

LOEWE.

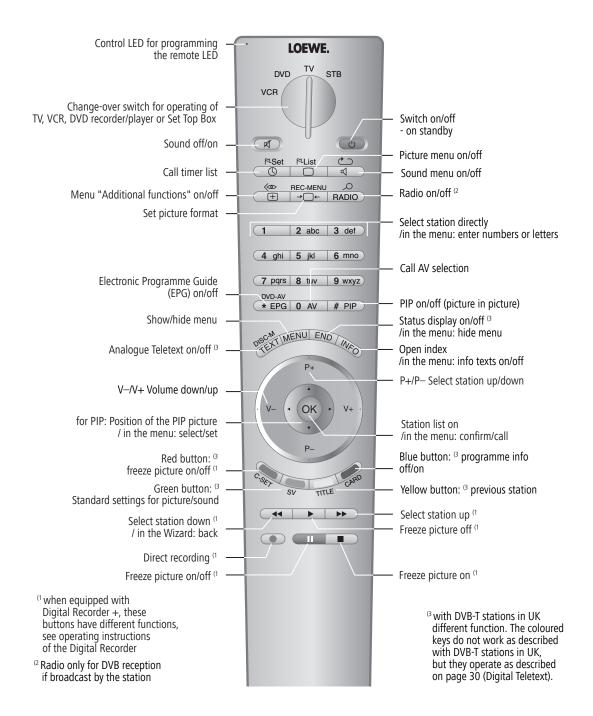
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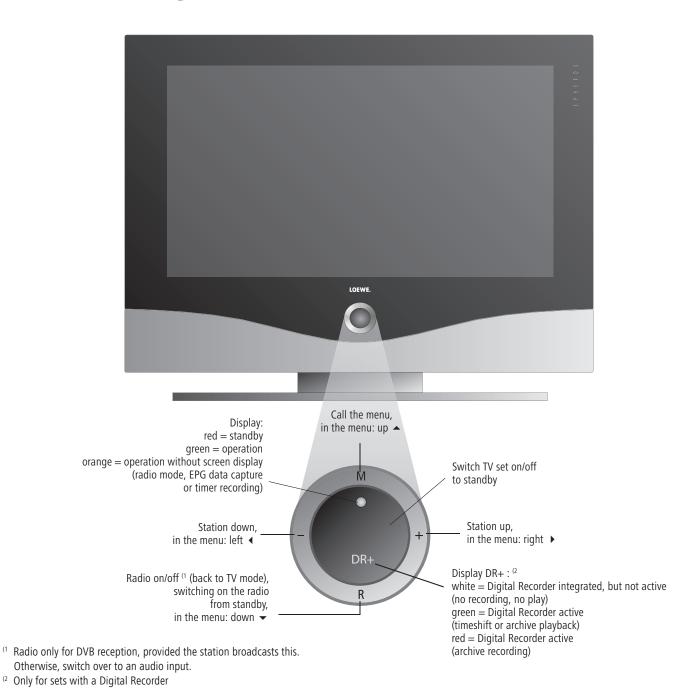
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Image+ demo mode

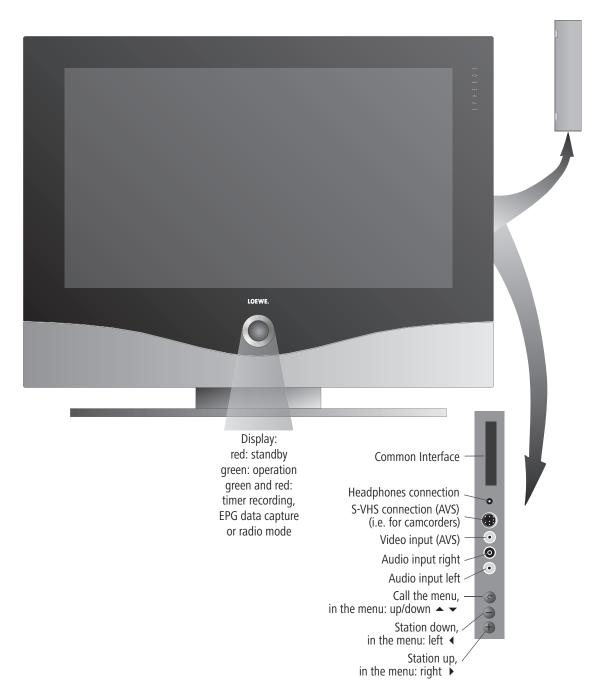
Remote control - TV functions



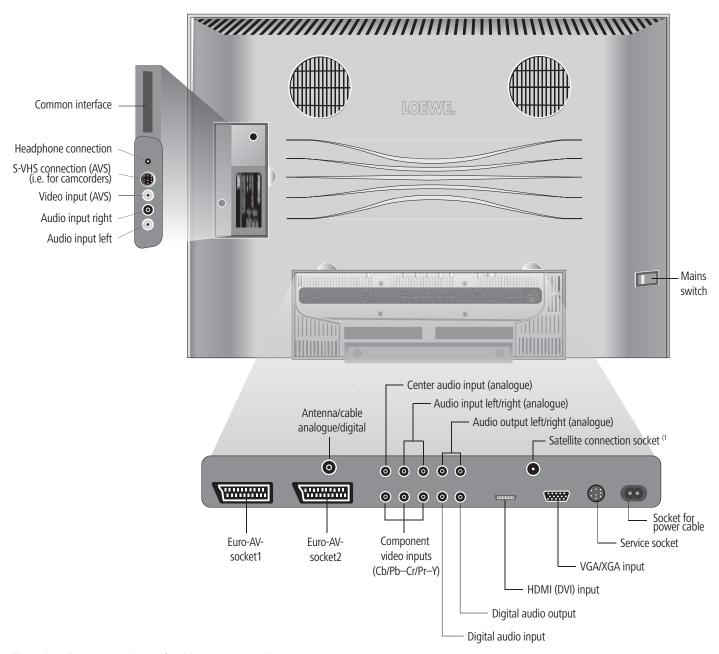
Control units Spheros R 26 and R 32



Control unit Spheros R 37

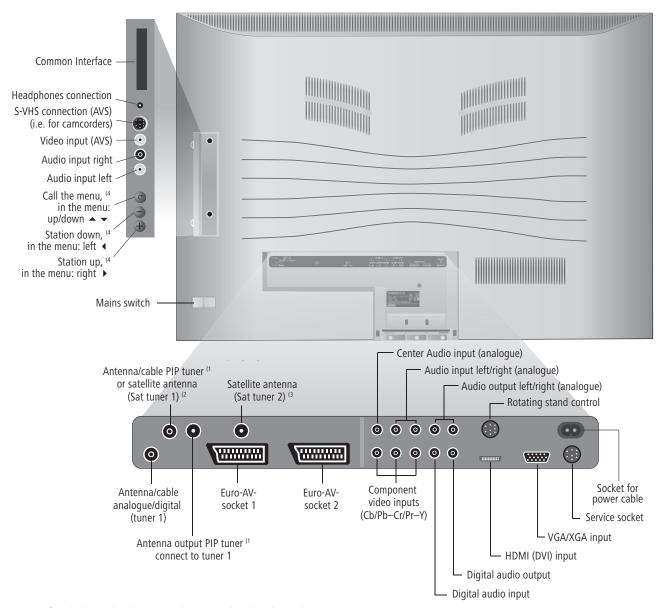


Connections to rear panel - Spheros R 26



⁽¹ Digital satellite tuner can be retrofitted (not in UK version).

Connections to rear panel - Spheros R 32 and R 37



⁽¹ Can be retrofitted. This is already integrated in sets with a digital recorder.

 $^{^{(2)}}$ Digital satellite tuner can be retrofitted (not in UK version).

⁽³ Can be retrofitted for sets with a digital recorder.

⁽⁴ Only for Spheros R 37.

Welcome

Thank you!

At Loewe, we combine the highest standards of technology, design and user friendliness. This applies equally for TV, video and accessories.

Your new TV set is ideally equipped for the TV standard of the future - "HDTV" (High Definition Television). With its high-resolution screen and the future-proof digital interfaces HDMI, you have the option to view HD content with excellent picture quality. It therefore carries the European quality mark "HD ready". Digital TV is steadily spreading via terrestrial reception, in the cable network and via satellite. Loewe supplies sets equipped with DVB-T and DVB-C (DVB-C not for UK). A digital satellite tuner (DVB-S) can be retrofitted. The DVB integrated within the TV set is operated via the TV set menus using the remote control. We have designed this TV set so that it is easy to operate by using menus. Information about settings in menus is shown automatically; this enables you to understand the context quickly.

You will find the answers to many of your technical queries in the index of your TV. If you want to operate the TV, you can access functions directly from the index. This saves you from having to read through detailed operating instructions and is the reason why this operating manual only explains the most important operating steps.

Integrated features

The maximum equipment is described in these operating instructions (without optional retrofit kits). Functions indicated by * are not available in all TV sets. Menu contents may differ from the ones shown, depending on how your TV is equipped.

You can display how your set is equipped in the "Integrated features" index (press the **INFO** button in the TV mode if no menu is displayed; the "Integrated features" menu item is also displayed in the index before the initial letter A). There are separate operating instructions for Digital Recorder Plus with the additional DVB satellite tuner.

Scope of delivery

- LCD-TFT TV set
- RC3 remote control with 2 batteries
- Table stand
- · Marketing and service card
- Fabric hose
- Screen cleaner set (only for Spheros R32/37)
- These operating instructions

Transporting

Only transport the unit in an upright position. Hold the set by the top and bottom edges of the housing. The LCD screen is made of glass and/or plastic and may break if not handled carefully. Should the LCD screen become damaged or should the liquid crystal begin to leak, then it is imperative you wear rubber gloves when removing the set. Should the liquid come in contact with your skin, thoroughly rinse with water immediately.

Installation options

As a desktop unit

Use the stand included in delivery. There are assembly instructions included with the stand. First read these assembly instructions and then set up your set.

As a rotating desktop unit for Spheros R 32/37

- Manual rotating plate for table stand TS51, Loewe order no. 89417001
- Table stand Motor Unit, Loewe order no. 88197B51.
 You also require an adapter kit, Loewe order no. 89117A00.

As a wall-mounted unit

- Wall holder WM52 for Spheros R 26, Loewe order no. 64493A00.
- Wall holder WM53 for Spheros R 32/37, Loewe order no. 63493A10.

As a free-standing unit mounted on a rack for Spheros R 32/37

- Flat TV F-Stand 3. Loewe order no. 64498A00.
- Spheros Rack 1, Loewe order no. 58490A01/M01.

As a rotating, freestanding unit mounted on a rack for Spheros R 32/37

- Spheros Rack Cube 1, Loewe order no. 61493A00/M00 + A30/M30.
- Spheros Rack Cube 1 TV, Loewe order no. 62497A00/M00 + A30/M30.
- Spheros Rack Cube 2, Loewe order no. 61494A30/M30.

You also require an adapter kit for the Cube Racks, Loewe order no. 89117A00.

Welcome

Note on the LCD screen

The TV set with an LCD screen you have purchased meets the highest quality requirements and has been tested for pixel errors. Despite the utmost caution in production of the displays, it cannot be totally ruled out that some of the pixels might be defective for technological reasons. Please understand that such effects cannot be considered a unit defect as defined by the warranty as long as they are within the limits specified by the standard.

Cleaning

Use only a soft, clean, damp cloth to clean the TV set, the screen and remote control (do not use any caustic or abrasive cleaning agents).
Use the cleaning cloth and cleaning agent included for this purpose (only for Spheros R32/37).

Note: The front screen is to be removed only by a specialist dealer.

Disposal

Packing and box

You have chosen a long lasting technical product of very high quality. We have paid a fee to authorised recyclers who will collect the packing from your dealer for disposal, pursuant to domestic regulations. Nevertheless, we recommend you to keep the original box and packing material for optimum protection if you have to transport the set.

The set

Attention: The EU directive 2002/96/EC regulates the proper way to recycle, handle and utilise used electronic devices. Hence, all used electronic devices are to be disposed of separately. Please do not dispose of this set in the normal household rubbish.

You may return your used set free of charge at designated recycling centres or at your specialist dealer whenever you purchase a new, comparable set. You can find out more about recycling (also for countries outside the EU) from your local government.

For your safety

For your safety and to avoid unnecessary damage to your TV set, please read and observe the following safety instructions:

 This TV set is designed exclusively for reception and reproduction of video and audio signals.

 This equipment is designed for domestic and office environments and must not be used in rooms with high humidity (e.g. bathroom, sauna) or high concentrations of dust (e.g.

workshops). If the equipment is used in the open air, ensure that it is protected against moisture (rain, drips, splashes, sprayed water or dew). Do not place any containers filled with liquids or lit candles on top of the TV.

High levels of moisture and concentrations of dust cause



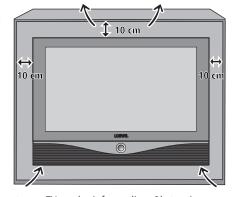
leakage currents in the equipment, which can lead to danger of electric shock or fire.

The manufacturer's warranty is only valid for use in the specified permissible environment.

• If you have moved the TV set out of the cold into a warm environment, leave

it standing for about an hour since condensation may form.

 This equipment must only be connected to a mains power supply which has the same voltage and frequency as that specified on the rating plate; use the power cable provided. Incorrect voltages can damage the equipment.



Like all electronic equipment, your TV needs air for cooling. Obstruction
of the air circulation can cause fires. Therefore the air vents on the back
must always be kept free. Please do not place newspapers or cloths on/over
the TV.

If the TV is placed in a cabinet or on a shelf, leave at least 10 cm at the sides and 10 cm at the top to ensure sufficient air circulation.

Position the set so that it is not exposed to direct sunlight and additional heating from radiators.

- Prevent any metal parts, needles, paper clips, liquids, wax or the like from getting into the TV set through the air venting slits in the rear panel. This can lead to short-circuits and possibly to fire. If something should get into the inside of the TV set, pull out the plug immediately and notify customer service.
- Never remove the back of the TV set yourself. Repair and servicing of your TV set should only be carried out by authorised TV technicians.
- Place the TV set on a level, firm base. The set should not protrude at the front when installing in cabinets or shelves.
 - Only use original accessories if possible, e.g. Loewe wall holders and stands. Never let children handle the TV unattended.
 - Do not allow children to play in the immediate vicinity of the TV, they could knock, shift or pull it over and injure someone.

Never leave the TV on unsupervised.

