



## **Operating Instructions**

TV

- Individual 40 Selection
- Individual 32 Selection
- Individual 32
- Individual 26 Selection
- Individual 26

## LOEWE.

## Contents

Remote control - TV functions
Control unit
Connections to rear panel
Welcome Integrated features Scope of delivery Transporting Installation options Note on the LCD screen Cleaning Disposal Remove the protective foil
For your safety
First installation Remote control Connection Handling the fabric hose (optional) Use of the binders Using the Conditional Access module Switching on Automatic programming Directing DVB-T antenna
Daily operation
Switching on/off Changing stations Basics about the menu operation For the info system For the index Setting the sound Picture settings Direct control on TV set
Operating modes – TV
How the coloured keys work in TV mode Show status display Calling the index Call additional functions Call timer overview Select picture format Move picture up/down TV menu DVB subtitles Removing the CA module Inserting a new CA module Inserting a new DVB software Image+ menu Image+ demo mode

Operating modes – PIP	24
PIP picture as freeze picture	24
Selecting the station of the PIP picture	24
Select the station of the TV picture (main picture)	24
PIP scan in the PIP picture	24
Interchanging PIP picture/TV picture Functions in the PIP menu	24 25
Setting the PIP type	25 25
Position of the PIP picture	25
Operating modes – EPG	26
Using the EPG	26
EPG menu	27
Selecting providers and stations	27
Data capture	27
Operating modes – Teletext	28
Page selection with the coloured keys	28
Displaying teletext pages	28
Programme timer recordings	29
Teletext menu	29
Digital teletext operation (only for MHEG-5 device versions)	29
Operating modes – Radio	30
Radio menu	30
EPG - Programme guide	30
Operating additional equipment	31
Login and connect equipment	31 32
Video playback Timer recording with video or DVD recorder	32 32
Assignment of digital audio inputs and outputs	33
Connecting Loewe DVD Preceiver Auro 2216 PS and Individual	55
Sound loudspeaker system	34
Connecting other audio amplifiers or active speakers	35
HDMI (DVI) connection	36
VGA/XGA connection	36
Component video connection	37
Operating other Loewe devices with the RC3 remote control	38
Setting the remote control to operate devices from other manufacturers Rotating the TV set	38 40
What to do, if	40 <b>41</b>
Technical data General data	<b>43</b> 43
Electrical data	45 44
Accessories	<b>4</b> 5
Service	47
Codelist RC3 / Lista de códigos RC3	48

## **Remote control - TV functions**



## **Control unit**



<sup>(1</sup> Radio only for DVB reception, provided the station broadcasts this. Otherwise, switch over to an audio input.

<sup>(2</sup> Only for sets with a Digital Recorder.

## **Connections to rear panel**

### Device variants with lateral connection sockets and CI slot



<sup>(1</sup> Set-specific equipment and retrofitting options for PIP and satellite tuners, see pages 45 and 46.

## **Connections to rear panel**

### Device variants with lateral CI slot



<sup>(1</sup> Set-specific equipment and retrofitting options for PIP and satellite tuners, see pages 45 and 46.

## 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 GB). 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. 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+.

### Scope of delivery

- LCD-TFT TV set
- Mains Cable
- RC3 remote control with 2 batteries
- Table stand mounted
- Marketing and service card
- 3 binders
- 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 manually rotatable desktop unit

Positioning as a manually rotatable desktop unit with the mounted table leg included in the delivery.

#### As a motorized rotating desktop unit

- ARS Motor Unit Screen Table Stand, Loewe order no. 66481B00.
- ARS Motor Unit Screen Table Stand Chrom, Loewe order no. 66481Q00.

#### As a wall-mounted unit

- Wall Holder WM55 for Individual 26, Loewe order no. 65497A00.
- Wall Holder WM54 for Individual 32 / 40, Loewe order no. 65498A00.
- Screen Wall Mount 1 for Individual 26 / 32, Loewe order no. 66484B00 (Only in connection with VESA adapters, see accessories on page 45).
- Screen Wall Mount 2 for Individual 40, Loewe order no. 65493B00 (Only in connection with VESA adapters, see accessories on page 45).

#### As a manually rotatable stand-alone unit

- Screen Floor Stand for Individual 26 / 32, Loewe order no. 65496B00.
- Screen Paravent for Individual 26 / 32 / 40, Loewe order no. 65494B00.

#### As a motorized rotating stand-alone unit

• Screen Floor Stand MU for Individual 26 / 32 / 40, Loewe order no. 66494Q00.

#### As an individual mounting solution

- Screen Lift for Individual 26 / 32, Loewe order no. 65486B00.
- Screen Lift Plus for Individual 40, Loewe order no. 65486B10 (Only in connection with VESA adapters, see accessories on page 45).
- Screen Ceiling Mount for Individual 26, Loewe order no. 65492B00.

## 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).

<u>Note</u>: The front screen (Individual Selection) may only be removed by a specialist dealer even in case of dirt on the inside.

### 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.

### Remove the protective foil

(only Indiviudal 40)

Pull the two protective foils slowly and carefully off the front of the unit (see fig.).



## 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.

The rating plate is located on the rear panel next to the connections.

### **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 38.

### 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).



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 guality.

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

If a set was retrofitted with a PIP tuner or if this is already integrated in a set with a digital recorder, then plug the antenna into the antenna input of the PIP tuner and connect the PIP tuner output with the ANT-TV socket (Tuner 1). See illustration on pages 5/6.

Set-specific equipment and retrofitting options for PIP and satellite tuners, see pages 46 and 47.

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, connect one antenna cable each, for example from the antenna switch or from the twin LNC, to both SAT sockets.

#### Handling the fabric hose (optional)



Use the fabric hose for tidy laying of the power cables, antenna cables or cables of other electronic components and lay the hose with the cables to the connecting sockets. 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.

You can obtain the fabric hose as an accessory from your Loewe dealer or Loewe Customer Service.

#### Use of the binders



The enclosed binders are intended to bind the connecting cables together and fix the cables to the mount of the table stand (see figure). By pressing on the closure of the binder, it can be opened again.

### **Using the Conditional Access module**

In order to be able to receive encrypted digital stations, a Conditional Access module (CA-module<sup>(1)</sup>) and a Smart Card<sup>(1)</sup>, if necessary, must be inserted into the corresponding slot of your TV set. You can find the Common Interface slot (CI-Slot) on the back of your TV set, see the illustration on pages 5/6.

- 1. Make sure the TV set is switched off with the mains switch on the set.
- 2. First push the Smart Card into the CA-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 Smart Card.





 Push the CA module carefully into the slot contact side first. When you are standing in front of the TV set, the logo on the CA module must face the rear. Make sure the module is not twisted in the process. Do not use force.

When the module locks, the eject button is pressed outwards.

<sup>(1)</sup> The CA-module and the Smart Card are not included in the scope of delivery of this set; you can usually obtain them at your specialist dealer.

### Switching on



Press the mains switch, the red indicator on the set now lights up (standby mode).



Switch on the set using the switch integrated in the indicator. The green indicator on the set now lights up (for further operating options see page 13).

Replace the connection cover on the TV set.

### 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 ...



••

 $\ldots$  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.
- By pressing the OK button, you can call the menu "Connect antenna cables(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

Initial installation				
Connect antenna cable(s)				
Antenna cable(s) for:		to antenna s	socket(s	s):
Antenna/cable (analogue)		ANT TV	$\checkmark$	- :
			$\checkmark$	
DVB-C		ANT TV	$\checkmark$	
DVB-S		ANT SAT		
	_	Connect/dis	connec	t
ok Proceed	44	Back		

stations from the cable network, then select "DVB-C" using the **yellow** coloured key.

- 3. For the country-specific station sorting and for presettings for DVB-T and DVB-C, enter the location at which the TV set is operated.
- 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)".
- 5. If you have selected "DVB-C", you generally leave the symbol rates and modulation types unchanged.

If other symbol rates are used in your cable network for broadcasting, enter the values with the numeric buttons of the remote control. If only one symbol rate is used, enter the same value for both symbol rates. If other modulation types are used for broadcasting in your cable network, select them in the menu. If only one modulation is used, select "none" for modulation type 2.

If necessary, ask your specialist dealer about the necessary settings for your cable network.

6. 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.

7. 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"). <u>Note</u>: For most satellites, a station search is required in both bands.
- 9. 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. <u>Note</u>: The correct display of the received frequencies in the "TV menu Settings Stations Manual adjustment" depends upon this setting.
- 10. You should receive a picture with sound with the settings previously made (only for ASTRA 1 and HOTBIRD). Then press **OK**.
- 11. 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.

- 12. Press **OK** to obtain an overview of the settings with which the automatic programming is to take place.
- 13. 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.
- 14. When the TV stations are saved, you will receive a corresponding message.
- 15. Press the **OK** button and the set then searches for the radio stations.
- 16. The TV set searches for, saves and sorts all radio stations which can be received with your antenna system.
- 17. 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 31.

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 GB 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 GB.

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

### **Directing DVB-T antenna**

#### Note: not with DVB-T stations in GB.

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.</li>
- 3. Select "Stations", then use  $\checkmark$  to select the menu line underneath.

771/	
TV menu Settings	INFO END
Stations	♦ Parental lock   Timer functions   Language
Manual adjustment	

4. Select "Manual adjustment" and call the menu using **OK** (not possible for MHEG-5 device versions).



- 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.
- 8. 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).
- 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.
- After you position or direct the antenna, we recommend to search for all the stations using the "Search wizard" (TV menu – Settings – Stations – 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, 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 (0 - 99).

Or 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 the radio

With the RADIO button on the remote control



RADIO

or:

Switch on radio using  ${\bf R}$  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.

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  $\frown \bigtriangledown$ .

#### ... 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).

1 2 ab 7 pqrs short short long

#### 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.

<u>Or</u> 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

1 2 7 8 tuv all short

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

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



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

#### ... 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.



9 wxyz

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



✓ ▲ ▲ ▶ and call with OK.

Digital DVB-T stations are indicated by **T**, DVB-C stations by **C** and DVB-S stations by **S**. Encrypted stations are additionally indicated by **S**. Ask your specialist dealer about decoders or the use of a CA module and a Smart Card for the reception of encrypted stations.

### 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  $\land \checkmark \blacklozenge \lor$ . You can make settings by using  $\blacklozenge \lor$ . 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.





ОК

(ок)

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.

