TV via VIDEO (yellow), AUDIO R (red) and AUDIO L (white) inputs. You must connect the jacks to the input using the same colour.

To Connect To S-VHS Input

Connect your camera or camcorder S-VHS input (EXT-4S) at the right side of the TV.

• Connect your equipment to the TV via S-VHS input and audio inputs of AV inputs by using S-VHS cables.

Connect The Decoder To The Video Recorder

Some video recorders have a special Scart socket for decoder.

• Connect a Scart cable to the Scart socket of your decoder and to the special Scart socket of your video recorder. Refer to the booklet of your video recorder.

• To connect your video recorder to the TV, refer to the TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket at the right side of the TV, to connect headphones.
Aerial Connection

Outdoor Aerial Connection

- Connect Peripheral Equipment

**either connect the aerial straight to your TV**...

- or connect the aerial through a VCR...

- or through a VCR and satellite decoder...

- or through a satellite decoder...

**headphone connection**

**camcorder connection**
PC Input Typical Display Modes

The display has a maximum resolution of 1366 x 768, vertical sync. frequency range of 56-85 Hz and a horizontal sync. frequency range of 30-69 KHz.

The following table is an illustration of some of the typical video display modes.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Resolution</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Horizontal</td>
<td>Vertical</td>
</tr>
<tr>
<td>1</td>
<td>640</td>
<td>400</td>
</tr>
<tr>
<td>2</td>
<td>640</td>
<td>480</td>
</tr>
<tr>
<td>3*</td>
<td>848</td>
<td>480</td>
</tr>
<tr>
<td>4</td>
<td>640</td>
<td>480</td>
</tr>
<tr>
<td>5</td>
<td>640</td>
<td>480</td>
</tr>
<tr>
<td>6</td>
<td>640</td>
<td>480</td>
</tr>
<tr>
<td>7</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>8</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>9</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>10</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>11</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>12</td>
<td>1024</td>
<td>768</td>
</tr>
<tr>
<td>13</td>
<td>1024</td>
<td>768</td>
</tr>
<tr>
<td>14</td>
<td>1024</td>
<td>768</td>
</tr>
<tr>
<td>15</td>
<td>1024</td>
<td>768</td>
</tr>
<tr>
<td>16</td>
<td>1152</td>
<td>864</td>
</tr>
<tr>
<td>17</td>
<td>1280</td>
<td>1024</td>
</tr>
<tr>
<td>18*</td>
<td>1280</td>
<td>768</td>
</tr>
<tr>
<td>19*</td>
<td>1280</td>
<td>768</td>
</tr>
<tr>
<td>20</td>
<td>1366</td>
<td>768</td>
</tr>
</tbody>
</table>

*Only available in Full and PAP modes, not in 4:3 mode
**Tips**

**Care Of The Screen**

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer.

**Poor Picture**

Have you selected the correct TV system? Is your TV set or house aerial located too close to non-earthed audio equipment or neon lights, etc.?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

**No Picture**

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket?

Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

**No Picture** could mean that your TV is not receiving a transmission. Have you selected the correct button on the remote control? Try once more.

**Sound**

You can not hear any sound. Did you perhaps interrupt the sound, pressing the button?

**Sound** is coming from only one of the speakers. Is the balance set to one extreme? See **Sound** menu.

**Remote Control**

Your TV no longer responds to the remote control. Perhaps the batteries are exhausted. If so you can still use the local buttons at the bottom of the TV.

Have you selected the wrong menu? Press the button to return to TV mode or press the “M” button to return to the previous menu.

**No solution:**

Switch your TV set off and on. If this does not work, call the service personnel; never attempt to repair it yourself.
Specifications

TV BROADCASTING
PAL/SECAM B/G D/K K’ I/I’ L/L’

RECEIVING CHANNELS
VHF (BAND I/III)
UHF (BAND U)
HYPERBAND
CABLE TV (S1-S20/ S21-S41)

NUMBER OF PRESET CHANNELS  100

CHANNEL INDICATOR
On Screen Display

RF AERIAL INPUT
75 Ohm (unbalanced)

OPERATING VOLTAGE
230V AC, 50 Hz.

AUDIO
German+Nicam Stereo

AUDIO OUTPUT POWER ($W_{RMS}$) (%10 THD)
2 x 8

POWER CONSUMPTION (W)
180 W
3 W (Stand-by)

PANEL
16:9 display, 32” (82 cm) Screen Size

DIMENSIONS (mm)

<table>
<thead>
<tr>
<th>DIMENSIONS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
</tr>
<tr>
<td>180</td>
</tr>
</tbody>
</table>

- 56 -