- Do not install the TV where there may be vibrations. Vibrations can lead to material stress.
- Pull out the power and antenna cables during thunderstorms. Surge
 voltages caused by lightning strikes can damage the TV through the antenna
 system and the mains. Also remove the antenna and mains plugs in long
 periods of absence.
- The mains plug of the TV set must be easily accessible so that the set can be disconnected at any time.
- Lay the mains cable in such a way that it will not be damaged. The power
 cable may not be kinked or laid over sharp edges, not stood on and not
 exposed to chemicals, the latter also applies to the device as a whole. A
 mains cable with damaged insulation can lead to electric shocks and is a fire
 risk.
- When removing the mains plug, pull the plug housing and not the cable.
 The wires in the plug could be damaged and cause a short circuit the next time it is plugged in.

Remote control

Batteries

To insert or change the batteries, press on the arrow. Slide the battery compartment cover downwards and remove it. Insert LR 03 alkaline-manganese batteries (AAA) and ensure that the + and - ends are positioned correctly.





Then push the cover back on from the bottom.

Note on disposing batteries



The batteries provided contain no harmful materials such as cadmium, lead or mercury.

Regulations concerning used batteries stipulate that batteries may no longer be thrown out with the household rubbish. Deposit any used batteries free of charge into the designated collection containers set up at commercial businesses.

Setting up the remote control for operating the TV



Set the rotary switch to "TV"

How to operate other equipment is described as of page 39.

Connection

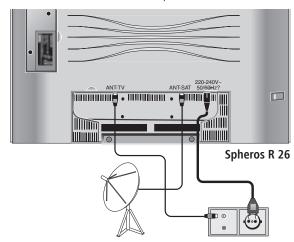
Power mains

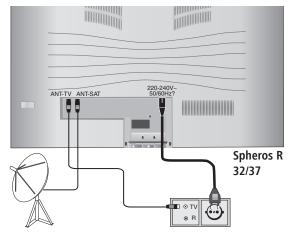
Remove the cover for the connections.

Connect the TV set to a 220-240V/50- 60 hertz power outlet. Plug the small plug of the mains cable into the mains socket on the rear of the TV set; plug the large mains plug into a mains socket.

Antennas

Plug the antenna plug of your antenna/cable system or the room antenna for DVB-T into the ANT-TV socket (Tuner 1 for Spheros R 32/37).





If the reception conditions are good, then a room antenna may be used for DVB-T. Passive and active room antennas are available on the market. The power is supplied for an active antenna via the antenna connection. For automatic programming or in "TV Menu — Connections — Antenna DVB — Antenna DVB-T," the distribution voltage (5 volts) is to be set correspondingly. It may be practical to use a nondirectional antenna. If the location is outside the normal transmitting range, then a unidirectional antenna may also be used to improve the reception quality.

You can find out more on the digital stations that can be received in your area at your specialist dealer.

If a Spheros R32/37 was retrofitted with a PIP tuner or if this is already integrated in a set with a digital recorder. The PIP tuner output has to be connected with the ANT-TV socket (Tuner 1). See illustration on page 7.

If a Digital Satellite Tuner 1 has been retrofitted, connect your satellite antenna system to the ANT-SAT socket.

If a Digital Satellite Tuner 2 has been retrofitted (only in conjunction with the Digital Recorder+), then connect one antenna cable each, for example from the antenna switch or from the twin LNC, to both SAT sockets.

When laying the cable, use the cable clips affixed beneath the TV set. Replace the connection cover on the TV set.

Handling the fabric hose



Use the fabric hose included to lay the mains cables, antenna cables or cables from other electronic components systematically; then lead the hose with the cables to the connection boxes. This provides you with an elegant solution when laying cables.

The diameter of the fabric hose increases when you push it together lengthwise (see illustration). This makes it easier for you to push through cables with plugs.

Using the common interface module

(only for sets with CI slot)

In order to be able to receive encrypted digital stations, the common interface module (CI module) and the smartcard both have to be inserted into the corresponding slot of your TV set. You can purchase the CI module and smartcard at your specialist dealer. You can find the slot on the back of your TV set, see the illustration on pages 6/7.

- 1. Make sure the TV set is switched off with the mains switch on the set, or pull the mains plugs.
- 2. First push the smartcard into the CI module as far as it will go. Insert it so

that the side with the golden contact chip faces the side of the module printed with the supplier's brand logo. Printed arrows indicate how to insert the card. Also follow the installation instructions included with the smartcard



 Slide the CI module (1 carefully into the slot with the contact side facing the front. The logo on the common interface module should be visible. Make sure the module is not twisted in the process. Do not use force. When the module locks, the eject button is pressed outwards.

⁽¹⁾ The CI module and the smartcard are not included in the scope of delivery for this set; you can usually obtain them at your specialist dealer.



Switching on

Press the mains switch (for Spheros R 37, the set switches on immediately, the green indicator lamp lights up).





The red indicator on the set now lights up (standby mode). Switch on the set using the switch integrated in the indicator (for further operating options see page 14).

Automatic programming

Automatic programming of the TV set is started the first time you switch it on. Follow the menus.



By pressing in one of the arrow directions, you can choose the settings ...



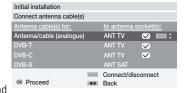
... and confirm your settings by pressing OK. You then go to the next menu.



Back to the previous menu.

- 1. First you have to select the menu language.
- 2. By pressing the **OK** button, you can call the menu "Connect antenna cable(s)". If you want to receive digital stations via satellite, then choose

"DVB-S" - confirm using the **yellow** coloured key. If you also want to receive digital terrestrial stations (DVB-T), then select "DVB-T". Also select "Antenna/cable (analogue)" - this way the standard analogue stations can also be searched for and



saved. If you can receive digital stations from the cable network, then select "DVB-C" using the **yellow** coloured key.

- 3. For the country-specific station sorting, enter the location.
- 4. If you have selected "DVB-T", you then reach the menu "Antenna DVB-T". If you use an active antenna, then select "yes (5V)".
- In the "Select satellite installation" menu, make the selection that
 corresponds to your satellite antenna installation.
 <u>Note</u>: If you have any questions on how your satellite antenna installation
 is configured and on the antenna settings, consult your antenna installer or
 your specialist dealer.
- Select the satellite the antenna is directed at, such as ASTRA1. If you only receive one satellite ...
- In the following menu, specify whether the station search should take place in the high and low band ("Yes") or only in the low band ("No"). Note: For most satellites, a station search is required in both bands.
- 8. For the low band and high band, the standard frequencies 9750 MHz (9.75 GHz) and 10600 MHz (10.6 GHz) are preset. If your satellite antenna is equipped with an LNC (LNB) with a divergent oscillator frequency, specify the corresponding frequency for low and high band respectively. Note: The correct display of the received frequencies in the "TV menu – Settings – Channels – Manual adjustment" depends upon this setting.

- You should receive a picture with sound with the settings previously made (only for ASTRA 1 and HOTBIRD). Then press OK.
- 10. In the "Pre-programming" menu, select the factory-set pre-programming to programme the satellite stations quickly.
 - To ensure all stations that can be currently received are searched for and saved, select "No" at this point.
 - Symbol rates: The standard symbol rates 22000 and 27500 are preset. If you would like to receive stations with different symbol rates, specify the corresponding values here using the numeric buttons on your remote control.
- 11. Press **OK** to obtain an overview of the settings with which the automatic programming is to take place.
- 12. Press the **OK** button again and the station search will start. The TV set searches for, sorts and saves all the TV stations that can be received, according to your settings and the antennas connected.
- 13. When the TV stations are saved, you will receive a corresponding message.
- 14. Press the **OK** button and the set then searches for the radio stations.
- 15. The TV set searches for, saves and sorts all radio stations which can be received with your antenna system.
- 16. Then log on your video equipment, decoder and audio system using the connection wizard and connect these to the TV according to the connection diagram displayed. If you want to connect other equipment later, you can find information as of page 32.

You can repeat the initial installation at any time, e.g. after moving house. Call the index using the **INFO** button (in the TV mode, if no menu is opened). Select the index item "Repeat initial installation" (you will find this listed separately before the letter A). Press **OK** to start the initial installation.

<u>Note</u>: For DVB-T stations in UK the stations are tied to "Logical Channel Numbers" -- "LCN" and sorted from 1-799. Digital stations without "LCN" are stored from 800 onwards. Analogue stations are stored from 1001.

Station sorting

Note: not with DVB-T stations in UK.

You can change the station sorting that was carried out automatically later at any time, see "TV menu — Settings — Channels — Change stations".

Directing DVB-T antenna

Note: not with DVB-T stations in UK.

If you use a room antenna to receive one or more DVB-T stations that have picture and sound interference, then you should change the location of where the antenna is set up.

To help you direct your antenna or to help you determine the most suitable location to set up the antenna, your TV set has a display for the signal quality **C/N** and the signal strength **Level**.

Consult your specialist dealer to find out which channels and frequency bands (VHF or UHF) are used to broadcast the digital TV stations in your area. On any one channel, several digital stations are broadcast.

Select a TV channel

- 1. Call the "TV menu" via the **MENU** button.
- Use ◆ ▶ to select "Settings", then use ▼ to select the menu line underneath.
- 3. Select "Channels", then use ▼ to select the menu line underneath.



 Select "Manual adjustment" and call the menu using OK (in UK, the manual adjustment does not work with DVB-T).



- 5. For digital stations, select "Signal source DVB-T".
- 6. Use the **numerical buttons** to specify the corresponding channel number. Depending on the channel selected and country, the system automatically sets the corresponding bandwidth of 7 or 8 MHz. You should only change the bandwidth under special circumstances if the channel raster in your area is different from the standard.

When you receive a digital station, the system displays the signal quality **C**/ **N** via a bar/numeric value and the signal strength via **Level**. The antenna's direction or position is best when the largest values possible are displayed (long bar) for the signal quality and signal strength.

- 7. Direct the antenna so that the largest numerical value/bar size is reached.
- If no signal is found in the channel set, you can start the frequency search run by pressing the **blue** button within the band selected (VHF or UHF).
- 9. Check the other channels one after another on which digital stations are broadcast terrestrially in your area.
 - For the weakest station, direct the antenna so that the maximum numerical value/bar size is achieved.
- 10. After you position or direct the antenna, we recommend to search for all the stations using the "Search wizard"

(TV menu – Settings – Channels – Search wizard).

Daily operation

Switching on/off

Your TV is equipped with an eco-standby power supply unit. On standby, the power consumption drops to low power. If you want to save even more electricity, switch the set off with the mains switch. However, please bear in mind that EPG data (electronic programme guide) will be lost and programmed timer recordings will not be performed by the TV.

Switching off





If the TV set is switched on, you can switch it to standby using the blue ON/OFF button on the remote control or by using the indicator field on the set. The red lamp on the TV set lights up. If the orange indicator lights up or if both the green and red indicators light up, then, for Spheros R 37, a timer recording is being made, EPG data is being captured or radio operation without screen display is active.

Switching on the TV set



From standby, it is best to switch the set back on using the blue On/Off button or by using the numeric buttons of the remote control (1-99).



Or, for Spheros R 26/32, use the switch integrated in the indicator on the set.

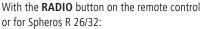
The green indicator on the TV set lights up.



Or switch on the TV set with **OK**, you can then see the station list and select a station.

Switch on radio







Switch on radio using **R** on the control ring of the TV set.

If you switch off the TV set using the mains switch on the set, the indicator no longer lights up.

<u>For Spheros R 26/32</u>: If the TV set is switched off via the mains switch, you have to switch it into the standby mode first via the mains switch and then switch it on using one of the above mentioned methods.

Changing stations

... with the P+/P- buttons on the remote control



Stations up/down

When changing, the station display is visible for a few seconds.



If additional languages are broadcast with DVB stations, then the set displays the language/sound selection under the station display. Call the language/sound selection by using the **green** coloured key and select using riangle riang

... with the numeric buttons of the remote control

The set has a dynamic memory with 1680 station memory locations. If up to 9 stations are stored, you only need to enter one digit; up to 99 stations, two digits are needed; up to 999 stations, three digits are needed (refer to the station list to see how many stations have been stored).

1 digit stations



Press buttons 0 -9 for one second, and the station changes instantly.

<u>Or</u> press button 0-9 briefly, the station then changes after 2 seconds (the station changes immediately when only 9 stations are saved).

2- and 3-digit stations



After briefly pressing the first numeric button(s), keep the last numeric button pressed for one second, the station then changes immediately.

Or press all numeric buttons briefly, the station then changes after 2 seconds (the station changes immediately if up to 99 or 999 stations are saved).

4 digit stations

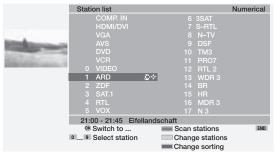


Press the four numeric buttons briefly, the channel then changes immediately.

... via the station list



Use OK to call the station list





Select the station (if possible, the selected station will be displayed as a small picture) or ...



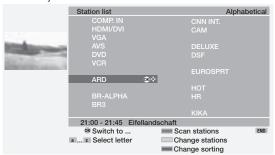
... select with numeric buttons



call selected station



Blue coloured key: sort alphabetically/according to bouquets/ numerically



For an alphabetical display: Enter letters with the numeric button (like on a mobile phone keypad), select with ▼ ▲ ◆ ▶ and call with **OK**.

For bouquet display (sorting according to broadcasting chains, only for DVB

stations, not for DVB-T stations in UK): Enter bouquet number, select with

→ ▲ ◆ ▶ and call with OK.

Digital stations are indicated by D; encrypted stations are indicated by D. Child-protected stations are indicated by .

Call last viewed station (for DVB-T stations in UK)



You can switch back and forth quickly between two stations using this button.

Basics about the menu operation

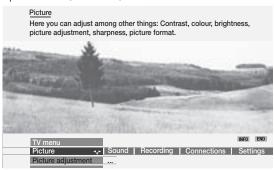
Menus are called via the **MENU** button or via the button for special menus and can be hidden by using these buttons or by using the **END** button. The menu is displayed in the bottom section of the screen. At the top, you can see additional information for the menu point selected. In the menus, navigate by using the cursor ▲ ▼ ◀ ▶ . You can make settings by using ◀ ▶ . When you exit the menu, the settings are adopted.

Example of the menu operation

We shall demonstrate how to navigate with the menus using the TV menu as an example. You can see which buttons you can use in the dark blue field on your TV set.

MENU

Open TV menu (in TV mode).





Select the function in the TV menu, e.g. "Sound" (for sound settings). Use ▶ to move the menu points displayed on the right into the dark blue field; use ◀ to move the menu points displayed on the left.





Select the sound function below with ▼ or **OK**; you will then see a list of the sound settings.

TV menu Sound			INFO	END
Treble ↔	Bass	more		
4				

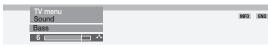


In the sound settings, also select the function with ◀ ▶, e.g. "Bass" (for increasing or reducing the bass tones).