	TV menu					INFO	END	
Picture	Sound	4,►	Recording	Connections	Settings			
	Treble							

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

1	TV menu Sound				1	INFO	END
	Treble	¢١	Bass	more			
	4						

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



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

Sound Bass 6 Set the bass tones by u	
If you want to make ot to "Bass" and select wi move up further to "So	her sound settings, move up with ▲ th ◀ ▶, e.g. "more". You can also und" by using ▲ and select other set- uch as, picture settings).
TV menu Sound Bass more 👁 💠	INFO END Treble
Use <b>OK</b> to call addition	al sound settings.
TV menu Sound Bass I <sup>r</sup> Loudspeaker sound∻ Stereo	INFO EN I' Headphone volume  ' Headphone sound  ' Auto
Select the sound setting	g using 4 >, e.g. "Auto volume" and
TV menu Sound sound ['Auto volume ↔ off	INFO EN I' AV audio signal  ' Maximum volume  ' Balance
use $\checkmark$ to select the	auto volume option.
TV menu Sound 'Auto volume off -	INFO EN
Use ◀ ▶ to select "on	" and activate the auto volume.
TV menu Sound	INFO EN
Auto volume	

**END** 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:

- Call the Sound menu directly.
- Call the Picture menu directly.
- Quick calls for Image+ \*, teletext subtitles, personal text pages, headphone volume, scan stations and to move the picture up and down.



́ок)

(OK)

OK

ОК

(ок)

**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  $\blacktriangle$  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:



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



If you want to search for new stations, for example, use  $\checkmark$  to select "Stations" in the line below.



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



Use - to select the line below, for example "Search wizard".



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.

. 1	IN	F	u	

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  $\checkmark$  b to go to the previous/next letter, or



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



and use  $\checkmark$  **\checkmark** to go from line to line.

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

OK)

Select the index item "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

v- (· OK) · v+	Setting the volume
P.	Volume 24
	by using $\checkmark$ or <b>OK</b> , you can call other sound settings
v v	Volume  Volume
(OK)	and select using $\blacktriangleleft$ $\blacktriangleright$
	Volume   Sound adjustment ·   Sound effects   Loudness Volume   Vo
	use $\checkmark$ for the related selection/setting
	Sound adjustment       normal     Pop     ◆I Classic   Speech     n       and use     ◆ to make the selection/setting there.

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:**



and use < > to select/set.

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

### Direct control on TV set

On page 4, you can find illustrations of the control unit located on the set.

#### Switching station on the TV set



Station up: with + on the control ring

Station down: with - on the control ring

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

Press R to switch the radio on or off.

#### 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** to call the menu

Direct control on TV set	
g mode 🛛 Volume 🛛 😽	Brightness   Contrast   Picture format   Stat
24	

use – or + to select the function to be set



use **R** for the related setting/selection



#### use - or + to set/select.

Use M 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 GB, but they operate as described on page 29 (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.

Standard settings pict./sound		INFO	END
Call up personal settings	Call up factory settings	Store	as per
Activate			

**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

 1 ARD
 Eifellandschaft
 14:30 - 15:15
 Stereo

 ①
 14:42
 Alarm time 20:00
 Sleep timer 23:00

 Language/sound selection
 Language/sound selection
 Sleep timer 23:00

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**



You can find more information on the index on page 17.

## **Operating modes – TV**

#### **Call additional functions**



Select additional functions such as Image+ \*, Teletext subtitles, Personal teletext pages, Headphone volume, Scan stations and to move the picture up and down.

Additional functions			INFO END
Image+	<b>~</b> ⊁	Teletext subtitles	Personal teletext pages
off			

#### **Call timer overview**



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

	Timer list	2222200		Fri 12.09./14:12	
	12.09. 18	:00-18:30 3	SAT Die Kö	chin, die Putzfra	und d
46					
194					
	TEXT Detail	New New	recording	Change	END
				Delete	INFO

#### 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  $\blacktriangleleft \triangleright$ .



You can switch the panorama picture over to distortion-free representation on your TV set. Dark margins are then visible on the left and right of the picture.

Switching over: Keep the **M** button on the set pressed, at the same time press the "Picture format"  $\neg$  button on the remote control briefly.

Resetting: Press the same button combination again.

#### Move picture up/down



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

#### TV menu

MENU Call up the TV menu



You will find a description of the picture and sound settings on page 18. 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":

#### Recording wizard - to programme new timer recordings

Via EPG
 Via teletext
 Manual

You will find further information about timer recording on page 32.

#### 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 12 and 13.

#### 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:

#### <u>Stations</u>

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 GB).

Search wizard 
 Manual adjustment 
 Change stations

#### Parental lock

You can lock the TV "immediately", "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

#### <u>Language</u>

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 first 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

The TV set can be rotated on a Loewe rotating stand. You can find out more on page 40.

#### **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**.

	DVB subtitles	
l	Subtitles off C:	END
	for translation	INFO

<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 subtitles are not available when Digital Teletext is being displayed.

## **Operating modes – TV**

#### **Removing the CA module**

- 1. Switch the TV set off with the mains switch.
- 2. Remove the cover from the back of the set on the upper left.
- 3. Press the eject button at the CA module slot; the module is unlocked.
- 4. Remove the CA module from the set.

#### Inserting a new CA module

After you insert a new CA module (CI module <sup>(1)</sup> is displayed in the menu) and switch the TV set on, the following dialogue is displayed:

Autom. station search
Your TV set has detected a new CI 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 CA module menu

Here you can call up information on the inserted Conditional Access module and the Smart Card. 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 Smart Card. The term CI module<sup>(1)</sup> displayed in the menu refers to the CA module. The content of this menu depends on the particular supplier of the CA 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 on-screen 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.

Update digital TV software Current version: V3.x.x You can search for a new software version with 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.

Update digital TV software Current version: V3.x.x New version: V3.1.0

#### **Downloading software**

- 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.
- 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.

<sup>(1)</sup> CA module has established itself as the usual market name. This cannot be taken into consideration in the menu yet.

## **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 the set Individual 32 Selection and Individual 40 Selection.

#### Image+ menu

+	Call the menu "Additional functions".
	Additional functions INFO END Image+
	Use $\checkmark$ to move to the corresponding selection/setting
·	Additional functions Image+ INFO END On off
	and use < > to select/set and use
	Additional functions Image+ Im
OK	to activate.

In 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)**

Note: The coloured keys do not work as described below with DVB-T stations in GB, but they operate as described on page 29 (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 or a digital satellite tuner retrofitted. Set-specific equipment and retrofitting options for PIP and satellite tuners, see pages 45 and 46. 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.

Note: For GB 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 kev. 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 kev.

Interchange the pictures by using the **yellow** 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.



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.



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



Select "Type" and then "Split Screen".



## **Operating modes – EPG**

### **EPG - Programme guide**

EPG is an electronic programme guide. With this system, you can easily find the programmes that interest you (sorted according to day, time, stations and topics). 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

Switch EPG on/	off		
Date Time Stations Topics	EPG (Electronic Progra Fri 10.09. now all	mme Guide) Fri 10.09./14	
24 Kabel 1	13:20-14:15 Kabel 1 13:30-14:15 H3 13:55-14:20 Kinderkan 14:00-14:15 ZDF 14:00-15:00 RTL 14:00-15:00 Sat 1 14:00-15:00 Pro7 14:00-14:30 N3 14:00-14:20 WDR	ARD-Buffet Blaubär & Blöd (37) heute - in Deutschland Das Strafgericht Zwei bei Kallwass Das Geständnis - Heute s DAS! ab 2 Die kleinen Strolche (10)	08 .
TEXT Detail	Familienserie - Sturzflug		END
P+ P- Page ↑/↓	0 9 Select time		MENU

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  $\checkmark$  **a** 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.



Use ▲ to select the menu line for the date, time, stations 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 Stations 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 **~** and mark this by using **OK**.

## **Operating modes – EPG**

In front of the programme's title, the system places an  $\checkmark$ . This station is switched later to this programme when 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  $\blacktriangleleft$  is 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.

<u>Or</u>, 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 **4**.

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.

First, all stations are marked with the  $\checkmark$  symbol so that their data is displayed in the programme guide (precondition: provided EPG data is broadcast for the respective station). Stations indicated by  $\blacksquare$  are analogue terrestrial/cable stations, stations indicated by  $\blacksquare$  are DVB-T stations, stations indicated by  $\square$  are DVB-C stations and stations indicated by  $\square$  are DVB-S stations. These stations are available for evaluation in the programme guide.

Select the stations you want to omit from the programme guide one after another and deactivate each one by using **OK**. The **V** symbol is removed.

#### 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 in standby mode, the indicator on the set turns orange. The data acquisition begins and lasts about 1 hour. When data acquisition is terminated, the indicator turns red again. 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**

TEXT

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



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:



6K

Formel 1: Sch	numacher erneut	vorne	213
Tagesschau.	. 110/112 Ku	ıltur	500
Wetter	170 Ge	esellschaft	530
Sport	200/600 Lo	tto/Toto	666
TV Guide	300/400 W	irtschaft	700
Inte	ernet: www.ard-te	ext.de	
+	- Inhalt	tagessch	au
Page select	ion OK	View	

call.



In **Multiple pages** scroll using  $\checkmark$  > . You can see which multiples pages can be called in the bottom menu line.



Call contents page 100



INFO

#### 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.

TV Guide 2 more				END
Wetter ତ↔ Sport 1 TV Guide ARD heute ARD morgen FS-Sendungen	Städte Regional Reisen int. Städte Biowetter	•••	213 500 530 666	
TOP table Übersicht tagesschau Wetter ଊ↔	Wetter Vorhersage		532 204	
Wird auch der Na	statt Eigenneim hverkehr teurer?		120 121 122	

Use ▲ to select the topic group. Select the topic column using . Select the topic with ▲ and display page with OK.

#### **1 2 7 pqrs** Enter the page number directly

#### **Displaying teletext pages**

- 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 O. 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  $\checkmark$  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 MHEG-5 device versions)

In the GB, 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.

If no message appears telling you how to switch to digital teletext after switching to another station, press the **TEXT** key. If a selection for DVB subtitles is available, this item must be hidden before.



Depending on the provider's respective offer, you can use the  $\checkmark \land \checkmark$  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.

#### <u>Note</u>:

- 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 teletext 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.



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.

Radio:	8	B DLF			Numerical
	AUDIO IN		9	HR-INFO	S
	AVS		10	MDR INFO	S
	AV2		11	MDR FIGA	S
	AV1		12	NDR KULT	s
	B5 AKTL	S	13	SWR1	s
	BAYERN 1	Š	14	SWR2	s
	BR4 KLSK	Š		WDR3	s
	SUNSHINE	Š	16	WDR5	Š
5	ROCK ANT	Š	17	OESTER 1	Š
	ANTENNE	Š		MDR JUMF	
7	DLR	Š	19	JAZZ RAD	Š
8	DLF	S	@⇔ 20	BLUSAT20	S
0	DEI		0.00	DECONTEC	
18:00 -	-18:10 Nachr	richten			
OK S	Switch to		Sc Sc	an stations	
	Select station		Pr	evious station	
	Screen off/on			ange sorting	
-	screen 011/011		- Ch	lange sorting	

You can see a station list of the radio stations or with DVB-T in GB 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.

You can see a station list of the radio stations. Digital DVB-T stations are indicated by **T**, DVB-C stations by **C** and DVB-S stations by **S**. Encrypted stations are additionally indicated by **T**. Ask your specialist dealer about decoders or the use of a CA module and a Smart Card for the reception of encrypted stations.

When time and title are sent by the marked station these data are displayed at the bottom of the station list.