	TV menu Sound				INFO	END
Treble	Bass	ψI	more			
	6					



To set the bass tones, use **▼** or **OK** to select the setting bar underneath.





Set the bass tones by using \blacktriangleleft \blacktriangleright .



If you want to make other sound settings, move up with to "Bass" and select with • • e.g. "more...". You can also move up further to "Sound" by using and select other settings in the TV menu (such as, picture settings).

	TV menu Sound		INFO END
Bass	more	⊕ ♦	Treble



Use **OK** to call additional sound settings.

	TV menu Sound	[IN	FO END
Bass	Loudspeaker sound ❖	l' Headphone volume Headphone sound	' Auto vo
	Stereo		



Select the sound setting using \blacktriangleleft \blacktriangleright , e.g. "Auto volume" and ...

	TV menu Sound						INFO	END
sound	' Auto volume	 ♦1	AV a	audio signal	I' Maximun	n volume	I' Baland	се
	off							



... use \checkmark to select the auto volume option.

TV menu Sound	N.	FO	END
Auto volume			
off ↔	on		



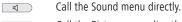
Use ◆ ▶ to select "on" and activate the auto volume.

TV menu Sound	INFO	END
Auto volume		
off on 💠		



Press the **END** button to hide the menu.

Apart from the TV menu shown here, other menus can be opened in TV mode as follows:







Quick calls for Image+ *, teletext subtitles, personal text pages, headphone volume, scan stations and to move the picture up and down.



Green coloured key: Call standard settings for picture and sound.



Using the volume control, you can also open other sound settings, such as Sound via, Sound adjustment, Sound effects and Loudness.

The key • or **OK** must be pressed for the duration of the volume display for this.

For the info system ...

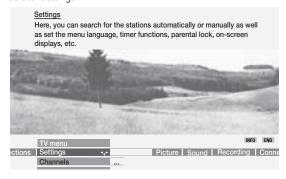
For each menu point, an info text is displayed at the top of the picture to help you with the setting. This saves you from having to refer back to the operating instructions. We shall demonstrate this using the station search option as an example:

MENU

Call the TV menu.



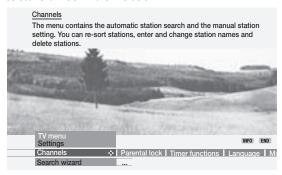
Select "Settings".



In this example, you can see the options available after "Settings".

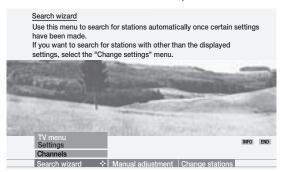


If you want to search for new stations, for example, use ▼ to select "Channels" in the line below.



The info text indicates which settings you can make in "Channels".





The info text explains how you are to proceed.

Upon delivery, the TV set is configured so that the info texts are always displayed (Automatic info "yes"). In this case, you can hide the info texts by using the **INFO** button.

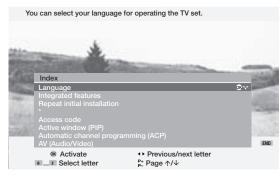
You can also configure the TV set so that you call the info texts when needed by using the **INFO** button (Automatic info "no"). You can find the setting to switch the automatic info option on or off via "TV menu under Settings — Miscellaneous — On-screen displays — Automatic info — yes/no".

For the index ...

Using the index, you can access many operational functions directly. You can also find a great deal of information on technical terms about television. Before the alphabetical sorting, you can find the menu language option, the list of features integrated into the TV set and the repeat initial installation option.

INFO

Call the index in the TV mode (without any other on-screen displays).



Info on the index item selected is visible at the top of the picture. If the OK symbol is displayed in the line selected, you can use the **OK** button to access the menu directly and carry out settings or selections.

This is how to select the index item:



Enter the first letter using the numeric buttons on the remote control (like on a mobile phone keypad); or



use ◆ ▶ to go to the previous/next letter, or



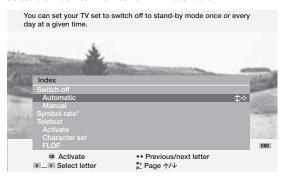
use P+/P— to scroll up or down through the pages



and use $\overline{}$ to go from line to line.

For example, you want to have the TV set switch off automatically:

Select the index item "Switch off" — "Automatic".





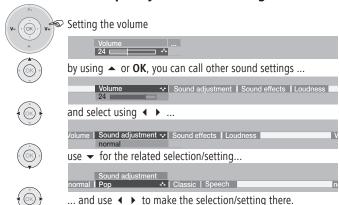
Use the **OK** button to call "Switch off" - "Automatic".



The corresponding menu "Timer functions" is displayed (in the TV menu - Settings). You can now choose between "Switch off today only" and "Switch off daily" and enter the time.

Setting the sound

Volume and other frequently used sound settings

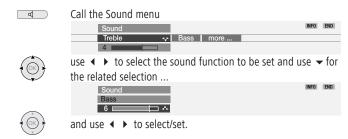


Sound adjustment allows you to adjust the sound characteristics to the station's sound. The Sound effects settings allow you to expand a Dolby Pro Logic Signal to a virtual surround signal by using "Dolby Virtual"; by using "Panorama", you can enhance the foundation of the stereo sound virtually for the loudspeakers.

Sound off/on

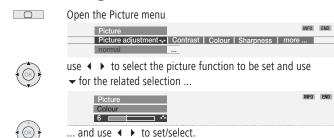


Other sound settings:



Sound settings: Treble and bass. Different menu items are displayed depending on the connected audio device (AURO, hi-fi amplifier). Under "more ..." you will find the sound selection for loudspeakers and headphones, auto volume, headphone volume, AV audio signal, maximum volume and balance.

Picture settings



Picture settings: Picture adjustment, Contrast, Colour, Sharpness. Under "more ...", you can find settings for Brightness, Image+*, Picture format, Move picture up/down, Auto format and Film quality improvement DMM*.

Direct control on TV set

On page 4 and 5, you can find illustrations of the control units located on the set.

Switching station on the TV set

Station up: with the button +
Station down: with the button -

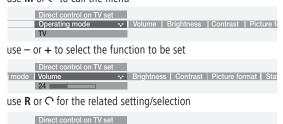
Switching the radio on/off or switching over to the radio

Press **R** to switch the radio on or off (not for Spheros R 37).

Additional functions via the menu

In the radio or TV operating modes, you can make settings for Volume, Brightness, Contrast, Picture format and Stations. "Service" is intended for the customer service department.

use M or C to call the menu



use – or + to set/select.

Use M or C to move one level up; you can use - or + to select other functions.

Operating modes – TV

TV

In initial installation and daily operation, the TV set is in TV mode. This is also the case when none of the other modes of operation, such as EPG, Teletext, PIP or Radio, have been selected.

Each of these operating modes has a separate menu with separate functions for the coloured keys. Call the menu via the **MENU** button.

How the coloured keys work in TV mode

<u>Note</u>: The coloured keys do not work as described below with DVB-T stations in UK, but they operate as described on page 30 (Digital Teletext).



Red: the TV picture freezes. Pressing this button again starts the picture moving again. If your TV set is equipped with a digital recorder, the DR archive is called.

Green: Call personal settings/factory settings for picture and sound, save picture and sound settings as personal settings.



Yellow: call last station viewed. You can switch back and forth quickly between two stations using this button.

Blue: call programme info.



Show status display

END

Show/hide status



In the line above, you can see the name of the station and the sound mode. Displayed below are additional options (Time, Sound mode, Alarm time and

Sleep timer) that can be selected in the "TV menu — Settings — Miscellaneous — On-screen displays".

For the status display, the DVB station providers may offer additional selection options for each station. Thus, the corresponding colour key or the **TEXT** button is displayed:



Red: channel selection for multi-channel providers.

Green: language/sound selection.

Yellow: time selection.

Blue: protection of minors.

TEXT

DVB subtitles.

If you press one of the coloured keys during the status display or you press the **TEXT** button, the related selection menu is displayed.

The status display subtitles refer only to the "DVB subtitles" and are not provided by all stations. The options you see depend on the particular station (many stations broadcast subtitles via teletext).

The status display is displayed automatically when a new programme begins with options different to the previous one.

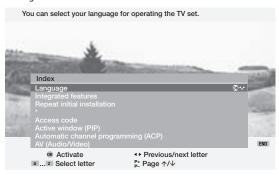
Notes.

- In the sound mode, Mono! means that you have switched manually from stereo to mono, for example.
- The selection menus are only available as long as the status display is displayed. You can call them again at any time by pressing the END button on your remote control.

Calling the index

INFO

Calling the index



You can find more information on the index on page 18.

Operating modes - TV

Call additional functions



Select additional functions such as Image+*, Teletext subtitles, Personal teletext pages, Headphone volume and Scan stations.



Call timer overview



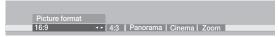
If timer recordings have been programmed, you will see when which station is recorded here.



Select picture format



The TV set sets the best picture format automatically when Auto format is switched on. If you want to set a different format, press this button until the desired format is selected or select the format with \P .



Move picture up/down



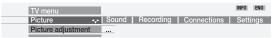
To make picture subtitles visible, you can use ▲ ▼ to move the picture up or down with the picture formats "Panorama", "Cinema" and "Zoom".

<u>Note</u>: for DVB-T stations in UK you can switch back and forth quickly between two stations using this button.

TV menu



Call up the TV menu



You will find a description of the picture and sound settings on page 19. The TV menu offers other options for recording, connections and settings of the TV set.

For a recorder that is logged in, you can find the following menus in the "Recording wizard":

Recording wizard - to programme new timer recordings

• Via EPG (not for DVB-T in UK) • Via teletext • Manual You will find further information about timer recording on page 33.

Timer list

Here you will find a list of programmes programmed for recording. You can change the recording data or delete programmed recordings and programme new recordings.

Pre-record time and Post record time

For recordings without VPS/PDC, set a lead and lag time here so that the programme is fully recorded despite any slight differences in the time.

Under "Connections" you will find the following functions:

New devices/modifications (connection wizard)

The connection wizard helps you connect and log in additional equipment such as video recorders, DVD players/recorders, camcorders/digital cameras, pay TV decoders, equipment with component signals and digital HDMI/DVI signals.

Antenna DVB

Antenna DVB-T
 Antenna DVB-S (1)

You can find more information on pages 13 and 14.

Digital Link Plus

Transmission of the station data from the TV set to the video/DVD recorder if a recorder with Digital Link Plus is connected.

Miscellaneous (connections)

- Set AV norm for the connections manually (if it is not recognised automatically).
- "Assign audio digital signals" to one of the AV sockets.
- "Allow switching voltage" to display the signals of the connected device immediately on the screen via Euro AV during playback.
- RGB insertions at AV2 to play back RGB signals at all station storage locations.
- · Select decoder stations and set sound encoding.

Under "Settings" you will find the following functions:

Channels

Here you can search for and store new stations automatically or manually. With "Change stations", you can rearrange and delete the stations and change station names (not for DVB-T stations in UK).

Search wizard
 Manual adjustment
 Change stations

⁽¹ only for sets with DVB-S

Operating modes – TV

Parental lock

You can lock the TV "immediatley", "daily" for a certain period of time or "agerelated" for DVB programmes with age restrictions.

Here, you determine the PIN to enter if you want to watch locked programmes.

Timer functions

You can have your TV switch off at pre-programmed times or wake you/remind you with radio or TV. If you are not present at the time, a safety prompt makes sure the TV switches off again after 5 minutes.

- Switch off today only Switch off daily One-time reminder
- Wake up Mon-Fri
 Wake up Sat
 Wake up Sun
 Wake up with *
- Wake up signal volume

Language

If "your" menu language is not set, you have to select the "Language" menu in a language that you do not understand. Therefore here is a simple way to set the right menu language:

- 1. Press the **INFO** button (index), select the <u>first</u> listing (this is above A).
- 2. Call the language selection by pressing the **OK** button.
- 3. Now select the desired language and confirm it by pressing the **OK** key.
- 4. Hide the menu again with the **END** button.

Miscellaneous (settings)

On-screen displays

You can set the duration and position of the station and status display, define the content of the status display and switch the automatic info texts on or off:

- On-screen display time On-screen display position Programme title
- Sound mode Time Alarm time Sleep timer Automatic info

Time and date

If you receive teletext, the set registers the time and date. These are required for timer recordings, timer functions and EPG. If you do not receive teletext, then you have to enter the date and time; you should <u>not</u> switch off the set using the mains switch since the settings will then be lost.

DVB software

Update of DVB software via satellite (1.

DVB subtitles

- Subtitles off Subtitles for the Hearing Impaired
- Subtitles as translation for foreign language programmes

DVB character set

• Western European • Polish • Standard.

Rotate TV

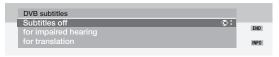
For Spheros R 32/37, it is possible to rotate the TV set on a Loewe rotating stand. You can find out more on page 41.

⁽¹ only for sets with DVB-S

DVB subtitles

If the station provides DVB subtitles, then you can have the TV display them permanently or suppress their display. You can also select between subtitles "for translation" or "for the Hearing Impaired".

- 1. Call the "TV menu" via the **MENU** button.
- 2. Select the "Settings" line and confirm using **OK**.
- 3. Select the "Miscellaneous" line and confirm using **OK**.
- 4. Select the "DVB subtitles" line and confirm using **OK**.



<u>Note</u>: If you have selected "Subtitles off", then the set generates an on-screen display when subtitles are available.

By using the **END** button, you can open the status display and you can display the subtitles again by using the **TEXT** button.

- Call the status display by pressing the **END** button, if it is not yet displayed.
- When the status display is visible, press the TEXT button.
 Select the desired language and confirm using OK. The presetting changes for the current programme.
- · Which subtitle languages can be selected depends on the provider.
- The automatic shortlist is determined by the menu language and the selection made in the "DVB subtitles" settings menu.
- By pressing the **END** button, you can hide the menu again.

Note: DVB-T subtitles are not available when Digital Teletext is selected.

Operating modes - TV

Removing the CI module

- 1. Switch the TV set off by pulling the mains plug from the power outlet.
- 2. Remove the cover from the back of the set on the upper left.
- Press the eject button at the module slot; the module is unlocked.
- 4. Remove the module from the set.

Inserting a new CI module

After you insert a new CI module and switch the TV set on, the following dialogue is displayed:

Autom. station search
Your TV set has detected a new Cl module. This requires a station search for all new receivable stations.

After you press the **OK** button, the system starts the wizard to carry out the automatic station search.

Check the proposed search parameters and let the set search for new stations.

Calling the CI module menu

Here you can call up information on the inserted common interface module and the smartcard. To do this, use the **MENU** button to call the TV menu, select the line "Settings", "Miscellaneous" and then the entry "CI module - xxx" (in place of "xxx" stands the name of the provider which is output by the smartcard. The content of this menu depends on the particular supplier of the CI module.

Note: This menu is only available for digital stations

Installing new DVB software

To ensure your DVB-S receiver is always performing at the state of the art, newly developed software versions are made available from time to time; these are broadcast via satellite and can be automatically installed on your set (only possible via ASTRA1).

Software is recognised automatically

The set can determine whether a new software version is available. This occurs at night when your EPG is automatically updated. For this, your TV set has to remain in the standby mode (do not switch off using the on/off button on the set).

If a new software version has been found, the set will indicate this with an onscreen message the next time the set is switched on: You can decide whether or not you want to download the new software.

Confirm using **OK**, so that the new software can be loaded and installed via satellite. Continue as set out in the "Downloading software" section.

Searching for new software

If you want to carry out a manual search for new software, proceed as follows:

- 1. Call the TV menu using the **MENU** button.
- 2. Confirm the "Settings" using **OK**.
- 3. Confirm the "Miscellaneous" using OK.
- 4. Select "DVB software" and press OK.



- 5. If you start the search using **OK**, the set checks if there is a new software version available.
- 6. If there is a new version available, the set generates an on-screen message.



Downloading software

- 1. If you press OK in the dialogue above, you can decide whether you want to download the new software immediately, when you switch off the set or not at all. We recommend you always carry out the update of the digital software. This is the only way to ensure your set is always up to date.
- 2. If you do decide to update, the software is initialised on your set and you are informed of the status with a grey bar.
 - Do not switch your set off during this time. This process may take up to one hour. You will be informed when the process is completed.
- 3. After the software is updated, you will be asked to switch your TV set off and back on again using the on/standby switch.

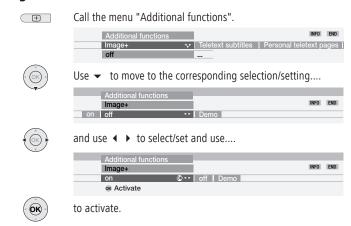
If the update was not carried out, you will be asked several times when you switch on the set whether you want to carry out this update.

Operating modes - TV

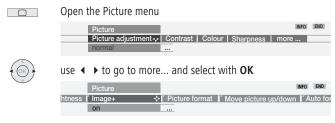
Image+

Image+ is a picture improvement specially developed by LOEWE, which delivers a sharper, lifelike and colour-fast picture richer in detail and contrast. Image+ is only integrated in Spheros R 32 and Spheros R 37.

Image+ menu



IIn the Image+ menu, the functions Image+ "on", "off" and "Demo" can be set. The Image+ settings can also be opened via the "Picture menu".

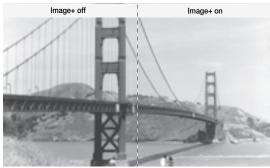


Select/set as described in the Image+ menu.

The standard setting at delivery of the set is Image+ "on".

Image+ demo mode

In order to show the way Image+ works, a "Demo mode" is integrated. In "Demo mode", the current picture is divided into two parts. The left half of the picture is shown in "normal" mode, the right half in the Image+ optimised mode.



The demo mode can be closed by pressing on any button on the remote control.

Operating modes – PIP

Picture in picture (PIP)

<u>Note</u>: The coloured keys do not work as described below with DVB-T stations in UK, but they operate as described on page 30 (Digital Teletext).

Picture in picture displays are possible if the set has an analogue PIP tuner or a digital satellite tuner in addition to the analogue TV cable tuner. You can have a PIP tuner (not for Spheros R 26) or a digital satellite tuner (not for UK sets) retrofitted. If there is no other tuner installed, you can use PIP (AV-PIP) when playing a video recorder or DVD player.

For a retrofitted PIP tuner, the following PIP displays are possible: Main picture analogue — PIP picture analogue, Main picture digital — PIP picture analogue. The following is not possible: Main picture digital — PIP picture digital, Main picture analogue — PIP picture digital.

For "Split screen," the PIP picture is displayed on the right side of the screen. Both pictures share the screen in two equal halves. For the "Small PIP" setting, a small picture is displayed in the TV picture.

The green bar/frame indicates that the control commands have an effect on the PIP picture. The white bar/frame means that the control commands have an effect on the main picture. Use the **green** coloured key to switch between the PIP picture and the main picture, for example to change stations. The frame or bar between the pictures is green for the time being.

PIP

Show/hide PIP picture

PIP picture as freeze picture



The bar/frame has to be green. If not, press the **green** coloured key.

If you press the **red** coloured key, the PIP picture freezes. Press again - moving picture.

Selecting the station of the PIP picture



The bar/frame has to be green. If not, press the **green** coloured key. Then select the station as usual.



Select the station of the TV picture (main picture)



The bar/frame has to be white. If not, press the **green** coloured key. Then select the station as usual.

<u>Note</u>: For UK sets, you switch from the green bar/frame to the white by using the **PIP** key. The next time you press the **PIP** key, PIP is switched off.



PIP scan in the PIP picture



The bar/frame has to be green. If not, press the **green** coloured key.

Start scanning the stations using the **blue** coloured key. The bar/frame turns blue.

The stations now change automatically. Stop scanning the stations by using the **blue** coloured key. The bar/frame turns green again.

Interchanging PIP picture/TV picture



The bar/frame has to be green. If not, press the **green** coloured key.



Operating modes - PIP

Functions in the PIP menu

In the PIP menu, you can set the PIP type (small picture or split screen) and the position of the small picture.

MENU

Call the PIP menu (PIP must be active, green bar/frame)



Setting the PIP type

You can have the PIP picture displayed as a small PIP or split screen.

Switch to small PIP:



Select "Type" and then "Small PIP"



For the small PIP, you will see a coloured frame around the PIP picture.

Position of the PIP picture



Move the PIP picture with the arrow keys to a corner of the TV picture. In this case, the frame around the PIP picture has to be green, and there should not be any other displays visible on the screen.



Switch to split screen:

You can have the PIP picture displayed on the right hand side of the screen. Both pictures share the screen in two equal halves. You will see a coloured vertical bar between the pictures

MENU

Call the PIP menu (PIP must be active, green frame)



Select "Type" and then "Split Screen".



Operating modes – EPG

EPG - Programme guide

<u>Note</u>: The EPG does not work with DVB-T stations in UK. The "Now & Next" feature for programme info of the current and next broadcast is displayed instead.

EPG is an electronic programme guide. With this system, you can easily find the programmes that interest you (sorted according to day, time, channel and topic). You can mark programmes and programme recordings.

Depending on whether you are receiving analogue stations by cable/antenna or digital stations, you will have different programme guides.

A wizard is activated the first time you use EPG (not with DVB) which guides you through the necessary settings. Then run the data capture (see next page).

Using the EPG

* EPG Switch EPG on/off



The programme guide menu is divided into two areas: at the top, you can make the settings for the programme list (date, ..., topics); on the bottom, the programme list is displayed. Use the **blue** coloured key to switch between the two areas to make your selections.

All programmes **currently** running are listed initially in the programme list. With the \checkmark buttons, select the programme you want to watch and switch over with the **OK** button.

Brief information is shown below the programme list for some programmes. If more detailed information is available, you can call it using the **TEXT** button. Use **P+/P**— to scroll up or down through the pages of the programme guide. In the selection lines for date and time above, you will see the time change when scrolling; when you scroll further, the date also changes. When the "Time" line is selected, you can enter the time as of which the programmes are to be displayed; use the numeric buttons on your remote control to do this. Always enter four digits, such as 0900 for 9 a.m.

If programmes are displayed which have not yet started, you can mark these with the **OK** button. The TV set then switches automatically to this station at the given time. When receiving digital terrestrial and digital satellite stations, you may find that two identical EPG data are displayed in the "EPG (DVB)" menu for one station. If you call the EPG menu in the EPG mode by using the **MENU** button, then select "Station selection," you can select the duplicate station and deactivate it by using **OK**).

You have direct access to the selection lines above to pre-select the day, the time, the station and the topic.



Blue coloured key: Call Select date/time/channels/topics



Use

★ to select the menu line for the date, time, channels or topics. Use

★ to select within the menu line.

If, for example, you are looking for the next news, select today's date, "Soon" under Time, "All" under Channels and "News" under Topics.

Then you get a list of all news programmes in the programme list below.



If you want to mark one of these news programmes, return to the programme list using the **blue** coloured key, select the desired news programme by using **oK**.

Operating modes - EPG

In front of the programme's title, the system places an
incomplex the system on the set is switched on. If the TV is off, it switches on again automatically at the beginning of the marked programme if this has been set in the EPG menu. If you are out, a security prompt prevents the TV set staying on unattended.

Before leaving the upper selection lines using the **blue** coloured key, select a specific line. If you have switched back to the programme list, you can change this menu line using • • without having to leave the programme list.

Programming recording for recorders

The programme marked using the \checkmark buttons can be prepared for recording by pressing the **red** coloured key. In the following menu, confirm the timer data or change them as required. Then, a red dot is set in front of this programme in the EPG programme list as an identification (if timer data is being transferred to the recorder, no red dot is set). If you select this programme, you can delete it from the timer using the red coloured key (if the timer data has been transferred to a recorder, the timer has to be deleted there).

EPG menu



You will find the following settings in the EPG menu:

- Select provider Station selection Timer list Data capture
- · Switch on TV when marked

Selecting providers and stations

If you want to change the provider for analogue TV reception (the station which transmits EPG data) to have other stations evaluated, you can do this under "Select provider".

Select "Select provider" and call this menu using **OK**. If the station you want to switch to is not listed in the "Select provider" list, then use the **yellow** coloured key to start the automatic search for stations with EPG data. This takes a while.

Or, if you know the station that transmits EPG data, press the **blue** coloured key to compile manually. Select the provider in the station list and adopt it by using **OK** and return to the provider selection using **44**.

Select the provider in "Select provider" and adopt it using **OK**. Then a station list search is performed. The stations offered by the provider are displayed in a list.

If you want certain stations to be omitted from the programme guide, you can select and deactivate these via **Station selection**. Call the station selection by using the **blue** coloured key.

Now all stations are displayed (the DVB stations, too). Stations indicated with E are analogue terrestrial/cable stations; stations indicated with D are digital stations ready for the programme guide. Select the stations you want to omit from the programme guide one after another and deactivate each one by using **OK**.

Data capture

After these settings or after each time the set is switched off using the mains switch, the data must first be collected, before switching on the set. To do this, select the station you have defined as a provider and leave the TV set switched on for about one hour or switch the set to the standby mode. After about two minutes, the orange indicator on the set lights up (for Spheros R 37, both indicators light up). The data capture begins and lasts about 1 hour. The data are also automatically captured between 2 a.m. and 5 a.m. when the TV is switched to standby.

A prerequisite for data capture is that "Data capture" is "on" (for DVB + analogue) in the EPG menu.

<u>Note</u>: If the TV set is switched off using the mains switch or the mains plug is pulled out, all EPG data are lost.

If, for example, you cannot receive any analogue EPG providers or if you only use DVB, you should set the data capture to "on (only for DVB)".

Switch on TV when marked

You can have the TV switched on automatically from standby at the beginning of the marked programme. If you are not present at the time, a safety prompt makes sure the TV switches off again after 5 minutes.

Operating modes – Teletext

Analogue Teletext

Teletext transmits information such as news, weather, sports, programme previews and subtitles.

TEXT

Teletext on/off



Many stations use the TOP operating system, some use FLOF (e.g. CNN). Your TV supports both these systems. The pages are divided into topic groups and topics. After switching on the teletext, up to 3,000 pages are stored for fast access.

Page selection with the coloured keys

The coloured bars (in TOP) or the coloured writing (in FLOF) in the next to the last line show you which coloured keys you can use to scroll to topic groups and topics.



Red: back to the previously seen page (not in FLOF)

Green: on to the next page (not in FLOF)

Yellow: to the next topic (only in TOP and FLOF)

Blue: to the next topic group (only in TOP and FLOF)

Other page selection options:



Select one page number specified on the page by using ▼ ▲ (Page Catching)





call



In **Multiple pages** scroll using ◀ ▶ . You can see which multiples pages can be called in the bottom menu line.



INFO

Call contents page 100



Call the **TOP table**

The TOP table is a general list of teletext. You can only call the table for stations that use the TOP operating system.



Use **▼** ▲ to select the topic group.

Select the topic column using .

Select the topic with ▼ ▲ and display page with **OK**.

1 2 7 pars Enter the page number directly

Displaying teletext pages

0 AV

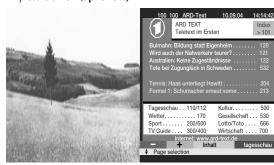
Stop self-turning pages (HOLD)

9 wxyz

Zoom page: top part - bottom part - normal size (press button several times)

PIP

TV picture on/off (Split Text)



Operating modes – Teletext

Programme timer recordings

A video and/or DVD recorder must be connected and logged in in the connection wizard. Call the programme pages of the current station in teletext mode using the Direct recording button . Scroll to the teletext page in which the programme to be recorded is listed if necessary. Select the programme you want to record by with . and confirm with the OK button. For "Timer data," select the VCR or DVD recorder and whether you want to record once or a series of times. Confirm with OK.

Teletext menu

MENU

Display teletext menu



Here you will find functions such as

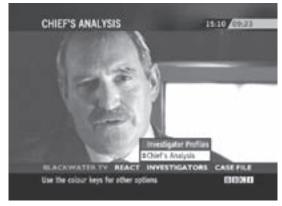
- "Newsflash", this is an on-screen display of the latest messages (e.g. page 111).
- "Reveal" concealed information, e.g. VPS pages in the station preview pages.
- Programme wizard for recording via teletext.

In the settings, you will find menus to define the station preview pages, subtitle pages and personal text pages, and menus to set the character set selection as well as HiText graphics.

Digital teletext operation (only for UK device version 27)

In the UK, the teletext for DVB-T stations is transmitted as per the MHEG-5 standard (standard of the Multimedia and Hypermedia Expert Group). It contains text, graphics, functions and links.

The operation of these menus depends on the particular provider. Normally after a station is changed, the provider broadcasting the digital teletext makes an introductory offer for this service on the screen via menu selection. Follow these notes.



Depending on the provider's respective offer, you can use the ▼ ▲ ◆ buttons and the **OK** button, the **coloured keys**, the **END/TEXT** button and sometimes even the **numeric buttons**.

If you want to close the digital teletext, just select a different station using the **P+/P**– buttons or follow the menu prompts on the screen.