When the station list is shown you can switch off the screen with the **red** coloured key. The LED indicator on the set changes from green to orange. You can switch the screen display back on by using the **OK** key, **red** or **blue** coloured keys, by using **RADIO**, **MENU** 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 GB, the buttons may be configured differently by the provider).

The sound menu can be called in the radio mode using the

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

#### **EPG - Programme guide**

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

**\* EPG** Call Programme guide

## **Operating additional equipment**

### Login and connect equipment

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



State what equipment you want to connect. State whether a piece of audio equipment is to be connected (more details as of page 34). 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 ◀ ▶.
- Select the line below using and select "Manual adjustment" using and call this menu using OK.
- 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.
- 7. 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.
- 9. 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.

## **Operating additional equipment**

### 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 TV. 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



(ок)

0 AV

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

You can programme timer recordings on the TV set. Programming can be done with the EPG programme guide (not with DVB-T in GB), teletext or manually. Call the "Timer list" menu with the <u>S</u> button and press the **red** coloured key for the "Recording wizard". Select whether you want to programme the recording via EPG, teletext or manually. You also have the option to programme recordings directly from the EPG programme guide or teletext.

<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 35.

#### 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).

## **Operating additional equipment**

### **Connecting Loewe DVD Preceiver Auro 2216 PS and Individual Sound loudspeaker system**

You can play audio signals from the TV or DVD player in cinema quality with these components. The Individual Sound 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.

<u>Note</u>: 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 abutton, 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.

## **Operating additional equipment**

### **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.

<b>0</b> AV	Call AV selection
	AV selection I VGA  HDMI/DVI TO: COMP. IN DECENTION VIDEO   VCR   DVD   AVS
	Select HDMI/DVI socket and use
OK	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 35. 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:

SDTV: 720x576i (PAL), 720x480i (NTSC),

720x576p, 720x480p.

HDTV: 1280x720p, 1920x1080i.

Select the VGA/XGA connection in the AV selection.

0 AV	Call AV selection
	AV selection
	Select VGA socket and use
OK	to call.

Start the connected device.

#### Set geometry

Call the TV menu using the MENU button, select "Geometry" using  $\blacktriangleleft \ \blacktriangleright$  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 Delta 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.
# **Operating additional equipment**

#### 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 35. 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 35.

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.

<b>0</b> AV	Call AV selection
	AV selection MI/DVI   COMP. IN The VIDEO   VCR   DVD   AVS   VGA   HDMI/DV
	Select COMP. IN sockets and use
OK	to call.

Start playback on the connected device.

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

# **Operating additional equipment**

### **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):

VCR VCR

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

Then press the END and  $\star$  EPG buttons simultaneously for at

least 5 seconds. The upper left indicator on the remote control will blink twice.

9 wxyz 8 tuv 8 tuv

# PIP )

STB

DVD

VCR

END \* EPG

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.

END \* EPG 0 AV 5 ikl

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** 5 seconds. The

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

9 wxyz 9 wxyz

# PIP

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
  - **# PIP** react, then that was not the right code. Press the **# PIP** button again to call the next code.

(U)	P

- ♂ Press the button ► (Play) or **On/Off** again.
- ★ EPG 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)



# **Operating additional equipment**

## **Rotating the TV set**

Individual / Individual Selection sets 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.



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 range of rotation (basic adjustment)

Here you can determine the range of rotation maximum +/- 40 degrees) of the TV set by adjusting the maximum right and left stop.



set allows. This will be the maximum right hand position in future.

Confirm with **OK**.

Rotate TV		
Basic adjustment	-	END
-31		
End of basic adjustment		
Turn your TV with $\blacktriangleleft$ as far to the left as the location of allows. This will be the maximum left hand position in		
End the basic adjustment with <b>OK</b> .		
Close the menu.		

#### Setting the position of the TV set when switched off

Юĸ

END

ОК)

( OK )

ОК

OK)

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

> Call the menu item "Activate switch-off position" in the TV menu – Settings – Miscellaneous – Rotate TV. Settings Miscellaneous INFO END Rotate TV Activate switch-off position 🛛 💠 Set switch-off position 🛛 Basic adjustn no Move down with  $\checkmark$  and select "yes" with  $\checkmark$  . Settings INFO END Rotate TV Activate switch-off position ves no Move up with ▲ and select "Set switch-off position" with ◀ ▶ Settings Miscellaneous INFO END Rotate TV osition Set switch-off position 🕅 🕂 Basic adjustment use **OK** to go down and use the **I** arrow buttons to set the desired switch-off position. The TV set rotates in the process. Settinas **Botate TV** INFO END Set switch-off position 0 [  $\mathbf{\Phi}$ **OK** Adopt

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

END Close the menu.

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

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

OK)

# 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.	<ul><li>a) The Digital Link function is not activated or not possible in the recorder.</li><li>b) Euro-AV cable is not connected.</li><li>c) Recorder is not logged in.</li></ul>	<ul><li>a) Activate Digital Link in the recorder (see operating instructions of the video recorder).</li><li>b) Connect the Euro-AV cable.</li><li>c) Log in recorder.</li></ul>
General problems with connecting external equip- ment via an AV input.	<ul> <li>a) The device is not logged in to the connection wizard or is connected differently than is shown in the connection diagram.</li> <li>b) The AV norm is set incorrectly.</li> <li>c) The AV signal is set incorrectly.</li> </ul>	<ul> <li>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.</li> <li>b) Set the norm correctly.</li> <li>c) Set the AV signal correctly.</li> <li>lf "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.</li> </ul>
A decoder connection does not function or is faulty.	<ul> <li>a) The signal is not decoded because the wrong decoder stations are selected in the connection wizard.</li> <li>b) The sound is missing in decoder mode because the wrong decoder sound is assigned in the connection wizard.</li> </ul>	<ul> <li>a) Follow the instructions in the connection wizard again (TV menu – Connections – New devices/ modifications) and select the corresponding decoder station.</li> <li>b) Follow the instructions in the connection wizard again and select the right audio source (decoder, TV or autom.), see instructions of the decoder.</li> </ul>
All menus appear in the wrong language.	Menu language has been set incorrectly.	Set your menu language: Press the <b>INFO</b> button in TV mode (index). Select the first index item and call it by using <b>OK</b> . Then select the language and confirm with <b>OK</b> .

# What to do, if ...

Problem	Possible cause	Remedy
Digital Link Plus does not function.	<ul> <li>a) Euro-AV cable is not fully wired (pin 10 not wired).</li> <li>b) Some recorders can only adopt stations during the initial installation of the TV set.</li> <li>c) All or some of the terrestrial and cable stations are stored on station storage locations ≥ 99.</li> </ul>	<ul> <li>a) Replace the Euro-AV cable.</li> <li>b) Restore the recorder to the as-delivered state (see recorder's operating instructions).</li> <li>c) Rearrange the terrestrial and cable stations so that they fall between 1 and 99.</li> </ul>
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.	<ul><li>a) The external digital audio amplifier does not support the selected sound format (Dolby Digital, dts, MPEG).</li><li>b) TV set and external digital audio amplifier are not connected.</li></ul>	<ul> <li>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).</li> <li>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.</li> </ul>
Device on mounted motor unit does not rotate.	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).
Dirt on the inside of the front screen (Individual Selection).		The front screen may only be removed and cleaned by your dealer.

# **Technical data**

## **General data**

Туре	Individual 26	Individual 26 Selection	Individual 32	Individual 32 Selection	Individual 40 Selection	
Item no.	65403xxx	65412xxx	65417xxx	65414xxx / 66434xxx	66428xxx	
Versions DVB-T CI (MHEG-5) Versions DVB-T/C CI Versions DR+ DVB-T CI (MHEG-5) Versions DR+ DVB-T/C CI	• • - -	• • - -	• • - -	• • • •	•	
Set dimensions without stand (ca. cm WxHxD) Dimensions with stand (ca. cm WxHxD)	67,4x50,3x11,0 67,4x56,0x32,0	67,4x50,3x11,0 67,4x56,0x32,0	81,5x57,9x9,9 81,5x62,8x32,0	81,5x57,9x9,9 81,5x62,8x32,0	101,4x69,7x10,4 101,4x74,7x38,5	
Set weight without stand (ca. kg) Set weight with stand (ca. kg)	14,0 19,0	18,0 23,0	16,2 21,2	22,4 27,4	30,0 35,5	
Display Picture diagonal (cm)/picture format Resolution Contrast ratio	HD-LCD technology 66/16:9 1366x768 800:1	HD-LCD technology 66/16:9 1366x768 800:1	HD-LCD technology 80/16:9 1366x768 800:1	HD-LCD technology 80/16:9 1366x768 800:1	HD-LCD technology 100/16:9 1366x768 3000:1	
Angle of viewing horizontally/vertically	170°	170°	170°	170°	178°	
Power consumption (IEC 62087) in operation (watt) in standby (watt)	70 < 3	70 < 3	85 < 3	85/100 < 3	135/150 < 3	
Ambient temperature (Celsius)			5° – 35°			
Relative humidity (not condensing)			20-80%			
Barometric pressure	800 – 1114 hPa (0 – 2000 m over NN)					

The cole number of the peak of the part of the peak of

/

# **Technical data**

## **Electrical data**

Chassis name Power supply	L 2650 220 V -240V/50- 60 Hz
Tuner VHF/UHF/ cable Hyperband 8 MHz	41 MHz to 860 MHz
Station storage locations	1680
TV standards	B/G, I, L, D/K, M, N
	DVB-T, DVB-C*, DVB-S*
Colour standard	SECAM, PAL, NTSC,
	NTSC-V, PAL-V (60Hz)
Sound standard	Mono/Stereo/Dual-channel
	Nicam B/G, I, L,
	Virtual Dolby
Rated audio power	2 x 20 watt
Analogue Teletext	TOP/FLOF Level 2.5
Page Memory	3000
Digital Teletext (only for MHEG-5 device versions)	MHEG-5

### Connections

Jack 3.5mm		Headphones 32- 2000 ohm
Mini-DIN (A	VS) Video IN	Y/C (S-VHS/Hi 8)
		CVBS (VHS/8 mm)
.,	ow) Video IN	CVBS (VHS/8 mm)
	te/red) Audio IN	L/R
	5 Ohm/5 V/80 mA	Antenna/cable/analogue PIP (2/DVB-T/C
	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	e in active loud speakers) L/R
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	e A 19pin Digital video and audio
VGA/XGA	VGA/XGA IN	PC/STB video signal
Mini-DIN	SERVICE	Service/L-Link
Mini-DIN	CONTROL	Rotating stand control

<sup>(1</sup> Depending on the type of set.

<sup>(2</sup> Set-specific equipment and retrofitting options for PIP and satellite tuners, see pages 45 and 46.



# Accessories

### Wall holders and stands

Refer to the notes on the installations options on page 7.

#### **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 with both retrofit versions.

You can find the retrofitting options for your set in the table on the next page. Loewe order no. 89442.080

### **Digital Satellite tuner**

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

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 retrofit 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.