Note:

- Digital teletext is not available when DVB-subtitles are being displayed.
- If a timer recording is programmed at the TV-set, at the start time of the recording the digital tletext mode is switched off automatically

Operating modes - Radio

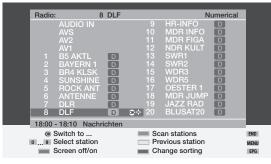
Radio

You can only receive radio stations via DVB. If you do not have any DVB radio reception, you can play a sound signal from an external device using the TV set via the sound/AV inputs.

RADIO

Use the **RADIO** button on the remote control or the **R** on the control ring of the TV set to switch the radio on or off.





You can see a station list of the radio stations or with DVB-T in UK the station logo. In this case you can call up the station list by using the **OK** or **INFO** key. Station list is sorted by LCN.

If data are sent by the station, then the time and title of the programme are displayed in the station list.

When the station list is shown you can switch off the screen with the **red** colour key. The LED indicator on the set changes from green to orange or if both the green and red indicators light up, then, for Spheros R 37. You can switch the screen display back on by using the **OK** key, **red** or **blue** colour keys, by using **RADIO** or **END** on the remote control or by using **R** on the control ring of the TV set.

Station switching with dark screen: by using — or + on the control ring of the TV set or by using the remote control P— and P+ or by using the numeric buttons (for DVB-T operation in UK, the buttons may be configured differently by the provider).

The sound menu can be called in the radio mode using the ____ button.

Radio menu

MENU

Call radio menu



In the radio menu, as in TV mode, you can set the sound, search for radio stations and store them (automatically or manually — not with DVB-T mode in

UK), delete stations from the list, rearrange them or change names and set the switching off and alarm functions.

EPG - Programme guide

Note: not with DVB-T stations in UK.

For the DVB radio stations, you can also use the programme guide if the station currently active supplies data.

* EPG

EPG- Call Programme guide

Login and connect equipment

You have logged in and connected all connected equipment in the initial startup. If you want to connect other equipment or disconnect equipment, call the connection wizard.

MENU

Call up the TV menu



Select "Connections"



Select the submenu line



Select "New devices/modifications" and ...



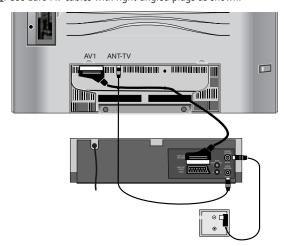
Call with OK.

State what equipment you want to connect. State whether a piece of audio equipment is to be connected (more details as of page 35). The connection wizard then shows you which sockets you should connect this equipment to. Then connect the equipment to these sockets according to the connection diagram.

Connecting video/DVD recorders

In addition to the connection via the Euro-AV sockets, you also have to connect the antenna (only for terrestrial antenna or cable systems) through the VCR/DVD recorder to the TV set. The antenna signal is then available to the video/DVD recorder and the TV set.

Note: Use Euro-AV cables with right-angled plugs as shown.



Search for and store the station of the video recorder (if no Euro-AV cable is available)

Switch on the test station on the VCR or insert a recorded tape and start playback. In some video recorders the station must be switched on by activating the modulator.

Then call the AV selection on the TV set with **0 AV**. Select the menu item "VIDEO" in the AV selection and call using **OK**.

To prevent "normal" TV stations being found in the search, pull out the antenna plug from the antenna input of the VCR temporarily (the cable to the antenna system).

If you cannot see the test station or playback from the cassette, the VCR is transmitting on a different channel. You then have to search for the station or set it manually.

- 1. Call the TV menu with the **MENU** button.
- 2. Select the "Settings" menu item with ◀ ▶ .
- 3. Select the line below using and use ▶ to select "Channels".
- Select the line below using → and select "Manual adjustment" using → and call this menu using OK.
- 5. Enter channel "E30" under the "Channel" menu item ("Antenna/cable (analogue)", select in this menu above if necessary).
- 6. Start search with the blue coloured key.
- When the station has been found, change the name if needed, confirm with OK and save with the red coloured key.
- 8. A list of the stored stations is displayed.
- Select 0 (VIDEO) here and overwrite this station storage location using the red coloured key.
- 10. Hide the menu again using the **END** button.

Plug the antenna plug back in.

If you now get interference because a TV station is transmitting on the same channel as the VCR station, you have to change the transmitting station on the VCR and search for the VCR station on the TV again.

Video playback

There are several ways to see the picture and hear the sound of the VCR, DVD player/recorder or camcorder on your TV:

 You can usually use the Euro-AV sockets on the TV set and on the VCR. For camcorders or digital cameras, use the AVS sockets on the right of the TV set. DVD players/recorders and SetTopBoxes may have HDMI or component sockets for video and audio transmission. In this case, use the corresponding sockets on the TV set.

When playing back from a video recorder using Euro-AV socket and Digital Link Plus (or a comparable system from another manufacturer), the picture from the VCR is shown at the current channel location.

When playing back from another VCR, camcorder or digital camera, use the AV selection • AV or the station list (**OK**) to select the AV socket/the device to which the VCR is connected.

Video recorders transmit a switching voltage during playback, which the TV can evaluate (can be activated in the connection wizard or in the "TV menu – Connections – Miscellaneous – Allow switching voltage" - set to "yes"). Then the picture of the video recorder is shown during playback at the current station location.

You can use the antenna connection between the VCR and the TV without a Euro-AV socket. The sound is only transmitted in mono. Select the first menu item, e.g. VIDEO, in the AV selection.

Calling AV inputs in the AV selection:



Call AV selection





Select AV device/socket (or VIDEO if the video recorder has been connected only via the antenna socket) and use ...



to call.

Now you will see the playback from the connected AV device.

Calling AV input via the station list

Call the station list with the **OK** button in TV mode.

In the numeric and alphabetical sorting, you will always find the AV sockets at the top of the list.

Timer recording with video or DVD recorder

<u>Note</u>: Copy-protected programmes are not output to the Euro-AV sockets for legal reasons.

When you have connected the Euro-AV socket to a recorder which has **Digital Link Plus** or a comparable system from a different manufacturer, the timer data of analogue terrestrial stations are transmitted from the TV to the recorder. The recording quality SQ or EQ is transmitted for DVD recorders, in additional to the station, date and time. The recording is then controlled by the recorder and the recorder tuner is used for reception of the station. The recording data are not saved in the timer list of the TV set. You will only find the timer data in the recorder.

If you want to record from digital stations, the TV tuner is used and the recorder is controlled by the TV set. Then the station is locked during the timer recording.

If you have connected a Loewe video recorder with **Digital Link** to the Euro-AV socket (without Digital Link Plus) and you are using the timer programming of the TV, the TV receiver is always used, for terrestrial stations as well. The TV controls the recording.

You have to set the recorder to the AV input (signal source) to which the TV set is connected.

Then the station on the TV set is locked during the timer recording. **Digital Link must be switched on on the recorder**. Read the operating instructions of your Loewe recorder for more information.

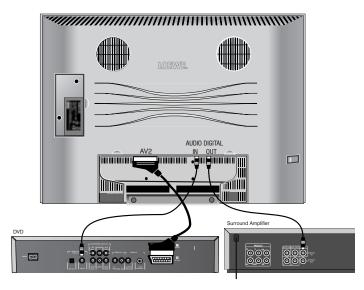
Use only Euro-AV cables, which are completely wired, otherwise Digital Link/ Digital Link Plus will not work.

Another advantage of Digital Link is that you can install the recorder in a concealed place (e.g. in a rack). You can control the recorder with the TV set. If you have a Loewe recorder with both systems, you can use all the advantages. The advantages of Digital Link Plus are used for the timer recording; the advantages of Digital Link for concealed installation of the recorder.

Assignment of digital audio inputs and outputs

Audio input "AUDIO DIGITAL IN"

The TV set has a coaxial digital audio input "AUDIO DIGITAL IN" and a coaxial digital audio output "AUDIO DIGITAL OUT". If you are using an external digital surround amplifier for sound reproduction, you have to feed digital audio signals to the TV, e.g. from the DVD player.



Connect the output socket of the DVD player (DIG OUT) to the TV's "AUDIO DIGITAL IN" socket with a cinch cable.

In the connection wizard, specify that audio transmission is to be digital. Specify that the digital sound is to be assigned for example to the Euro-AV socket 2 to feed the digital sound to the digital audio output of the TV set and via this to the external audio amplifier. Further information about this can be found on page 36.

Audio output "AUDIO DIGITAL OUT"

The digital audio signal is applied at the "AUDIO DIGITAL OUT" socket of the TV. For example, you can connect an external digital audio amplifier or the Loewe Auro system here.

An analogue audio signal from the TV set or another sound source which is received at one of the Euro-AV sockets of the TV set is converted into a digital signal (PCM) and output at the "AUDIO DIGITAL OUT" socket. Conversion from external analogue AV sources to PCM is not possible if the TV's loudspeakers are used as a centre channel. In this case, connect your audio amplifier additionally to the TV (AUDIO OUT L/R) with a cinch cable and switch the audio amplifier to analogue audio input.

The digital TV sound or the digital sound of a connected auxiliary device is only audible via an external digital audio amplifier (e.g. Loewe Auro system).

Connecting Loewe DVD Preceiver Auro 2216 PS and Tremo loudspeaker system

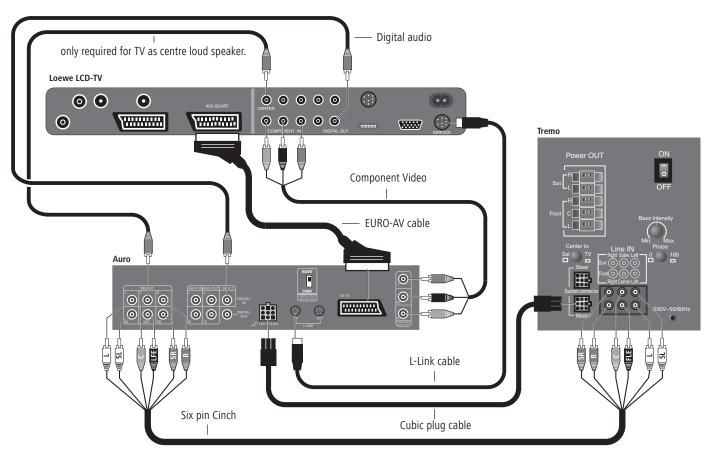
You can play audio signals from the TV or DVD player in cinema quality with these components. The Tremo system includes 5 speakers for the front, centre and surround reproduction in addition to the subwoofer illustrated below. The centre signal can be reproduced alternatively by the TV speakers.

Connect the cubic socket on the DVD Preceiver to the "Master" cubic socket on the subwoofer. Use the cubic plug cable enclosed with the DVD Preceiver. Plug the white plug (without kink protection) into the cubic socket on the subwoofer. For TV as a centre loudspeaker, connect "AUDIO IN C" on the TV set to "PRE OUT C" on the DVD Preceiver using a cinch cable.

Connect the digital audio output of the TV set "AUDIO DIGITAL OUT" to the "DIGITAL IN" input of the Preceiver using a cinch cable. Connect the TV socket "SERVICE" to the TV-L-Link socket on the Preceiver using the L-Link cable (provided with the Preceiver). Switch on the TV set and the Preceiver. Via the L-Link, the TV recognises whether the Preceiver is connected.

Select the "Tremo" loudspeaker system in the DVD menu of the Preceiver, set the listener/speaker distances and adjust the speaker levels. Please consult the Preceiver manual.

If you want to listen to the sound via the TV speakers temporarily, call the Sound menu, select "Sound via" and then "TV". If you want to listen to the sound via the Loewe Auro system, select "AURO" under "Sound via".



Connecting other audio amplifiers or active speakers

In the connection wizard, select "HiFi/AV amplifier" under "Equipment selection: audio component". The connection wizard allows configuration of different audio amplifiers (stereo amplifiers, surround amplifiers, analogue or digital) with different sound formats (Dolby Digital, dts, MPEG and Stereo/PCM). Refer to the operating instructions for the audio amplifier to be connected.

Select "Digital" under "Audio transmission" for **digital audio amplifiers**. Connect the digital audio output of the TV AUDIO DIGITAL OUT to the digital audio input of the digital amplifier.

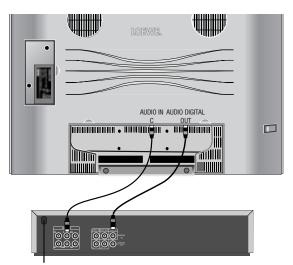
Assign the digital audio input to the socket through which the corresponding picture is transmitted (e.g. AV2 if a DVD player is connected there). Then the digital sound is passed to the digital audio output of the TV set and fed to the external audio amplifier via this.

Specify which sound formats can be decoded with your digital amplifier (Dolby Digital, MPEG, dts).

Specify under "Type of amplifier" whether the digital amplifier is a stereo or surround amplifier.

If it is a surround amplifier, specify whether or not the TV loudspeakers are to be used as centre loudspeakers. Connect the centre output of the amplifier to the centre output of the TV using a cinch cable, if necessary.

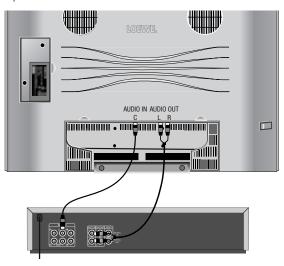
<u>Note</u>: do not use the centre loudspeaker connection on the amplifier; instead use the pre-amplifier centre output.



Select "Analogue" for "Sound transmission" for **analogue audio amplifiers**. The sound for the analogue amplifier is transmitted via the AUDIO OUT L/R connections of the TV to the audio amplifier. Connect the amplifier with two cinch cables.

Specify under "Type of amplifier" whether the analogue amplifier is a stereo or surround amplifier.

If it is a surround amplifier, also specify whether or not the TV speakers are to be used as centre loudspeakers. Connect the centre output of the amplifier to the centre output of the TV using a cinch cable, if necessary. Note: do not use the centre loudspeaker connection on the amplifier; instead use the pre-amplifier centre output.



If you want to listen to the sound via the TV loudspeakers temporarily, call the Sound menu using the _____ button, select "Sound via" and then "TV".

When connecting **active speakers**, select "Active speakers" in the connection wizard under "Audio equipment selection". The sound for the active speakers is transmitted via the AUDIO OUT L/R connections to the active speakers. Make connections to the active speakers using the cinch cables.

Make the audio settings on the TV set when active speakers are connected. When using an external audio amplifier, make the audio settings on the audio amplifier.

HDMI (DVI) connection



The HDMI connection (High Definition Multimedia Interface) allows digital picture and sound transmission via a connecting cable, e.g. from Loewe DVD Recorder Centros 2102/2172 HD. The digital picture and sound data are transmitted without

data compression and therefore lose none of their quality. In the equipment connected, no analogue/digital conversion is necessary, which might also have lead to losses in quality.