You can find the retrofitting options for your set in the table on the next page. Loewe order no. 89361.056

#### **Digital Twin Satellite tuner**

If your TV set is equipped with the Digital Recorder+, you can have it retrofitted with an integratable DVB-S Twin Sat tuner.

The integrated PIP DVB-T/C tuner is exchanged for the DVB-S Twin Sat tuner. You can find the retrofitting options for your set in the table on the next page. Loewe order no. 89443.080

### **VESA** adapter

The VESA adapter offers you the possibility of also using your TV set for other VESA-compatible fastening devices.

Loewe order no. 89687.B00 (VESA I 26; Individual 26 / Individual 26 Selection) Loewe order no. 89688.B00 (VESA I 32; Individual 32 / Individual 32 Selection) Loewe order no. 89754.B00 (VESA I 40; Individual 40 Selection)

<u>Note</u>: Please only use the original LOEWE VESA adapter for your TV set and use the VESA-compatible fastening devices recommended by LOEWE.

#### Inlays

For your Individual / Individual Selection set, there is the possibility to exchange the inlays (covers) attached at the sides to match the décor of your home. There are different surface textures or colours to choose from for the inlays for your Individual / Individual Selection set.

Please contact your specialist dealer to find out more about this offer.

Wooden trims are a natural product. UV light (exposure to strong sunlight) can cause slight discoloration here.

#### 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 Individual Sound

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.

#### Cube i Rack

The Loewe Cube i Rack is designed as an accessory rack to hold two peripheral units such as DVD players and/or DVD recorders as well as the subwoofer of the Individual Sound System.

If no subwoofer is used, the Cube i rack can hold up to four peripheral devices.

# Accessories

## **Retrofitting options**

The following table shows the equipment and retrofitting options for the individual device versions.

Device version / Equipment	ltem no.	PIP tuner (1	Digital Single SAT-Tuner <sup>(2</sup>	Digital Twin SAT-Tuner <sup>(3</sup>
Individual 26 DVB-T/C CI	65403xxx	-	0	-
Individual 26 DVB-T CI	65403xxx (MHEG-5)	-	-	-
Individual 26 Selection DVB-T/C CI	65412xxx	-	0	-
Individual 26 Selection DVB-T CI	65412xxx (MHEG-5)	-	-	-
Individual 32 DVB-T/C CI	65417xxx	0	0	-
Individual 32 DVB-T CI	65417xxx (MHEG-5)	-	-	-
Individual 32 Selection DVB-T/C CI	66434xxx	0	0	-
Individual 32 Selection DVB-T CI	66434xxx (MHEG-5)	-	-	-
Individual 32 Selection DR+ DVB-T/C CI	65414xxx	•	-	0
Individual 32 Selection DR+ DVB-T CI	65414xxx (MHEG-5)	•	-	-
Individual 40 Selection DVB-T/C CI	66428xxx	0	0	-
Individual 40 Selection DVB-T CI	66428xxx (MHEG-5)	-	-	-
Individual 40 Selection DR+ DVB-T/C CI	66428xxx	•	-	0
Individual 40 Selection DR+ DVB-T CI	66428xxx (MHEG-5)	•	-	_

• available / installed

• retrofittable / optionally available

- retrofitting not possible

<sup>(1</sup> You can retrofit either this PIP tuner or a digital satellite tuner.

<sup>(2</sup> You can retrofit either this digital satellite tuner or a PIP tuner.

<sup>(3</sup> The integrated PIP tuner is exchanged for the Twin Sat tuner.

## Service

#### 

Loewe Austria GmbH Parkring 10 1010 Wien, Österreich Tel.: +43 - 810/0810-24 (zum Ortstarif) E-Mail loewe@loewe.co.at

#### AUS

International Dynamics Australasia Pty Ltd. 129 Palmer Street Richmond 3121, Victoria, Australia Tel. +61 - 3 - 94 29 08 22 Fax +61 - 3 - 94 29 08 33 Email mail@internationaldynamics.com.au

#### BNLL

Loewe Opta Benelux NV/SA Uilenbaan 84 2160 Antwerpen, België Tel. +32 - 3 - 2 70 99 30 Fax +32 - 3 - 2 71 01 08 Email ccc@loewe.be

#### CH

Telion AG Rütistrasse 26 8952 Schlieren, Schweiz Tel. +41 - 44 732 15 11 Fax +41 - 44 732 15 02 Email infocpe@telion.ch

#### CY

HADJIKYRIAKOS & SONS LTD. Prodromou 121, P.O Box 21587 1511 Nicosia, Cyprus Tel. +357 - 22 87 21 11 Fax +357 - 22 66 33 91 Email Efthymios@hadjikyriakos.com.cy

#### CZ

Ing. Ivo Tietz Dolní nám. 9 746 01 Opava, Česko Tel.: +420 553 624 944 Fax: +420 553 623 147 E-mail tietz@opava.cz

### D

Loewe Opta GmbH, Customer Care Center Industriestraße 11 96317 Kronach, Deutschland Tel. +49 1801–22256393 Fax +49 9261–99500 Email ccc@loewe.de

## **DK**

Kjaerulff 1 A/S C.F. Tietgens Boulevard 19 5220 Odense SØ, Denmark Tel. +45 - 66 13 54 80 Fax +45 - 66 13 54 10 Email mai@kjaerulf1.com

#### E

Gaplasa S.A. Conde de Torroja, 25 28022 Madrid, España Tel. +34 - 917 48 29 60 Fax +34 - 913 29 16 75 Email loewe@maygap.com

#### F

Loewe Opta France S.A. 13 rue du Dépôt, Parc del l'Europe, BP 10010 67014 Strasbourg Cédex, France Tel. +33 - 3 - 88 79 72 50 Fax +33 - 3 - 88 79 72 59 Email loewe.france@wanadoo.fr

#### FIN

Kjaerulff 1 OY Artturinkatu 2 20200 Turku, Finland Tel. +358 - 2 284 1600 Fax +358 - 2 284 1601 Email Finland@kjaerulff1.com

#### GB

LinnSight Ltd. PO Box 8465 KA 7 2YF Prestwick, UK Tel. +44 - 12 92 - 47 15 57 Fax +44 - 12 92 - 47 15 54 Email helpline@linnsight.co.uk

#### GR

SIBA Engineering S.A. 6, Kifsou Av., 122 42 Aegaleo, Hellas Tel. +30 - 210 - 5913793 Fax +30 - 210 - 5317755 Email service@siba.gr

#### H

Basys Magyarorszagi KFT Epitok utja 2–4 2040 Budaörs, Magyar Tel. +36 - 23 41 56 37 (121) Fax +36 - 23 41 51 82 Email basys@mail.basys.hu

## 

Loewe Italiana SRL Largo del Perlar, 12 37135 Verona (VR), Italia Tel. +39 - 045 82 51 619 Fax +39 - 045 82 51 622 Email Angelo.Lorenzi@loewe.it

### 

PL Trading (pz 2004) Ltd. 27, Aliat Hanoar St. Givataiim 53401, Israel Tel. +972 - 3 - 57 27 155 Fax +972 - 3 - 57 27 150 Email info@loewe.co.il

### M

Mirage Holdings Ltd Flamingo Complex, Cannon Road Qormi, Malta Tel. +356 - 22 - 79 40 00 Fax +356 - 21 - 44 59 83 Email servicing@mirage.com.mt

#### MA

SOMARA S.A. 377, Rue Mustapha El Maani 20000 Casablanca, Morocco Tel. +212 - 22 22 03 08 Fax +212 - 22 26 00 06 Email somara@wanadoopro.ma

## $\bigcirc$

CableCom AS Gneisveien 12 3221 Sandefjord, Norge Tel. +47 - 33 48 33 48 Fax +47 - 33 44 60 44 Email soren@cablecom.no

#### (NZ)

International Dynamics (NZ) Pty Ltd PO Box 109 317, Newmarket Auckland, New Zealand Tel.: +64 9 379 0179 Fax: +64 9 379 0279 E-mail: enquiries@internationaldynamics. co.nz

## P

Videoacústica Comercio e Representacoes de Equipamentos Electronicos S.A. Estrada Circunvalacao, Quinta do Paizinho, Arm. 5 2795-632 Carnaxide, Portugal Tel. +351 - 2 14 24 17 70 Fax +351 - 2 14 18 80 93 Email office@videoacustica.pt

#### PL

DSV TRADING SA Plac Kaszubski 8 81-350 Gdynia, Polska Tel. +48 - 58 - 6 61 28 00 Fax +48 - 58 - 6 61 44 70 Email market@dsv.com.pl

#### RUS

Service Center Loewe ul. Verkhnaya Maslovka, d. 29 125083 Moscow, Poccurя Tel. +7 - 495 612 50 43 Fax +7 - 495 612 47 10 Email service@atc.ru

### S

Kjaerulff 1 AB Ridbanegatan 4, Box 9076 21377 Malmö, Sverige Tel. +46 - 4 06 79 74 00 Fax +46 - 4 06 79 74 01 Email Sweden@kjaerulff1.com

#### SK

BaSys Czech & Slovak s.r.o. Stará Vajnorská 17/A 831 04 Bratislava, Slovakia Tel.: + 421 2 49 10 66 18 Fax: + 421 2 49 10 66 33 Email: loewe@basys.sk

#### SLO

Jadran Trgovsko Podjetje Partizanska cesta 69 6210 Sezana, Slovenija Tel. +386 - 57 31 04 40 Fax +386 - 57 31 04 42 Email milos.zvanut@jadran.si

#### TR

Enkay Elektronik Servis Müdürlügü Alemdag Cad: Site Yolu No.: 10 Ümraniye/ Istanbul, Türkiye Tel. +90 - 216 634 44 44 Fax +90 - 216 634 39 88 Email mhatipog@enkaygroup.com

## ZA

Videonix (Pty) Ltd P.O. Box 31952, Kyalami 1684 Republic of South Africa Tel. +27 - 1 14 66 47 00 Fax +27 - 1 14 66 42 85 Email mail@loewe.co.za

Loewe	DEC	0699 0818	Kendo		0699 Pacific		8 0790	0713	
	Decca	0770	Kenwood 0	0534 0490	0737 Palladium				0695
	Denon	0490 0634	Kiiro	0718	0770 Palsonic			0689	0672
DVD-Player 0539	Denver	0699 0788	Kingavon		0818 Panasonic			0490	1908
DVD-Recorder Centros 11x2 0741	Denzel	0665	Kiss		0665 Panda				0783
DVD-Recorder Centros 21x2 1463		0768 0723	Koda		0818 Philips	053	9 0646	0503	
STB 1127	Digihome	0713	Koss		0651 Phonotren			0000	0699
VCR 0866	digiRED	0713		0705 0716			1 0631	1900	
Ven 0000	Digitrex	0672	Lecson		0696 Pointer	057	0001	1500	0770
	Digitiex	0831		0651 0770		<b>a</b> t			0718
<b>B</b> 1/B							1 0072	0700	
DVD	Dinamic	0788	Lenoxx		0690 Proline	005	1 0672	0790	
	DiViDo	0705	Lexia		0699 Proscan				0522
3DLAB 0539	DK digital	0831		)591 0741					0699
A-Trend 0714	DMTECH	0783 0790	Lifetec		0651 Provision				0699
Acoustic Solutions 0730	Dragon	0831	Limit	0716		e			0741
AEG 0788 0770	Dual 0665 0651	0713 0730	Loewe	0539	1922 Raite				0665
Aiwa 0641 0695	078	3 0790 0831	LogicLab		0768 Rank Aren	ia			0718
Akai 0790 0788 0690 0716 0713 0705	E-Boda	0723	Logix	0705	0783 RCA			0522	0651
	Eclipse	0723	Lumatron		0705 REC			0689	0490
AKI 0718	Electrohome	0770	Luxman		0573 Red Star			0770	0788
Akira 0699	Elin	0770	Luxor		1004 Reoc				0768
Alba 0717 0699 0713 0723 0695		0788 0790	Magnavox	0503					0699
All-Tel 0790	Emerson	0591 0705	Magnex		0723 Roadstar	0699 0690	1 0680	0713	
Amitech 0770	Enzer	0665	Manhattan		0705 Rotel	0099 0090	0005	0/15	0623
Amstrad 0713		0651							10023
Apex Digital 0672	Ferguson		Marantz						
Audiosonic 0690		0770 0783	Mark		0713 Saba				0651
AWA 0730	Firstline	0651	Matsui	0651					0768
Black Diamond 0713	Funai	0695	MBO	0690					0741
Blaupunkt 0717	GE	0717	MDS		0699 Samsung			0573	
Blue Sky 0699 0695 0713 0672 0651	Global Solutions	0768		0783 0716		0695 071			
Boman 0783	Global Sphere	0768	Memorex		0831 Sanyo		0670	0695	
Brain Wave 0770	Go Video	0783	Metz	0571	0713 Scan				0705
Brandt 0651 0551	GoldStar	0591 0741	MiCO		0723 ScanMagi	С			0730
	Goodmans 0651 1004	0790 0690	Microboss		0718 Schaub Lo	orenz		0788	0770
Bush 0699 0690 0689 0717	0783	0723 0818	Micromaxx		0695 Schneider	0651 078	3 0705	0790	0788
0713 0818 0695 0831 0723	Graetz	0665	Micromedia	0503	0539 Scientific I	Labs			0768
C-Tech 0768	Grandin	0716	Micromega		0539 Scott		0718	0651	0672
Cambridge Audio 0696		0651 0775	Microsoft		0522 SEG			0713	
Cambridge Soundworks 0696	0705 0790 0713		Microstar		0831 Shanghai		0000	07.15	0672
CAT 0699	Grunkel	0770	Minax		0713 Sharp			0630	
Celestial 0672	H&B	0818 0713	Minoka		0770 Sherwood		0717	0741	
Centrex 0672 1004	Haaz	0768	Mitsubishi		0713 Shinco		0717	0741	0717
Centrum 0713	Hanseatic	0708	Mizuda		0818 Silva				0788
cineULTRA 0699		••••				aidar			0788
Classic 0730	HCM	0788	Monyka		0665 SilvaSchne	aldel	0000	0710	
Clatronic 0788	HDT	0705	Mustek		0730 Singer		0690	0716	
Clayton 0713	HE	0730	Mx Onda	0651				0730	
Coby 0730	Henß	0713	NAD		0741 Slim Art				0770
Conia 0672		0665 0573	Naiko		0770 SM Electro	onic		0768	
Crown 0770 0651 0690	Hiteker	0672	Neufunk		0665 Smart		0718	0705	
Cybercom 0831	Home Electronics	0730	Nordmende		0831 Sonashi				0716
5	Hyundai	0783	Omni	0690	0699 Sony	053	3 0573	1903	1904
	Ingelen	0788	Onkyo	0627	0503 Soundmas	ster			0768
Cytron 0716 0651 0705	ISP	0695	Optimus		0571 Soundmax				0768
Daewoo 0770 0705 0714	Jeken	0699	Orava		0818 Soundway				0783
Daewoo International 0699	JMB	0695	Orion		0695 Standard	-		0651	
Dansai 0770 0783	JVC 0623 0539 0503		Oritron		0651 Starmedia			5051	0818
Dantax 0723	Karcher	0783	P&B		0818 Sunwood				0788
	Karcher	0705			Juliwoou				0700

Super 0730 SVA 0672 Synn 0768 Tandb 0713 Tatung 0770 Teac 0717	0768 erg g	0571	0768	0591	
0571 Thoms 0551 Tokai 0665 Tokiwa 0705 Toshib 0503 Umax 0690 United 0788 Univer	1908 ka ood 0651 0768 Digital 0768 0778	0790			

0522 XLogic XMS Yamada Yamaha Yamakawa Yelo Yukai Zenith			0490 0665 0503	0770 0788 0539 0710 0591	0768 0689 1004 0646 0765 0718 0730 0741
VCR					
Adyson Aiwa 0307	0000	0209	0348	0352	0072 0037 0041
Akai Akashi	0106	0315	0041	0352	0240 0072
Akiba Akura Alba0278 Allorgan	0072	0209	0352	0072 0000 0348	0072 0041 0315 0081 0240
Allstar Amstrad Anitech Ansonic			0000	0278	0081 0072 0072 0000
Aristona ASA Asuka Audiosonio		0037	0081	0037 0000	0081 0081 0038 0278
AVP AWA Baird	0106	0037 0278	0278 0104	0352 0642 0041	0000 0043 0000
Basic Line Bestar Black Diam	uand		0278	0209 0642	0072 0278 0278
Black Pant Blaupunkt			1562	0226	0278 0081
Blue Sky Bondstec		0037	0209 0352	0348 0278	0072 0000 0072
Brandt Brandt Elec		ue		0041	0320 0041
Brinkmann Bush0072		0315	0209	0209 0352 0348	0348 0000 0081
Carena Carrefour Casio Cathay				0209	0081 0045 0000 0278
CGE Cimline Clatronic Combitech				0041 0072 0072	0000 0209 0000 0352
Condor Crown Cyrus				0278	0278 0072 0081