DVI signals can be also be reproduced by the HDMI connection using a DVI/HDMI adapter cable. This is possible because HDMI is based on DVI and is downwardly compatible. That means that the digital video signals are transmitted via HDMI - no audio signals are transmitted, though. In addition, both use the same copy protection method HDCP.

Connect the set with an HDMI connection using an HDMI cable (type A, 19-pin) to the HDMI socket of the TV set. Log in the HDMI connection in the connection wizard (TV menu - Connections - New devices/modifications).

Select the HDMI connection in the AV selection.





to call.

Start playback on the device connected with HDMI connection.

The set automatically recognises and sets the best possible format for the video. If transmission occurs via a DVI/HDMI adapter cable, then you can feed in the appropriate analogue audio via the audio input sockets AUDIO IN L/R on the TV set. The sound is reproduced via the TV speakers.

If you have connected a digital external audio amplifier, you can select the digital audio signal in the connection wizard (TV menu - Connections - New devices/modifications) and assign it to the HDMI/DVI socket. You can make the other settings for the audio amplifier as described for digital amplifiers on page 36. The digital audio signal of the DVI audio source is fed in at the AUDIO DIGITAL IN socket on the TV. Feed the digital audio signal from the TV AUDIO DIGITAL OUT to the external amplifier.

Set geometry: as described for the VGA/XGA connection.

VGA/XGA connection



You can connect a PC or a Set Top Box (STB) and therefore use the TV screen as an output device.

Connect the PC/STB to the VGA/XGA socket on the TV using a VGA cable.

When connecting to a PC, first set one of the following screen resolutions on your PC.

800x600 60Hz (SVGA)

1024x768 60Hz (XGA).

When a Set Top Box is connected, set the following screen resolutions according to the options of the Set Top Box:

720x576i (PAL), 720x480i (NTSC), 720x480p (60 Hz)

720x480i, 720x 576i (SDTV – standard modi for STB) 720x576p (50 Hz) 1280x720p, 1920x1080i (HDTV modi)

Select the VGA/XGA connection in the AV selection.



Start the connected device.

Set geometry

Call the TV menu using the **MENU** button, select "Geometry" using ◀ ▶ and set:

If the picture is not positioned correctly, you can move the picture horizontally and vertically here so that it fills the whole screen. You can also set the phase position so that the picture appears in the best possible quality.

Setting colour standard

Call the Picture menu using the □□□ button. Select "Colour standard" using

▶ and make your selection.

The colour standard for a connected PC is RGB.

In Set Top Boxes, you usually set Ycc as a colour standard. Other formats such as Ypp or RGB can also be output. Please consult the operating instructions of the device connected.

If the wrong standard is selected, you will recognise this by the wrong colours in the display.

Sound from PC or Set Top Box

Feed the analogue audio signal from the PC or the STB to the sockets AUDIO IN L/R on the TV via a cinch cable. The sound is reproduced via the TV speakers. If you have connected a digital external audio amplifier, you can select the digital audio signal in the connection wizard (TV menu - Connections - New devices/modifications) and assign it to the VGA/XGA socket. You can make the other settings for the audio amplifier as described for digital amplifiers on page 36. The digital audio signal of the Set Top Box is fed in at the AUDIO DIGITAL IN socket on the TV. Feed the digital audio signal from the TV AUDIO DIGITAL OUT to the amplifier.

Component video connection



If you have a DVD player/recorder with Component OUT connections, you can connect it to the SD/HD-COMPONENT IN sockets of the TV instead of to the Euro-AV sockets. The connecting cable with three cinch plugs each transmits picture

information. The playback is of a better quality than via the Euro-AV socket. You need another cinch cable for the analogue sound transmission. Connect the analogue audio outputs of the DVD player to the AUDIO IN L/R sockets on the TV set. The sound is reproduced via the TV speakers.

If you want to use the digital sound of the DVD player with a digital audio amplifier connected to the TV, make a connection between AUDIO DIG OUT of the DVD player and AUDIO DIGITAL IN of the TV set.

Log in the component/device in the connection wizard:

Assign the AUDIO DIG IN input here to the COMP. IN socket, provided a digital audio amplifier is also connected. You can make the other settings for the audio amplifier as described for digital amplifiers on page 36.

Set the signal at the component input in the connection wizard: Set to "Automatic" first. If the signal is not reproduced when playback is started, consult the operating instructions of the DVD device connected to find out what screen resolution is possible (SDTV, HDTV or ProScan).

Select the component connection in the AV selection.



Start playback on the connected device.

Set geometry and colour standard: as described for the VGA/XGA connection.

Operating other Loewe devices with the RC3 remote control

Using this remote control, you can operate additional devices from Loewe.



Use the rotary switch to select VCR, TV or a Set Top Box. The following are preset at the factory: Loewe VCRs, Loewe TV sets and for STBs (Set Top Box) in Germany, the common d-box.

Use the driver buttons in the TV and STB position for VCR, **DVD** or Digital Recorder

You can switch over the six drive buttons

(, both for the TV and for the STB, to control a VCR or DVD player/recorder (the control of the integrated "Digital Recorder Plus" is preset at the factory):



First set the switch to the main function TV or STB.

Then press the **END** and ★**EPG** buttons simultaneously for at least 5 seconds. The upper left indicator on the remote control END * EPG will blink twice.



Enter the the numbers 988 in sequence. The indicator will again blink two times.



Now set the switch to the desired function for the drive buttons:

to DVD, VCR or to TV, if the digital recorder is to be operated. Press the # PIP button to complete the setting. The indicator will blink two times.

Setting the remote control to operate devices from other manufacturers

You can switch over the remote control for other VCRs, DVD players and Set Top Boxes if the infrared code for the device type is listed in the code list or if it is included in the code memory of the RC3.

Even if the manufacturer of the device is listed in the code list, it may not be possible to operate that device using the Loewe remote control.

Setting the remote control using code entry

Search for the code number for your device in the code list (see as of pages 48-52). The list is arranged according to device type – DVD, VCR, STB – and alphabetically according to manufacturer. Next to the manufacturer's name, you will find one or more code numbers.



Use the rotary switch if you want to switch over a VCR, DVD device or a Set Top Box.



Press the **END** and ★**EPG** buttons simultaneously for at least 5 seconds. The upper left indicator on the remote control will blink twice.

5 jkl 3 def 9 wxyz

Enter the four numbers in sequence that you found in the code list (e.g. 0539 for Loewe DVD player).

After each number you enter, the indicator will blink once, after the last number it will blink twice. If the number was incorrect, the indicator will remain lit longer. The code number was not accepted. If the code was accepted with two blinks, you can test the functions of the device you just programmed.

If the device cannot be operated or can only be operated poorly, repeat the code entry with the next code from the list. If there are no other codes specified for this manufacturer, try it using the code suggestions from the remote control.

Setting the remote control using the suggestions from the remote control

Switch the device **on** that you want to switch over to the remote control. Standby mode is not enough.



Use the rotary switch if you want to switch over a VCR, DVD device or a Set Top Box.

Press the **END** and ★**EPG** buttons simultaneously for at least 5 seconds. The upper left indicator on the remote control will blink twice.



END * EPG

Enter the the numbers 991 in sequence. The indicator will blink once after each number entered.



Press the # PIP button to select the first code.

Point the remote control toward the device you want to switch over to the remote control. Observe that device.



Now press the button ▶ (Play) or **On/Off** on the remote control.



Wait a moment for the device to react. If the device does not react, then that was not the right code. Press the # PIP button again to call the next code.



Press the button \(\rightarrow \) (Play) or \(\mathbf{On}/\text{Off} \) again.



If the device reacts, press the ★EPG button to adopt the code.

Using the RC3 remote control to operate a DVD recorders or DVD player

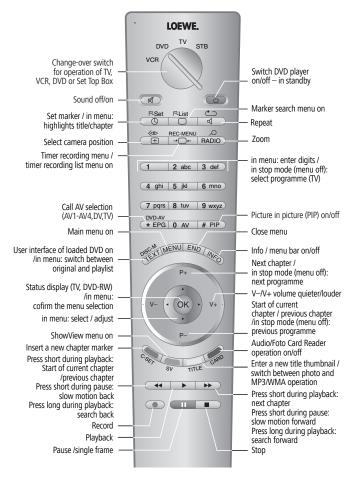


Set the rotary switch to "DVD".

The infrared code and the functions are preset at the factory for the Loewe DVD recorder Centros 21x2 HD.

In the DVD mode, it is possible to operate the Loewe DVD recorders Centros 1102, 1172, 2102HD, 2172HD, and the DVD players Xemix 6122DO, 8122DA and 6222PS.

Functions for the Loewe DVD recorders (Centros 1102, 1172, 2102, 2172)



Using the RC3 remote control to operate a VCR



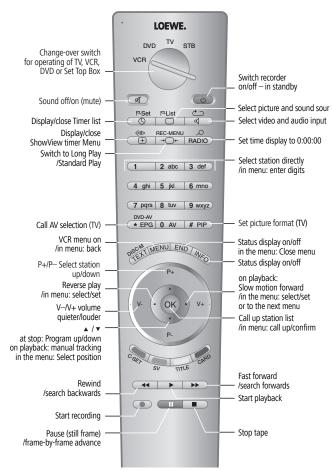
Set the rotary switch to "VCR".

The infrared code and the functions for a Loewe VCR are preset at the factory.

In VCR mode, the following VCRs can be operated: ViewVision 8106H, 8136H, 8176H, 6306H, 6336H, 6376H, 6396H, 4306H, 4376H, 2102M, 2302M, 4206, 4236. 4276.

For other Loewe equipment than that listed, please use the original remote control.

Functions for Loewe VCR (VV 8106, 8136, 8176)



Rotating the TV set for Spheros R 32/37

Spheros R 32/37 have a connection for a rotating stand control. If the TV set is mounted on a motor unit, you can use the remote control to adjust it to your seating location accordingly.

You can fix the position of the TV set when the set is switched off.

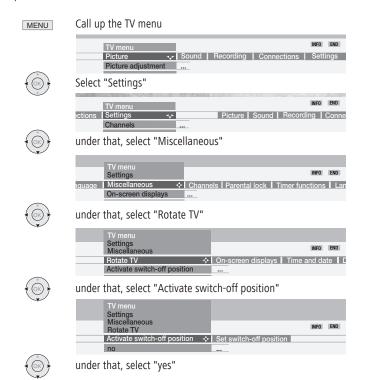


Rotate the TV set when no menu or PIP is being displayed.

<u>Note</u>: Make sure there are no objects in the TV's area of rotation that might obstruct the rotation or be knocked down due to the rotating motion.

Setting the position of the TV set when switched off

You can set the position the TV set is to assume once it is switched off (switch-off position must be activated for this):







go up and select "Set switch-off position"





use **OK** to go down and use the ◀ ▶ arrow buttons to set the desired switch-off position. The TV set rotates in the process.





use **OK** to save the position set.



Close the menu

If the TV set is switched off using the blue on/off button on the remote control, the set will rotate to the position defined.

When it is switched back on, it returns to the position last set manually.

What to do, if ...

Problem	Possible cause	Remedy
The "Recording" menu point is not displayed in the TV menu.	No video or DVD recorder logged in.	Log in the video or DVD recorder in the connection wizard and connect the device.
"Connections" cannot be called in the TV menu (deactivated)	A time recording is in progress.	Wait until the timer recording has ended or delete the timer.
The control of the Loewe video recorder and the timer do not work or do not work properly.	a) The Digital Link function is not activated or not possible in the recorder.b) Euro-AV cable is not connected.c) Recorder is not logged in.	a) Activate Digital Link in the recorder (see operating instructions of the video recorder).b) Connect the Euro-AV cable.c) Log in recorder.
General problems with connecting external equipment via an AV input.	 a) The device is not logged in to the connection wizard or is connected differently than is shown in the connection diagram. b) The AV norm is set incorrectly. c) The AV signal is set incorrectly. 	 a) In the connection wizard (TV menu – Connections – New devices/modifications), compare the connection diagram with the actual installation and connect as shown, if necessary. b) Set the norm correctly. c) Set the AV signal correctly. If "Automatic" is set for AV norm or AV signal, this can lead to errors for signals which do not conform to the norm. Then the norm and the signal are to be set according to the specifications in the operating instructions of the external device.
A decoder connection does not function or is faulty.	a) The signal is not decoded because the wrong decoder stations are selected in the connection wizard. b) The sound is missing in decoder mode because the wrong decoder sound is assigned in the connection wizard.	 a) Follow the instructions in the connection wizard again (TV menu – Connections – New devices/ modifications) and select the corresponding decoder station. b) Follow the instructions in the connection wizard again and select the right audio source (decoder, TV or autom.), see instructions of the decoder.
All menus appear in the wrong language.	Menu language has been set incorrectly.	Set your menu language: Press the INFO button in TV mode (index). Select the first index item and call it by using OK . Then select the language and confirm with OK .

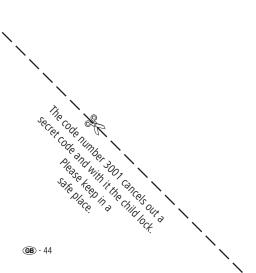
What to do, if ...

Problem	Possible cause	Remedy
Digital Link Plus does not function.	 a) Euro-AV cable is not fully wired (pin 10 not wired). b) Some recorders can only adopt stations during the initial installation of the TV set. c) All or some of the terrestrial and cable stations are stored on station storage locations ≥ 99. 	 a) Replace the Euro-AV cable. b) Restore the recorder to the as-delivered state (see recorder's operating instructions). c) Rearrange the terrestrial and cable stations so that they fall between 1 and 99.
Various characters are displayed incorrectly in the teletext.	The wrong character set is set in the teletext menu.	Set the right character set: Teletext menu - Settings - Character set: standard or the appropriate character set.
No sound via external digital audio amplifier.	a) The external digital audio amplifier does not support the selected sound format (Dolby Digital, dts, MPEG).	a) Set PCM stereo on the DVD player in the sound selection. For DVB stations, switch language/ sound selection (green coloured key) to Stereo on the TV set in the status display (END).
	b) TV set and external digital audio amplifier are not connected.	b) Connect Digital-Out from the TV set to a Digital-In of the external digital audio amplifier and select the appropriate input to this.
Device on mounted motor unit does not rotate (only Spheros R 32/37).	Motor unit and connection for rotating stand control are not connected to each other.	Use related cable to connect socket of motor unit to interface of rotating stand control (see assembly instructions for motor unit).