Daewo         0278         0642         029         0348         0352         Hisawa         0209         0352         0045           Dansai         0072         0278         Hitachi         0042         0041         0000         0240         0081           Derca         0000         0041         0081         10067         0348         Hitachi         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0278         0072         0073         0279         0278         0072         0278         037         0209         0348         0104         0284         0072         037         0209         0348         0279         0337         0209         0348         0037         0209         0348         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404         0404												
Dansai         0072         0278         Hitachi         0042         0041         0081         0104         0881           Dertron         0020         0041         0081         0067         0348         Hornyphone         0081         0081         0081         0081         0081         0081         0081         0081         0081         0081         0081         0289         0000         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0240         0278         0072         0209         0240         074         0278         0072         0278         0072         0278         0071         0278         037         0279         0348         0140         044         <	Daewoo	0278	0642	0209	0348	0352	Hisawa				0209	0352
Daytron         0278         0000         0042         0081         0104         0048         Hornyphone         0072         0209         0200         0242         0081         01067         0348         Hypson         0072         0209         0240         0278         0071         0240         0278         0071         0278         0071         0278         0072         0278         0071         0278         037         0209         0348         0140         0240         0278         037         0209         0348         0140         0440	0045						Hischito					0045
de Graaf         0042         0081         0104         0084         Hornyphone         0081           Decca         0000         0041         0081         0070         0348         Hypson         0072         0209         0278         0352           Deitron         0278         Ingersoll         0209         0240         0278         0037         0072         0037         0071         0272         0037         0037         0278         0278         0278         0176         0042         0037         0037         0037         0240         11         0106         0041         038         0404         044         044         040         044	Dansai				0072	0278	Hitachi	0042	0041	0000	0240	0081
Decca         0000         0041         0081         0067         0348         Hypson         0072         0209         0278         0352           Deitron         0278         Ingersoll         0200         0240         0172         0037         0037         0037         0037         0037         0038         International         0278         0037         0037         0038         118         0041         0240         0172         0240         0172         0240         0172         0278         0337           Elha         0072         0072         0278         0240         177         0106         041         0240											0104	
0209         Imperial         0000         0240           Deitron         0278         Ingersoll         0209         0240           Denko         0037         Interbuy         0037         0072           Domland         0041         081         0278         0072         Interbuy         0037         0072           Dumont         0000         0081         0144         Intervision         0003         0278         0037         029         037         029         037         029         037         029         038         037         029         0348         044         047         048         047         047         048         047         044         047								e				
Deitron         0278         Ingersoll         0209         0240           Denko         0072         Inno Hit         0240         0278         0072           Domland         0001         0278         0001         Interbuy         0037         0072           Dumont         0000         0081         0278         0001         Interbuy         0037         0072           Dumont         0000         0081         0104         Intervational         0278         0037         0270         037         0072           Elbe         0278         0032         Intervision         0000         0281         0104         0240         017         0106         0041         0278         037         0279         0348           Ela         0072         0278         0000         ITT         0106         0041         020         0384         043         0209         0348         043         0209         0348         043         0278         037         Firdelity         0072         0240         Intervision         0001         0284         0037         Firdelity         0072         0278         Kaisui         0077         0278         Kaisui         0077         0278 </td <td></td> <td>0000</td> <td>0041</td> <td>0081</td> <td>0067</td> <td>0348</td> <td></td> <td></td> <td>0072</td> <td>0209</td> <td></td> <td></td>		0000	0041	0081	0067	0348			0072	0209		
Denko         0072         Inio Hit         0240         0278         0072           Diamant         0037         Interbuy         0037         0072           Dumland         0041         0081         0174         0081         0074           Dumont         0000         0081         0104         Interfunk         0081         0172           Dumont         0000         0278         0037         Intervision         0000         0278         037           Elia         0072         0240         Intervision         0000         0278         0037           Elia         0072         0240         ITT         0106         041         0384         0140         0240           Elia         0072         0278         0278         17V         0278         0000           Elita         0072         0278         0270         JVC         0041         0072           Forstine         0041         0320         0000         0278         Kaisui         0072         0209         034         072           Finlandia         0140         042         0278         Karcher         0279         0315         0348         072												
Diamant         0037         Interbuy         0037         0072           Domland         0209         Interfunk         0081         0278           Dumont         0000         0081         0174         Internal         0278           Dumont         0000         0278         0037         0007         0278         0377           Elbe         0278         0038         Intervision         0000         0278         0377         0037         0037         039         348           Elate         0270         0240         Intervision         0000         0278         037         0209         0348           Elas         0072         0278         0278         ITT         0106         041         0384         0104         0209         0352           Esc         0278         0240         Joyce         0001         0037         0378         0077           Fisti         0001         0240         Kaisui         0072         0278         Kaisui         0077         0384         0037         0037         037         037         037         037         037         037         037         037         037         037         037												
Domland         0209         Interfunk         0081         0104           Dual         0041         081         0278         0000         Internal         0278           Dumont         0000         0278         0031         1027         0037         0209         0348           Elche         0278         0032         Intervision         00072         0037         0209         0348           Elche         0278         0072         Irradio         0072         0037         0281         0041         0240         0072         0037         0219         0348           Elsay         0072         0278         0270         ITT         Nola         0278         037           Ererson         0072         0240         Joyce         0000         0384         0072         0384           Fast         0897         Kaisui         0037         0240         037         Karcher         0278           Finlandia         0104         081         0142         0002         Karcher         0278         037           Finsher         0007         0240         0278         Karcher         0209         0348         0037           Finshe										0240		
Dual         0041         0081         0278         0000         Internal         0278         0037           Dumont         0000         0081         0104         International         0278         0037         0037         0031           Elhe         0072         0178         0032         Intervision         0000         0278         0037         0031         0031         0041         0240         11T         0106         0041         038         0104         0240         11T         0106         0041         038         0104         0240         11T         0106         0041         0328         0000         048         0278         0037         0831         0000         0278         0037         081         0000         0278         0037         0315         0348         0000         0328         00072         JVC         0041         0067         0344         0072         0340         0037         Kaisui         00072         0240         Karcher         0278         Kaisui         0037         0348         0072         0348         0037         Kilc         0037         0341         0037         0348         0037         0348         0037         Kilc         0041												
Dumont         0000         0081         0104         International         0278         0037           Elbe         0278         0032         International         0278         0037         0209         0348           Elatech         0072         0278         0037         0072         0348         0104         0240         0106         0041         0048         0104         0240           Elag         0072         0278         0200         JJMB         0278         037           Emerson         0072         0278         0240         Joyce         0070         0384           Fast         0087         0240         Joyce         0071         0384         0072           Findelity         0000         0072         0240         Karcher         0278         0337           Finlandia         0104         0081         0104         0042         0209         0315         0348         072           Fisher         0007         0209         0348         0037         Kimari         0041         0384           Fisher         0047         0104         0038         Kneissel         0352         0209         0348         0377			00/1	0001	0770						0081	
Elbe         0278         038         Intervision         0000         0278         037         0209         0348           Elcatech         0072         1rradio         0072         0037         0081           Elin         0240         ITT         0106         041         0384         0104         0240           Elia         0072         0278         0240         ITT         0106         041         037         0037           Emerson         0072         0278         0240         Joyce         0070         0384           Fast         0072         JVC         041         067         0384           Finlandia         0141         0320         0000         0278         Kambrook         0278         037           Finlandia         0140         0820         0000         0278         Karcher         0278         037           Finlandia         0104         0081         042         0278         Kimari         0041         038           Finlar         0007         0240         0278         Kimari         0279         0348         037           Finlar         0047         0209         0348         0037			0041					al			0270	
Elcatech         0072         Irradio         0072         0037         0081           Elin         0240         ITT         0106         0041         0384         0104         0240           Elsay         0072         0272         ITT Nokia         0048         0048           Elta         0072         0278         0240         Joyce         0000         0278         037         0384           Emerson         0072         0278         0240         Joyce         0001         0072         0384         0077         0384         0077         0384         0077         0384         0077         0378         0377         0384				0000					0270	0027		
Elin         0240         ITT         0106         0041         0384         0104         0240           Elsay         0072         0278         ITT         Nokia         0048         0048           Elta         0072         0278         ITV         0278         0037           Emerson         0072         0245         0000         JMB         0209         0352           ESC         0278         0240         Joyce         0041         0067         0384           Fast         0897         Kaisui         0072         0278         Kambrook         0037           Finlandia         0104         0081         0042         0000         0278         Karcher         0278           Finlandia         0104         0081         0042         0278         Kimari         0007           Gasa         0047         0104         038         Kensol         0041         038         037           Finlux         0000         0081         0142         0278         Kimari         0047           Finshine         0047         0140         038         Kotser         0209         0348         0037           Fint         00					0270			0000	0270			
Elsay         0072         ITT Nokia         0048           Elta         0072         0278         ITV         0278         0037           Emerson         0072         0245         0000         JMB         0209         0352           ESC         0278         0240         Joyce         0000         072         JVC         0041         0067         0384           Fast         0897         Kaisui         0072         JVC         0041         0037         0278           Findelity         0000         0072         0248         Karcher         0037         0278           Finlandia         0104         0081         0042         0200         048         Karcher         0037           Firstline         0072         0209         0348         0037         KilC         0037           Finstline         0072         0209         0348         0037         Kilc         0037           Firstline         0072         0209         0348         0037         Kilc         0037           Finter         0047         0140         0338         Kneissel         0352         0209         0348           Finter         0047								0106	00/11			
Elta         0072         0278         ITV         0278         0037           Emerson         0072         0045         0000         JMB         0209         0352           ESC         0278         0240         Joyce         0000         0374           Fast         0897         Kaisui         0072         0278         0278         0278           Friguson         0041         0320         0000         0278         Kambrook         0037           Fieldity         0000         0072         0240         Karcher         0278         Karcher         0278           Finlandia         0104         0081         0042         0278         Kenwood         0016         0209         0315         0348         0072           Fishtine         0072         0209         0348         0037         Kicr         0000         0047         0104         038         Kneissel         0352         0209         0348         0037           Fishter         0047         0104         038         Kneissel         0352         0209         0348         037           Fujitsu         0000         Kuba         0000         Kuba         0072         047<								0100	0041	0304	0104	
Emerson       0072       0045       0000       JMB       0209       0352         ESC       0278       0240       Joyce       0000       0072         Fast       0897       Kaisui       0072       0240       0772         Ferguson       041       0320       0000       0278       Kambrook       0037         Fidelity       0000       0072       0240       Karcher       0278         Finlandia       0104       0810       042       0000       0106       0209       0315       0348       0037         Finlandia       0104       0081       01042       0072       Kendo       0106       0209       0315       0348       0037         Finlux       0000       0081       0104       0042       Kenwood       0041       038         Fisher       0072       0209       0348       0037       KitC       00072       0348       0037         Funits       0007       0045       042       0278       Korpel       0072       047         Galaxi       0000       Kuba       0072       Kuba       0072       0072       047         General Technic       0337					0072						0278	
ESC         0278         0240         Joyce         0000           Ezuko         0072         JVC         0041         0067         0384           Fast         0897         Kaisui         0072         JVC         0041         0067         0384           Ferguson         0041         0320         0000         0278         Kambrook         0037           Finlandia         0104         0081         0042         0000         048         Kendo         0106         0209         0315         0348         0037           Finlandia         0104         0081         0104         0422         Kenwood         0041         0033           Firstline         0072         0209         0348         0037         KIC         0000           Fisher         0047         0104         038         Kneissel         0352         0209         0348         0037           Funai         0000         Kuba         Maga         0047         Funai         0000         Kuwa         0226         047           Gel         0320         Lenco         0378         Kyoto         0072         Funai         0000         Kuwa         0226         0270				0072								
Etzuko       0072       JVC       0041       0067       0384         Fast       0897       Kaisui       0072       Kaisui       0072         Ferguson       0041       0320       0000       0278       Kambrook       0037         Fidelity       0000       0072       0240       Karcher       0278         Finlandia       0104       0081       0142       0000       0048       Kendo       0106       0209       0315       0348       072         0384											0200	
Ferguson         0041         0320         0000         0278         Kambrook         0037           Fidelity         0000         0072         0240         Karcher         0278           Finlandia         0104         0081         0042         0000         0048         Karcher         0278           Gast         0000         0081         0104         0042         Kendo         0106         0209         0348         0072           Gast         0072         0209         0348         0043         0037         Kic         0007         0038           Firstline         0072         0209         0348         0043         0037         Kic         00007         0047         0048         0047 <td>Etzuko</td> <td></td> <td></td> <td></td> <td></td> <td>0072</td> <td></td> <td></td> <td></td> <td>0041</td> <td>0067</td> <td></td>	Etzuko					0072				0041	0067	
Fidelity       0000       0072       0240       Karcher       0278         Finlandia       0104       0081       0042       0000       0048       Karcher       0037         O384       0072       0209       0348       0043       0037       Kendo       0106       0209       0315       0348       0037         Finlux       0000       0081       0104       0042       0278       Kimari       0047       0041       0038         Firstline       0072       0209       0348       0042       0278       Kimari       0047	Fast					0897	Kaisui					0072
Finlandia       0104       0081       0042       0000       0048       Kendo       0106       0209       0315       0348       0072         0384       0072       0209       0348       0043       0037       Kenwood       0041       0038         Firstline       0072       0209       0348       0042       0278       Kirari       0000         Fisher       0047       0104       0038       Kneissel       0352       0209       0348       0037         Fint       0047       0104       0038       Kneissel       0352       0209       0348       0037         Fint       0047       0104       0038       Kneissel       0352       0209       0348       0037         Fint       0047       Korpel       0072       Korpel       0072       047       047         Funai       0000       Kuba       Electronic       0047       047       047         Galaxis       0278       Kyoto       0072       047       047       047         General Technic       0348       027       0037       0000       0278       037       0000       0278         Goldband       0072	Ferguson		0041	0320	0000	0278	Kambrook					0037
0384         0000         0081         0104         0042         Kenwood         0041         0038           Firstline         0072         0209         0348         0043         0037         KIC         0000           Firstline         0072         0209         0348         0043         0037         KIC         0000           Fisher         0047         0104         0038         Kneissel         0352         0209         0348         0037           Fint         0209         Korpel         0209         0348         0047         0047         0047         0047         0000         Kuba         0047         0047           Funai         0000         Kuba         Correctoric         0047	Fidelity			0000	0072	0240	Karcher					0278
Finlux         0000         0081         0104         0042         Kenwood         0041         0038           Firstline         0072         0209         0348         0043         0037         KlC         0000           Fisher         0047         0104         0038         KlC         00072         0209         0348         0037           Flint         0047         0104         0038         Kneissel         0352         0209         0348         0037           Funai         0000         Kuba         0000         Kuba         0047         0047           Galaxi         0000         Kuwa         0226         047         047         047           Gec         0278         Kyoto         0072         Kuba         0047         047           Genexxa         0104         Leyco         0072         0072         047         047           Goldhand         0072         Leyco         0037         0000         0278         0466         037           Goldstar         0037         0000         0772         0240         0278         Luxor         0106         043         029         0348         0209           Golds	Finlandia	0104	0081	0042	0000	0048	Kendo	0106	0209	0315	0348	0072
Firstline       0072       0209       0348       0043       0037       KIC       0000         Fisher       0047       0104       0038       Kneissel       0352       0209       0348       0037         Fisher       0047       0104       0038       Kneissel       0352       0209       0348       0037         Fint       0047       0104       0038       Kneissel       0352       0209       0348       0037         Funt       0072       Korpel       0072       Korpel       0072       0047         Galaxi       0000       Kuba       0047       0047       Guda       0226         Gelaxis       0278       Kyoto       0072       General Technic       0348       LG       0037       0000       0278         General Technic       0348       0270       0278       Lifetec       0209       0348       0278       037       0000       0278       0037       0000       0278       0037       006       0209       0348       0278       0041       044       044       047       048       0278       0278       0278       0278       0278       0278       0278       0278       0278	0384											0037
main       0045       0042       0278       Kimari       0047       0144       0038       Kneissel       0352       0209       0348       0037         Fint       0209       Kolster       0209       Kolster       0072       0072         Funit       0000       Kuba       0072       Korpel       0072       0072         Funita       0000       Kuba       0072       Kuba Electronic       0047         Galaxi       0000       Kuwa       0226       0278       Kyoto       0278         GE       0320       Lenco       0279       0278       0278       00072       0278         General Technic       0348       0209       0352       0281       Leyco       0072       0299       0348         GoldStar       0037       0001       Logik       0240       0278       0047       044       047         Graatz       0041       0104       0240       0278       Lumatron       0278       0081       0240       072       014       047         Graati       0140       0240       0278       Luwar       0106       043       072       0106       0298       0278       0278											0041	
Fisher         0047         0104         0038         Kneissel         0352         0209         0348         0037           Flint         0209         Kolster         0209         0348         0072           Frontech         0072         Korpel         0072         Korpel         0072           Fujisu         0000         Kuba         0047         0047         0047           Galaxi         0000         Kuba         0072         Gedatasis         0278           GEC         0320         Lenco         0279         037         0000         0278           General Technic         0348         LG         0037         0000         0278         0266         0371         0000         0278           Goldband         0072         0240         0278         Lifetec         0209         0348         0209         037         0000         0278           Goddmans         0000         0772         0240         0278         Lumatron         0276         0266         037           Goddmans         0007         0240         0278         Lumatron         0278         0278         0278         0278         0278         0278         0278	Firstline	0072	0209									
Flint       0209       Kolster       0209       0348         Frontech       0072       Korpel       0072         Fujitsu       0000       Kuba       0047         Funai       0000       Kuba Electronic       0047         Galaxi       0000       Kuwa       0226         Galaxis       0278       Kyoto       0072         GE       0320       Lenco       0278         GEC       0081       Leyco       0072         General Technic       0348       LG       0037       0000       0278         Goldhand       0072       Logik       0240       0286       0371       0000       0278         Goodmans       0000       0072       0240       0278       Lumatron       0278       0072       0106       0209       0348       0209       0278       0072       0106       0209       0240       0278       0072       0106       0072       0106       0209       0240       0278       0072       047       0072       047       047         Goodmans       0000       0072       0240       0278       Lumatron       0278       0278       0278       0240       0278	<b>-</b> : 1											
Frontech         0072         Korpel         0072           Fujitsu         0000         Kuba         0047           Funai         0000         Kuba Electronic         0047           Galaxi         0000         Kuwa         0226           Galaxis         0278         Kyoto         072           Gec         0320         Lenco         0278           Gec         0320         Lenco         0209           Genexxa         0104         Lifetec         0209         0348           Goldhand         0072         0240         0278         0240         0240         0278           Goldhand         0072         0240         0278         Loewe         081         1562         0226         0866         037           GoldStar         0037         0000         0278         Lumatron         0278         0048         0240         0072         0106         0249         047           Graetz         0041         0140         0240         0072         Magnavox         0081         0240         0072         048         0249         037         0081         038         0209         037         0081         0352         041 <td></td> <td></td> <td></td> <td>0047</td> <td>0104</td> <td></td> <td></td> <td></td> <td>0352</td> <td>0209</td> <td></td> <td></td>				0047	0104				0352	0209		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$											0209	
Funai         0000         Kuba Electronic         0047           Galaxi         0000         Kuwa         0226           Galaxis         0278         Kyoto         0072           GE         0320         Lenco         0278           GEC         0320         Lenco         0072           General Technic         0348         LG         0037         0000         0278           Goldhand         0072         Loewe         0081         1562         0226         0866         0037         0000         0278           GoldStar         0037         0000         0072         Loewe         0081         1562         0226         0866         0037           GoldStar         0037         0000         0072         0240         0278         Lumatron         0278         0041         047           Graetz         0041         0140         0240         037         Magnavox         0081         0209         038         0209           Grandin         0072         0037         0000         0278         0209         Marantz         0081         0240         0352           Graadi         0104         0448         0220 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
Galaxi       0000       Kuwa       0226         Galaxis       0278       Kyoto       0072         GE       0320       Lenco       0278         GEC       0081       Leyco       0072         General Technic       0348       LG       0037       0000       0278         Goldhand       0072       Loewe       0081       1562       0226       0866       0037         GoldStar       0037       0000       0278       Loewe       0081       1562       026       0866       0037         GoldStar       0037       0000       0072       0240       0278       Lumatron       0278         Grandta       0104       0104       0240       0278       Luxor       0106       0043       0072       0104       047         Grandtin       0072       0037       0000       0278       0200       Magnavox       0081       0209         Grandtin       0072       0037       0000       0278       0209       Marantz       0081       0208         Grandin       0072       0276       0320       0348       0209       Marantz       0081       038       0209	,							ania				
Galaxis         0278         Kyoto         0072           GE         0320         Lenco         0278           GEC         0081         Leyco         0072           General Technic         0348         LG         0037         0000         0278           General Technic         0348         LG         0209         0348         Goldstar         00072         0209         0348         LG         0209         0348         GoldStar         0000         0272         0206         0866         037         0000         0278         GoldStar         0037         0000         Logik         0240         0270         0166         0209         0348         Lumatron         0278         0037         0014         0047         0048         0049         044         044         0240         072         0106         0299         048         0209         0348         0209         0348         0209         044         044         044         044         0240         072         045         081         0209         048         0209         045         048         0209         0478         0209         Marantz         0081         0352         0400         0352         046iator								OUIC				
GE         0320         Lenco         0278           GEC         0081         Leyco         0072           General Technic         0348         LG         0037         0000         0278           Genexxa         0104         Lifetec         029         0348           GoldStar         0072         Loewe         081         1562         0226         0866         0037           Goodmans         0000         0072         0240         0278         Lumatron         0278           Goodmans         0000         0072         0240         0278         Lumatron         0278           Granada         0144         0140         0240         0072         Luxor         0106         0043         0072         0104         0240           Granada         0144         0048         0240         0037         0081         038         0209         0388         0209         037         0081         038         0209         038         0209         0388         0209         0388         0209         0388         0209         0388         0209         0388         0209         0388         0209         0388         0209         0388         0209												
GEC         0081         Leyco         0072           General Technic         0348         LG         0037         0000         0278           Genexxa         0104         Lifetec         0209         0348           Goldhand         0072         Loewe         0081         1562         0226         0866         0037           GoldStar         0037         0000         072         Loewe         081         1562         0226         0866         0037           GodStar         0037         000         072         0240         0278         Loewe         081         1562         0226         0866         0037           GodStar         0037         0081         0348         0209         0352         0642         Lumatron         0278           Granada         0104         048         0219         037         0000         0278         0081         0081         0038         0209           Grandin         072         037         0000         0278         0209         Maresth         0072         0440         0388         0209           Grandin         0072         037         0000         0278         0072         Matsui <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td>							,					
General Technic         0348         LG         0037         0000         0278           Genexxa         0104         Lifetec         0209         0348           Goldhand         0072         Loewe         0081         1562         0226         0866         0037           GoldStar         0037         0000         0072         0240         0278         Logik         0240         072         0106         0209         0348           GoldStar         0037         0000         0072         0240         0278         Lugik         0240         0072         0106         0209         0278           Goadmans         0000         0072         0240         0278         Luwatron         0278         0048           Grandin         0172         0037         0000         0278         0209         Marentz         0081         0240         0048           Grandin         0072         0037         0000         0278         0209         Marentz         0081         0240         0352           Grandin         0072         0037         0000         0278         0209         Marentz         0081         0240         0352           Haaz												
Genexxa         0104         Lifetec         0209         0348           Goldhand         0072         Lifetec         0209         0348           GoldStar         0037         0000         Loewe         0081         1562         0226         0866         0037           GoldStar         0037         0000         0072         0240         0278         Logik         0240         0278         Lumatron         0278           Granda         0104         0240         0278         Luxor         0106         0043         0072         0104         0240           Grandin         0072         0037         0000         0278         0209         Magnavox         0081         0240         0047           Grandin         0072         0037         0000         0278         0209         Marantz         0081         0240         0352           Grandin         0072         0278         0209         0348         0209         Marantz         0081         0340         0352           Haaz         0348         0209         0352         0348         0209         0348         0352         0000           Harwood         0072         0278		hnic								0037	0000	
Goldhand         0072         Loewe         0081         1562         0226         0866         0037           GoldStar         0000         0072         0240         0278         Logik         0240         0278         0209         0209         0209         0278         0207         0240         0278         028         029         0278         028         029         0278         029         Magnavox         0081         029         028         029         029         0372         029         038         0209         0278         029         0372         0240         0352         0278         0278         0278         0278         0278         0278         0279         0348         0352         0209         0348         0352         0299										0007		
GoldStar         0037         0000         Logik         0240         0072         0106         0209           Goodmans         0000         0072         0240         0278         Lumatron         0278           0037         0081         0348         0209         0352         0642         Luxor         0106         0043         0072         0104         0047           Graetz         0041         0104         0240         0037         0000         0278         Luxor         0106         0043         0072         0104         0047           Grandan         0104         0048         0240         0037         0000         Magnavox         0081         0209           Grandin         0072         0037         0000         0278         0209         Marantz         0081         0208           Grundig         0081         0347         0226         0320         0348         0209         Mark         0278         038         0209           Haaz         0347         0229         0348         0209         Mark         0209         0348         0352           Harwood         0072         0278         0072         Mediator         0000 </td <td>Goldhand</td> <td></td> <td></td> <td></td> <td></td> <td>0072</td> <td></td> <td>0081</td> <td>1562</td> <td>0226</td> <td></td> <td></td>	Goldhand					0072		0081	1562	0226		
0037 0081         0348         0209         0352         0642         Luxor         0106         0043         0072         0104         0047           Graetz         0041         0104         0240         0037         0001         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0048         0048         0049         0081         0038         0029         0081         0038         0029         0348         0209         Mark         00278         0081         0037         0240         0352         0041         0348         0329         0000         0348         0352         0040         0001         00497         0081         00497         0488         0352	GoldStar				0037	0000			0240	0072	0106	0209
Graetz         0041         0104         0240         Magnavox         0012         0013         0048           Granada         0104         0048         0081         0240         0037         Magnavox         0081         0209           Grandin         0072         0037         0000         0278         0209         Maresth         0072         0041         0138         0209           Grandin         0072         0037         0200         0278         0209         Maresth         0072         0081         038         0209           Grundig         0081         0347         0226         0320         0348         Mark         0278         0380         0209           Haaz         0348         0209         0352         Mediator         0000         0381         0352           Hanseatic         0037         0209         0278         081         0038         Medion         0209         0348         0352           Harwood         0072         0072         Melectronic         0000         0037         0048         047           Hinari         0072         0352         0411         0278         Memphis         0072	Goodmans		0000	0072	0240	0278	Lumatron					0278
Granada         0104         0048         0081         0240         0037         Magnavox         0081           Grandin         0072         0037         0000         0278         0209         Manesth         0072         0045         0081         0209           Grandin         0072         0037         0000         0278         0209         Marantz         0081         0308         0209           Grundig         0081         0347         0226         0320         0348         Mark         0278         0209           Haaz         0348         0209         0352         Mediator         0000         0348         0352           Hanseatic         0037         0209         0278         081         0038         Medion         0209         0348         0352           Harwood         0072         0072         Menorex         0104         0000         037         0048         047           Hinari         0072         0209         0352         041         0278         Memorex         0104         0000         037         048         047	0037	0081	0348				Luxor	0106	0043	0072	0104	0047
Oracle         Outropy         Outropy <th< td=""><td>Graetz</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0048</td></th<>	Graetz											0048
Grandin Grundig         0072         0037         0000         0278         0209         Marantz         0081         0038         0209           Grundig         0081         0347         0226         0320         0348         Marantz         0081         0038         0209           Haaz         0348         0209         0348         0209         Matsui         0209         0348         037         0240         0352           Hanimex         0352         0352         Mediator         0000         0081         0352         0081         0388         0352           Harwood         0072         0278         0081         0038         0209         0348         0352           Harwood         0072         0072         Melectronic         0000         0037         0388           HCM         0072         0352         0041         0278         Memorex         0104         0000         0037         048         0047           Hinari         0072         0352         0041         0278         Memphis         0072	Granada	0104	0048									
Grundig         0081         0347         0226         0320         0348         Mark         0278           Maz         0072         Matsui         0209         0348         0037         0240         0352           Haaz         0348         0209         0352         Mediator         0000         0000           Hanimex         037         0209         0278         0081         0382         Mediator         0081           Hanseatic         0037         0209         0278         0081         0038         Mediator         0081           Harwood         0072         Memorex         0104         0000         0037         0038           HCM         0072         0209         0352         0041         0278         Memphis         0072									0072			
0072         Matsui         0209         0348         0037         0240         0352           Haaz         0348         0209         0352         Mediator         0000           Hanimex         0352         Mediator         0081           Hanseatic         0037         0209         0278         0081         0032           Harwood         0072         Metorinic         0000         0037         0388           HCM         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0209         0352         0041         0278         Memphis         0072										0081	0038	
Haaz         0348         0209         Mediator         0000           Hanimex         0352         Mediator         0081           Hanseatic         0037         0209         0278         0081         0038           Harwood         0072         Melectronic         0000         0037         0038           HCM         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0352         0041         0278         Memphis         0072	Grundig	0081	0347	0226	0320							
Hanimex         0352         Mediator         0081           Hanseatic         0037         0209         0278         0081         0038         Medion         0209         0348         0352           Harwood         0072         0072         Melectronic         0000         0037         0038           HCM         0072         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0352         0041         0278         Memphis         0072					0240		Matsui	0209	0348	0037	0240	
Hanseatic         0037         0209         0278         0081         0038         Medion         0209         0348         0352           Harwood         0072         0072         Melion         0209         0348         0352           HCM         0072         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0352         0041         0278         Memphis         0072					0348							
Harwood         0072         Melectronic         0000         0037         0038           HCM         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0209         0352         0041         0278         Memphis         0072		0027	0200	0270	0001					0200	0240	
HCM         0072         Memorex         0104         0000         0037         0048         0047           Hinari         0072         0209         0352         0041         0278         Memphis         0072		0037	0209	0278	0081			_				
Hinari 0072 0209 0352 0041 0278 Memphis 0072									0000			
0072		0072	0200	0352	00/11			0104	0000	003/	0048	
	man	0072	5209	0552	0041			1562	03/17	00.21	0226	
							WICK2	1502	5547	5001	5220	5057

Micormay					0348	RFT	
Micromaxx					0209	Roadstar	
Migros					0000	Royal	
Mitsubishi			0043	0067	0081	Saba	
Multitec			00.0	0007	0037	Saisho	
Multitech			0000	0072	0104	Salora	
Murphy			0000	0072	0000	Samsung	
Myryad					0081	Sansui	0041
NAD					0104	Sanyo	0041
National				1562	0226	Saville	
NEC	0041	0038	0067		0037	SBR	
Neckerman		0050	0007	0041	0081	Scan Sonic	
Nesco			0072		0352	Schaub Lor	enz
Neufunk			0072	0000	0209	Schuub Loi	CIIL
Nikkai				0072		Schneider	0072
Nokia	0104	0106	0315			Semiciaei	0072
Nokia	0104		0048			Seaway	
Nordmende	۵	0041		0320		SEG	0072
NU-TEC	-	0041	0504	0209		SEI	0072
Oceanic	0000	0048	0106		0104	Sei-Sinudyr	
0041	0000	0040	0100	0001	0104	Seleco	
Okano	0315	0209	03/18	0072	0278	Sentra	
Orbit	0515	0205	0540	0072	0072	Setron	
Orion			0209	0352	0348	Sharp	
Orson			0205	0552	0000	Shintom	
Osaki			0000	0037	0072	Shivaki	
Osume			0000	0057	0072	Siemens	0037
Otake					0209	Siera	0057
Otto Versar	hd				0205	Silva	
Palladium		0315	0037	0041	0209	Silver	
ranaulum	0072	0313		0348		Singer	
Palsonic			0240	0072		Sinudyne	
Panasonic				1562		Smaragd	
Pathe Cine	ma			1302	0043	Sonitron	
Pathe Marc					0043	Sonneclair	
Perdio	.0111			0000	0209	Sonoko	
Philco					0072	Sonolor	
Philips				0081	0384	Sontec	
Phoenix				0001	0278	Sony	
Phonola					0081	Soundwave	
Pioneer			0067	0081	0042	Ssangyong	
Portland			0007		0278	Standard	
Prinz					0000	Starlite	
Profitronic				0081	0240	Stern	
Proline				0000		Sunkai	
Prosco				0000	0278	Sunstar	
Prosonic			0209	0278		Suntronic	
Protech					0081	Sunwood	
Provision					0278	Supra	
Pye					0081	Symphonic	
Quasar					0278	T+A	
Quelle					0081	Taisho	
Radialva		0037	0072	0081	0048	Tandberg	
Radiola					0081	Tashiko	0000
Rank					0041	Tatung	0000
Reoc			0209	0348		5	
Rex				0041	0384	Teac	0072