Technical data

General data

Туре	Spheros R 26	Spheros R 32	Spheros R 37					
Versions DVB-T CI Versions DVB-T/C CI Versions DVB-T/C CI Versions DR+ DVB-T/C CI	65435x27 - 65435x87 -	65436x27 65436x84 - 65436x47	65437x27 65437x84 - 65437x47					
Set dimensions without stand (ca. cm WxHxD) Dimensions with stand (ca. cm WxHxD)	68,4x50,7x10,8 68,4x56,1x35,0	84,5x58,5x9,0 84,5x64,0x40,0	99,0x67,5x9,0 99,0x71,6x40,0					
Set weight without stand (ca. kg) Set weight with stand (ca. kg)	18,5 20,5	34,5 36,5	37,0 39,0					
Display Picture diagonal (cm)/picture format Resolution Contrast ratio	HD-LCD technology 66/16:9 1366x768 800:1	HD-LCD technology 80/16:9 1366x768 800:1	HD-LCD technology 94/16:9 1366x768 800:1					
Angle of viewing horizontally/vertically	170°	170°	170°					
Power consumption (IEC 62087) in operation (watt) in standby (watt)	70 <3	85/100 < 3	100/115 < 3					
Ambient temperature (Celsius)		5° – 35°						
Relative humidity (not condensing)		20 - 80%						
Barometric pressure	800 – 1114 hPa (0 – 2000 m over NN)							



Technical data

Electrical data

Chassis name Power supply Tuner VHF/UHF/ cable Hyperband 8 MHz Station storage locations TV standards Colour standard

Sound standard

Rated audio power Analogue Teletext Page Memory Digital Teletext (in UK only) L 2650 220 V -240V/50- 60 Hz

41 MHz to 860 MHz
430 / for DVB 1680
B/G, I, L, D/K, M, N
SECAM, PAL, NTSC,
NTSC-V, PAL-V (60Hz)
Mono/Stereo/Dual-channel
Nicam B/G, I, L,
Virtual Dolby
2 x 20 watt
TOP/FLOF Level 2.5
3000
MHEG-5

Connections

Jack 3.5mm		Headphones 32- 2000 ohm						
Mini-DIN (A	VS) Video IN	Y/C (S-VHS/Hi 8)						
Cinch (yellov	w) Video IN	CVBS (VHS/8 mm)						
Cinch (white	e/red) Audio IN	L/R						
IEC socket 7	5 Ohm/5 V/80 mA	Antenna/cable/analogue PIP (1/DVB-T						
F socket 75	Ohm 13/18 V/350 mA (2	ANT-SAT						
EURO-AV 1	Video IN	Y/C (S-VHS/Hi 8)						
		CVBS (VHS/8 mm)						
	Video OUT	CVBS (VHS/8 mm)						
		Y/C (S-VHS/Hi 8)						
	Audio IN	L/R						
	Audio OUT	L/R						
EURO-AV 2	Video IN	Y/C (S-VHS/Hi 8)						
		CVBS (VHS/8 mm)						
		RGB, YUV						
	Video OUT	CVBS						
		Y/C, (only with SVHS Link Plus)						
	Audio IN	L/R						
	Audio OUT	L/R						
Cinch	Audio IN max. 2Vrms	Centre						
2 x Cinch	Audio IN	L/R						
2 x Cinch	Audio OUT (level adjustable	•						
Cinch	COMPONENT IN:	Cb/Pb signal						
Cinch	COMPONENT IN:	Cr/Pr signal						
Cinch	COMPONENT IN:	Y signal						
Cinch	Digital Audio IN (SPDIF)	Digital audio						
Cinch	Digital Audio OUT (SPDIF)	Digital audio						
HDMI/DVI	Digital Video/Audio IN type							
VGA/XGA	VGA/XGA IN	PC/STB video signal						
Mini-DIN		Service/L-Link						

⁽¹ Analogue PIP tuner can be retrofitted.



⁽²⁾ Digital satellite tuner can be retrofitted, Twin sat tuner can be retrofitted for sets with digital recorder.

Accessories

Wall holders and stands

Refer to the notes on the installations options on page 8.

PIP tuner

The PIP tuner enables picture in picture displays (PIP) for analogue terrestrial and cable reception.

You can retrofit either this PIP tuner or a digital satellite tuner.

The PIP function is possible for both retrofit models.

Retrofit not possible for Spheros R26 and UK device versions.

Loewe order no. 89442.080

Digital Satellite Tuner

You can have your TV set retrofitted with the digital satellite tuner. You receive DVB-S stations with this tuner.

The digital satellite tuner is completely integrated in the TV set (physically and logically) and is operated by the remote control/menu control of the TV. When you retrofi t your TV set with the digital satellite tuner, your TV set automatically has the PIP function.

You can retrofit either this digital satellite tuner or a PIP tuner.

Retrofit not possible for UK device versions.

Loewe order no. 89361.055

DVB-S Twin sat tuner

(only for sets with a Digital Recorder)

If your TV set is equipped with the Digital Recorder+, you can have it retrofitted with an integrated DVB-S twin sat tuner.

The integrated PIP DVB-T/C tuner is exchanged for the DVB-S twin sat tuner (not for Spheros R 26).

Loewe order no. 89443.080

Loewe Video Recorders

Loewe video recorders are specially adapted to Loewe TV sets in design, user guidance and technical properties. They greatly simplify daily handling of the equipment.

Loewe DVD players and recorders

The DVD players and recorders from Loewe are characterised by form and colour, which match Loewe TV sets, adapted user guidance and technology. A combination of the two devices forms a system which offers many advantages.

Loewe audio system Auro and the active speaker system Tremo

The interplay of a Loewe TV with a Loewe audio system and a Loewe speaker system creates an excellently coordinated home cinema system. Advantages are high operating comfort, attractive design and adapted technology.

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Subject to modifications!! © by Loewe Opta

Loewe			DEC				0.000	0010					0000	D:f: -		0760	0700	0712	0021
LOCATE			DEC				0699	0818	Kendo		0524	0.400	0699	Pacific		0768	0790	0/13	
			Decca				0.400	0770 0634	Kenwood		0534	0490		Palladium				0600	0695
DVD-Player		0539	Denon Denver					0788	Kiiro			0/16	0770 0818	Palsonic Panasonic				0689 0490	
DVD-Rayer DVD-Recorder Centros 11x2		0741	Denvel				0099	0665	Kingavon Kiss				0665	Panda				0490	0783
DVD-Recorder Centros 21x2		1463	Diamond			0651	0768		Koda				0818	Philips		N539	0646	0503	
STB		1127	Digihome			0031	0700	0723	Koss				0651	Phonotrend		0333	0040	0303	0699
VCR		0866	digiRED					0717	Lawson		0705	0716		Pioneer		0571	0631	1900	
		0000	Digitrex					0672	Lecson		0,03	0710	0696	Pointer		0371	0051	1300	0770
			DiK					0831	Lenco	0699	0651	0770		Powerpoint					0718
DVD			Dinamic					0788	Lenoxx				0690	Proline		0651	0672	0790	
			DiViDo					0705	Lexia				0699	Proscan					0522
3DLAB		0539	DK digital					0831	LG		0591	0741	1906	Prosonic					0699
A-Trend		0714	DMTECH				0783	0790	Lifetec				0651	Provision					0699
Acoustic Solutions		0714	Dragon					0831	Limit			0716	0768	Radionette					0741
	0788		Dual		0665	0651			Loewe			0539		Raite					0665
	0641					078	3 0790		LogicLab				0768	Rank Arena					0718
Akai 0790 0788 0690 0716			E-Boda					0723	Logix			0705		RCA				0522	
AKI	0713	0718	Eclipse					0723	Lumatron				0705	REC				0689	
Akira		0699	Electrohom	e				0770	Luxman				0573	Red Star				0770	
Alba 0717 0699 0713	0723		Elin					0770	Luxor				1004	Reoc					0768
All-Tel	0723	0790	Elta		0690	0770			Magnavox			0503		Revoy					0699
Amitech		0770	Emerson				0591	0705	Magnex				0723		699	0690	0689	0713	
Amstrad		0713	Enzer					0665	Manhattan				0705	Rotel					0623
Apex Digital		0672	Ferguson			0744		0651	Marantz				0539	Rowa					1004
Audiosonic		0690	Finlux			0/41	0770		Mark			0654	0713	Saba					0651
AWA		0730	Firstline					0651	Matsui MBO			0651		Sabaki					0768 0741
Black Diamond		0713	Funai GE					0695 0717	MDS			0690	0699	Salora Samsung				0573	
Blaupunkt		0717	Global Solu	itions				0717	Medion	0651	0783	0716			605	0716	0768		
Blue Sky 0699 0695 0713	0672	0651	Global Sph					0768	Memorex	1 600	0763	0/10	0831	Sanyo	095	0/10		0695	
Boman		0783	Go Video	ere				0783	Metz			0571		Scan			0070	0033	0790
Brain Wave		0770	GoldStar				0591	0783	MiCO			03/1	0713	ScanMagic					0730
	0651		Goodmans		0651	1004			Microboss				0718	Schaub Loren	7			0788	
Bush 0699 0690			doodinans		0051		0723		Micromaxx				0695	Schneider 0		0783	0705		
0713 0818 0695	0831		Graetz			0703	0123	0665	Micromedia			0503		Scientific Lab		0703	0703	0730	0768
C-Tech		0768	Grandin					0716	Micromega			0303	0539	Scott	5		0718	0651	
Cambridge Audio		0696	Grundig		0539	0695	0651		Microsoft				0522	SEG				0713	
Cambridge Soundworks		0696		0705		0713			Microstar				0831	Shanghai					0672
CAT		0699	Grunkel					0770	Minax				0713	Sharp				0630	
Celestial	0672	0672	H&B				0818	0713	Minoka				0770	Sherwood			0717	0741	0633
Centrex Centrum	0072	0713	Haaz					0768	Mitsubishi				0713	Shinco					0717
cineULTRA		0699	Hanseatic					0741	Mizuda				0818	Silva					0788
Classic		0730	HCM					0788	Monyka				0665	SilvaSchneide	r				0831
Clatronic		0788	HDT					0705	Mustek				0730	Singer			0690	0716	
Clayton		0713	HE					0730	Mx Onda			0651		Skymaster				0730	
Coby		0730	Henß					0713	NAD				0741	Slim Art					0770
Conia		0672	Hitachi			0664	0665		Naiko				0770	SM Electronic				0768	
	0651		Hiteker					0672	Neufunk				0665	Smart			0718	0705	
Cybercom		0831	Home Elect	ronics				0730	Nordmende			0000	0831	Sonashi		0500	0577	4000	0716
	0714		Hyundai					0783	Omni			0690		Sony		0533	0573	1903	
-,	0651		Ingelen					0788	Onkyo			0627		Soundmaster					0768
	0705		ISP					0695	Optimus				0571	Soundmax					0768
Daewoo International		0699	Jeken					0699	Orava				0818	Soundwave				0054	0783
Dansai	0770	0783	JMB	0622	0530	0502	1001	0695	Orion				0695	Standard				0651	
Dantax		0723	JVC Karcher	0023	0559	0503	1901	0783	Oritron P&B				0651 0818	Starmedia Sunwood					0818 0788
			Maichei					0/03	LQD				0010	Sullwood					0/00

Supervision	0730 (0768 Aud	iosonic				0278	Fisher			0047	0104	0038	Kneissel		0352	0209	0348	0037
SVA	(0672 AVP				0352	0000	Flint					0209	Kolster				0209	0348
Synn	(0768 AWA	4	0037	0278	0642	0043	Frontech					0072	Korpel					0072
Tandberg	(0713 Bair	d 0106	0278	0104	0041	0000	Fujitsu					0000	Kuba					0047
Tatung	(0770 Basi	c Line		0278	0209	0072	Funai					0000	Kuba Electr	onic				0047
Teac 0717 0741 0571	0768 (0591 Best	ar				0278	Galaxi					0000	Kuwa					0226
	(0790 Blac	k Diamond			0642	0278	Galaxis					0278	Kyoto					0072
Technics	0490		k Panther				0278	GE					0320	Lenco					0278
Technika			punkt		1562	0226		GEC					0081	Leyco					0072
Techwood			Sky	0037		0348		General Te	chnic				0348	LG			0037	0000	
Tensai	0690 (J.,	005.		0278		Genexxa					0104	Lifetec			005.		0348
Tevion	0651 (dstec		0552	02,0	0072	Goldhand					0072		0081	1562	0226		
Theta Digital		0571 Brar				0041	0320	GoldStar				0037	0000	Logik		0240			
Thomson	0551 (idt Electronic	ALLE		0011	0041	Goodmans		0000	0072	0240		Lumatron		02 10	0072	0100	0278
Tokai	0665 (kmann	que		0209	0348		0081						0106	0043	0072	0104	
Tokiwa	0705 (10072 0278	0315	กวกด			Graetz	0001	0340		0104		Luxoi	0100	0043	0072	0104	0047
Toshiba		0503	10072 0270	0515	0203		0081	Granada	0104	00/18		0240		Magnavox					0040
Umax		0505 0690 Care	na				0081	Gialiaua	0104	0040		0042		Manesth		0072	0045	0001	
	0730 (efour			0209	0045	Grandin	0072	0027		0042		Marantz				0038	
	0730 (0000							Mark			0001	0030	
								Grundig	1 800	0347	0220	0320			0200	0240	0027	0240	0278
Venturer		0790 Cath				0041	0278					0240	0072	Matsui	0209	0348	0037	0240	
Vieta		0705 CGE					0000	Haaz				0348	0209						0000
Voxson	0730 (0209	Hanimex	0007	0200	0270	0004	0352	Mediator				00.40	0081
Walkvision			ronic			0072	0000	Hanseatic	0037	0209	0278	0081		Medion				0348	
Welkin			bitech				0352	Harwood					0072	Melectronic					0038
Wesder		0699 Con					0278	HCM					0072	Memorex	0104	0000	0037	0048	
Wharfedale	0696 (02/8	0072	Hinari	00/2	0209	0352	0041		Memphis					0072
Windy Sam		0573 Cyru					0081						0240		1562	0347	0081	0226	
XBox		0522 Dae		0642	0209	0348	0352	Hisawa				0209	0352	Micormay					0348
XLogic	0770 (Hischito					0045	Micromaxx					0209
XMS	0788 (0072	0278	Hitachi	0042	0041	0000	0240		Migros					0000
Yamada		1004 Day					0278					0104	0384	Mitsubishi			0043	0067	
	0539 (iraaf			0104		Hornyphon	е				0081	Multitec					0037
	0710 (0041	0081	0067	0348	Hypson		0072	0209	0278		Multitech			0000	0072	
Yelo		0718 020						Imperial					0240	Murphy					0000
Yukai	(0730 Deit	ron				0278	Ingersoll				0209	0240	Myryad					0081
Zenith 0503	0591 (0741 Den	ko				0072	Inno Hit			0240	0278	0072	NAD					0104
		Diar	nant				0037	Interbuy				0037	0072	National				1562	0226
VCR		Don	ıland				0209	Interfunk				0081	0104	NEC	0041	0038	0067	0104	0037
		Dua		0041	0081	0278	0000	Internal					0278	Neckerman	n			0041	0081
Adyson	(0072 Dun	ont		0000	0081	0104	Internation	al			0278	0037	Nesco			0072	0000	0352
Aiwa0307 0000 0209 0348	0352 (0037 Elbe				0278	0038	Intervision	0000	0278	0037	0209	0348	Neufunk					0209
	(0041 Elca	tech				0072	Irradio			0072	0037	0081	Nikkai				0072	0278
Akai 0106 0315 0041	0352 (0240 Elin					0240	ITT	0106	0041	0384	0104	0240	Nokia	0104	0106	0315	0041	0278
Akashi	(0072 Elsa	V				0072	ITT Nokia					0048			0240	0048	0042	0081
Akiba	(0072 Elta	,			0072	0278	ITV				0278	0037	Nordmende	1	0041			
Akura	0072 (rson		0072	0045		JMB					0352	NU-TEC					0348
Alba0278 0072 0209 0352	0000 0						0240	Joyce					0000		0000	0048	0106		
	0348 (ko			02,0	0072	JVC			0041	0067		0041	0000		0.00		0.0.
Allorgan	(0240 Fast					0897	Kaisui				0007	0072		0315	0209	0348	0072	0278
Allstar			uson	0041	0320	0000		Kambrook					0037	Orbit	0313	0203	03 10	0072	0072
	0278 (0041		0072		Karcher					0278	Orion			ივიი	0352	
Anitech			india 0104	L በበ Ջ 1				Kendo	0106	0200	N31E	0348		Orson			0203	0552	0000
Ansonic		0000 038		. 0001	JU42	0000	0040	NEHUU	0100	0203	0515	0340	0072	Osaki			٥٥٥٥	0037	0000
Aristona		0000 038 0081 Finli		0000	0001	0104	0042	Kenwood				0041	0037	Osaki			0000	003/	0072
ASA	0037 (0209				KIC				004 I	0000	Otake					0209
Asuka 0072 0037 0081			IIIIE 00/2	0209		0043		Kic Kimari					0000						0209
A3und 00/2 003/ 0061	0000 (0030			0043	0042	0270	MIIIdII					0047	Otto Versan	ıu				υυδΙ

Palladium 0072 0315 0037 00	41 0209 48 0432	Silver Singer			0278 0045	Yamishi Yokan			0072	0278 0072	Canal Satellite Canal+				0853 0853
	72 0000	Sinudyne		0081		Yoko		0037	0072		Cherokee		0123	0710	
	62 0226	Smaragd		0001	0348	ZX		0037	0072	0209	Chess	0157	0605		
Pathe Cinema	0043	Sonitron			0047					0203			0115		
Pathe Marconi	0041	Sonneclair			0072						Clemens Kamphus		05		0396
	00 0209	Sonoko			0278	SAT /STB)					Cobra				0396
	38 0072	Sonolor			0048	JAI /JIU/					Colombia			0668	0132
Philips 00	81 0384	Sontec		0037	0278	@sat				1300	Columbia				0132
Phoenix	0278	Sony		0032	0106	ABsat	0668	0123	1323		Columbus				0668
Phonola	0081	Soundwave	0037	0209	0348	ADB	0000	0123	1323	0642	Comag				0132
Pioneer 0067 00	81 0042	Ssangyong			0072	Adcom				0200	Condor				0607
Portland	0278	Standard			0278	AGS			0668		Connexions				0396
Prinz	0000	Starlite		0037		Akai				0200	Conrad	0607	0573	0115	0501
Profitronic 00	81 0240	Stern			0278	Akena				0668	Conrad Electronic			0607	0713
	00 0320	Sunkai	0209	0348		Alba			0455		Cryptovision			0455	
Prosco	0278	Sunstar			0000	Allsat		0200	1017	1043	Cyrus				0200
	78 0000	Suntronic			0000	Alltech				0713	D-box		1127	1114	
Protech	0081	Sunwood			0072	Alpha			0668	0200	Daeryung				0396
Provision	0278	Supra		0037		Altai				0396	Daewoo			1296	
Pye	0081	Symphonic		0000		Amitronica				0713	Delfa				0863
Quasar	0278	T+A			0226	Ampere			0396	0132	Deltasat				1075
Quelle	0081	Taisho			0209		0713				DGTEC				1242
Radialva 0037 0072 00		Tandberg		0004	0278	0882 0885	0863	0501	0795		Digatron				1294
Radiola	0081	Tashiko 0000 004				Anglo				0713	Digenius				0299
Rank	0041	Tatung 0000 004				Ankaro				0713	Digiality				0607
	48 0278 41 0384	T 0072 00		0348		AntSat			1017		Digipro				1105
Rex 00 RFT	0072	Teac 0072 004		0278		Apollo				0455	DigiQuest Diskoverer			0605	0863
Roadstar 0240 0072 00		TEC	0037	0278			1043	0834	0132		Diskovery			0668	
Royal	0072	Tech Line		0276	0072	Armstrong				0200	Disego			0000	0710
Saba 0041 0320 03		TechniSat		0348		Asat				0200	Distratel		0084	0885	
	09 0348	Teleavia		0340	0041	ASLF				0713	Distrisat		0004	0003	0200
Salora 0043 01			11 0320	U38/I		AssCom			٥٥٥٥	0853	DMT				1075
	40 0432	Teletech		0278		Astacom			0668		DNT			0200	0396
Sansui 0041 0067 0106 00		Tenosal	0072	0270	0072	Aston			0607	1129	DREAM multimed	ia TV		0200	1237
Sanyo 0104 0047 00		Tensai	0000	0037		Astro 0133	0172	0501			DStv	10.1 V		0642	
,	78 0240	Tevion	0000	0348		ASUU 0133	0173	1099			D3(V			0012	0075
SBR	0081	Thomson 0320 004	11 0067			Athena	1113	1033	1100	0668	Echostar 0610	1169	0871	0167	0853
Scan Sonic	0240	Thorn		0104		Atlanta				0871			0454		
Schaub Lorenz 0041 0104 00		Thorn-Ferguson			0320	Aurora				0879				0511	
	0315		2 0037	0041			0642	0497	0879		Einhell			0713	
Schneider 0072 0000 0037 00	81 0278	Tokiwa			0072	Avalon	0042	0431	0013	0396	Elap	0713	1129	0668	0710
0240 00	42 0897	Topline			0348	Axiel			0668		Elsat				0713
Seaway	0278	Toshiba 0045 004	11 0384	0043	0081	Axis			1111		Elta				0200
SEG 0072 0240 0278 06	42 0081	Towada			0072	Beko				0455	Emme Esse				0871
SEI	0081	Tredex			0278	Bentley Walker				1017	Engel			1017	0713
Sei-Sinudyne	0081	Uher		0037	0240	Blaupunkt				0173	EP Sat				0455
	84 0037	Ultravox			0278	Blue Sky			0713		Eurieult		0084	0885	
Sentra	0072	Unitech			0240	Boca			0132	0713	Eurocrypt				0455
Setron	0072	United Quick Star			0278	Boston		0132	0710		Europa	0863	0607		
	37 0569		00 0081			Broco				0713	Europhon			0299	
	72 0104		06 0348	0209		BskyB			0847	1175	Eurosky	0607	0132		
Shivaki	0037	Victor		00=-	0067	BT			0668					0114	
Siemens 0037 0104 0081 03			31 0352	0278		Bubu Sat				0713	Eurostar		0455		0115
Siera	0081	Weltblick			0037	Cambridge				0501	Fenner	0668	0157	0605	
Silva	0037	Yamaha			0041						Ferguson				0455
3 50															

Fidelity 0501	K-SAT	0713 Neuhaus 0501 0713		0501
Finlandia 0455	Kamm		0713 0834 Sat Control	1300
Finlux 0573 0455	Kaon	1300 Nikko 0713	0723 0200 Sat Partner	0501
Flair Mate 0713	KaTelco	1111 Nokia 1023 1114 0751	1127 0723 Sat Team	0713
Force 1101	Kathrein 0658 0249 1057	0173 0853 0573 1223	0455 1723 Satcom	0605 0607
Fortec Star 1017 1083	1221 0200 0713 0668		1310 1312 Satec	0713 0834
Foxtel 0879 0720 0455 0497	0123 0115 1323		0455 Satline	0628
0795 1176	Kathrein Eurostar	0115 Nova	0879 Satistation	1083
Fracarro 0871 0668	Kiton	0114 OctalTV		0710 0668 0157 1206
Freecom 0501 0173		0710 Okano		0605 0157 0607 0885
Freesat 0882	Konig	0607 OnDigital 0751 0329 0241		1111 0132 1075
FTEmaximal 0713 0863		1043 Optex	0834 SCS	0115 0299
Fuba 0396 0173 0573 0115 0299	Kreiling 0658 0249	0114 Optus	0879 0853 Seemann	0396
Fugionkyo 1105	Kreiselmeyer	0173 Orbitech 1099 1100 0200	0501 0157 SEG	0605 0742 0114 1087
Galaxis 1111 1101 0834 0863 1176	Kyostar	0132 Origo	0497 Seleco	0871
0853 0115 0879	L&S Electronic	1043 Ouralis	1205 Septimo	1205 0885
Garnet 1075	Labgear	1296 Oxford	0668 Siemens	0173
GF 0834 1043	LaSAT 0607 0115 0132 0157			0713
GF Star 1043				0501
GOD Digital 0200	Lenson	0501 0720 0497 0200 0853		0713
Goldbox 0853	Lexus	0200 Packsat		0847 0856 0887 1014
Goldvision 1017	LG	1075 Palcom	0299 SKY+	1175
Gooding 0571	Lifesat 0605 0299 1043	0713 Palladium		0713 0605 0157 1200
Goodmans 1284 0455	Logix 1017	1075 Palsat	0501	1085 1075 0628
Gradiente 0887	Lorenzen 0299 1294 0607 0742	0132 Panasat	0879 0615 Skymax	0200
Granada 0455		0501 Panasonic 0847 1104	0455 1320 SkySat	0157 0605 0713
Grandin 0084	M&B1	0605 Panda 0455 0607		0132 0742
Grundig 0173 0847 1150 1291 1435	Manata 0710 0668		0668 SM Electronic	0157 0713 1200
0571 0750 0879 0885 0853 0501	Manhattan 1083 0455 0710			1075 1085
1297 1330		1017 0710 0668 0571 0173		0132 0299 1101 0882
Hanseatic 0605 1099 1100	Marantz		1017 1200	0396 1113 0115 0713
Hänsel & Gretel 0132 0607	Maspro 0750 0713 0173			0282 0847 0853 0455
Hauppauge 1294	Matsui 0571 0710		0871 0396 SR	0132
HDT 1011	Max	0607 Polytron	0396 Starland	0713
Heliocom 0607	MB	0605 Praxis	0511 Strong 0879	0853 1105 1159 1300
Helium 0607	Mediabox	0853 Preisner 0132 0396	1101 1113 Sunsat	0713
Hirschmann 0396 0882 1113 1111	Mediacom	1206 Premiere 0853 1114 1127	0723 1111 Sunstar	0132
0173 0573 1085 0299 0501	MediaSat 0501	0853 1176 1195 1100 0249	0658 1435 Tantec	0455
0710 0607 0668	Medion 0713 0299	1043 Primacom	1111 Tatung	0455
Hitachi 0455	Medison		0668 0710 Teac	1322
HNE 0742 0132	Mega	0200 Promax	0455 Tecatel	1200
Houston 0668 0396	Metronic 0713 1215 0084 0885			0200 1099 1100 1195
Humax 1176 0863	Metz	0173 Prosonic	0742	0501 1322
	Micro 0607 0501	· - , -	0571 Technosat	1206
Hyundai 1011 1159 1075	Micro electronic	0713 Pyxis	0834 Technowelt	0607 0885
ID Digital 1176 0863	Micro Technology	0713 Quadral 0628 0668		1017
Imex 0084	Micromaxx		0742 0115 Techwood	0114
Ingelen 0396 0882	Microtec	0713 Radiola	0200 Telasat	0605 0115 0607
International 0132	Minerva	0571 Radix 0396	1113 0882 Teleciel	1043
Interstar 1105 1017	Mitsubishi	0455 RFT	0200 Telecom	0713
Intervision 0628 0607	Morgan's 0200 0713	0132 Roadstar	0713 Telefunken	0710
Invideo 0871	Motorola			0750 0501 0607 0834
IRTE 0609		0879 Saba 0710 0885		0605 0607
Italtel 0871	Multitec	0157 Sabre		0501 1099 1100 0114
ITT Nokia 0573 0455 0723			1114 1253	0200 0157
	Myryad			
JOK 0710	Mysat	0713 Samsung 0863 1243 1343		0114
JVC 0571	Netgem	1322 1017	1293 1292 Televes	0455 0501 0132

Thomson		0713 10820		0115 0710	0607 1046
Thorn Tokai	.23	.0020	0000	0,.0	0455
Tonna Topfield	0455	0668	0501	0713	0834 1206
Toshiba TPS				0820	0455 1253 0501
Triasat Triax	0501	0115	0200	0396	0501
Turnsat	0853	30114	1296	1291	0132 0713
Twinner				0132	0713
UEC					0879
Uher Unisat					0157 0200
Universum		0173	0571	0607	0299
Van Hunen			0115	0742	1087 0299
Variosat					0173
Ventana Vestel					0200 0742
VH-Sat			1222	1022	0299
Viasat Visionic			1323	1023	0820 1105
Visiosat			0457	0710	0713
Wetekom Wewa			0157	0605	0501 0455
Wisi	0173	0396	0299	0455	0501
Worldsat		0710	0114	0607 0123	0834 0668
XCOM				0123	0668
XSat Xtreme			0668	0713	0123 1300
YES	4075	0740	0444	0445	0887
Zehnder Zenith	10/5	0742	0114	0115	0419 0856
Zeta Techno	ology				0200
Zinwell					1176

NTL Cabletell		0276
Ono		1068
Optus	0276	1060
Pace	1068	1060
Philips	0817	0286
PVP Stereo Visual		0003
Sagem		0817
Tele+1		0443
Telepiu		0443
Tudi		0286
United Cable		0003
Visiopass		0817

Cable Box (STB)		
Austar		0276
BT		0003
Canal Plus		0443
Comcrypt		0443
Decsat		0423
Filmnet		0443
France Telecom		0817
General Instruments		0276
Jerrold	0003	0276
Kabelvision		0003
Macab		0817
Melita		0003
MNet		0443
Mr Zapp		0817
Noos		0817