				0072
	0240	0072	0037	0278 0072
	0041	0320	0384	0278
		0043		0348 0104
		0045	0240	0432
0041	0067	0106	0072	0348
	0104			0067 0240
		0552	0270	0081
	0044	0404		0240
enz	0041	0104	0000	0106 0315
0072	0000	0037	0081	0278
		0240	0042	0897 0278
0072	0240	0278	0642	0278
				0081
e		00/1	0204	0081 0037
		0041	0564	0037
				0072
		0048	0037	0569
			0072	0104 0037
0037	0104	0081	0320	0347
				0081
				0037 0278
				0045
			0081	0209
				0348 0047
				0072
				0278
			0037	0048 0278
			0037	0106
1		0037	0209	0348
				0072 0278
			0037	0278
				0278
		0209	0348	0278 0000
				0000
				0072
				0240 0072
			0000	0226
				0209
0000	00/18	0240	0081	0278 0037
0000	0048	0240	0048	0037
0070		0209	0348	0352
0072	0041	0000	0278	0642
	enz 0072 0072 e 0037	0041 0041 0107 0072 0000 0072 0240 e 0104 0037 0104	0041         0320           0041         0043           0041         0067           0104         0047           0072         0000           0072         0240           0072         0240           0073         0240           0037         0240           0037         0240           0037         0240           0037         0104           0037         0104           0037         0104           0037         0104           0037         0209           00000         0048           00000         0048           0209	0041         0320 0043         0326 0043         0326 0043           0041         0104         0000           0072         0040         0104         0000           0072         0000         0337         0081           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0442           0072         0240         0240         0343           0037         0104         0081         0320           0037         0037         0037         0037           0037         0209         0348         0348           0000         0448         0240         0348

			0037	0081	0307	Apollo	
TEC				0278	0072	Arcon	1
Tech Line					0072	Armstrong	
TechniSat				0348	0209	Asat	
Teleavia					0041	ASLF	
Telefunken		0041	0320	0384	0278	AssCom	
Teletech			0072	0278	0000	Astacom	
Tenosal					0072	Aston	
Tensai			0000	0037		Astra	
Tevion			0000		0209	Astro	0
Thomson	0320	00/1	0067	0384		ASUO	C
Thorn	0520	0041	0007		0278	Athena	
	ucon		0041	0104	0320	Atlanta	
Thorn-Ferg	uson	0072	0027	0041			
Tokai		0072	0037	0041		Aurora	
Tokiwa					0072	Austar	C
Topline					0348	Avalon	
Toshiba	0045	0041	0384	0043	0081	Axiel	
Towada					0072	Axis	
Tredex					0278	Beko	
Uher				0037	0240	Bentley Wa	alk
Ultravox					0278	Blaupunkt	
Unitech					0240	Blue Sky	
United Qui	ck Star				0278	Boca	
Universum	ck Stai		0081	0240	0037	Boston	
Universum			0348	0240		Broco	
Victor		0100	0340	0209			
		0001	0252	0270	0067	BskyB	
Watson		0081	0352	0278	0642	BT	
Weltblick					0037	Bubu Sat	
Yamaha					0041	Cambridge	
Yamishi				0072	0278	Canal Sate	llr
Yokan					0072	Canal+	
Yoko			0037	0072	0240	Cherokee	
ZX					0209	Chess	
						CityCom	
						Clemens K	an
SAT /ST	R)					Cobra	
	<u>D)</u>					Colombia	
orat					1300	Columbia	
@sat		0000	0122	1222		Columbus	
ABsat		0668	0123	1323	0710	Comag	
ADB					0642	Condor	
Adcom					0200		_
AGS				0668		Connexion	S
Akai					0200	Conrad	
Akena					0668	Conrad Ele	
Alba				0455	0713	Cryptovisio	on
Allsat			0200	1017	1043	Cyrus	
Alltech					0713	D-box	
Alpha				0668	0200	Daeryung	
Altai				0000	0396	Daewoo	
Amitronica					0713	Delfa	
				0396		Deltasat	
Ampere	0047	0742	0740			DGTEC	
Amstrad	0847	0713				Digatron	
	0885	0863	0501	0795	1113		
Anglo					0713	Digenius	
Ankaro					0713	Digiality	
AntSat				1017	1083	Digipro	
Antout							
Antour						DigiQuest	

Apollo Arcon Armstrong Asat ASLF	1205	1043	0834	0132	0455 1075 0200 0200 0713
AssCom Astacom Aston				0668	0853 0710 1129
Astra				0607	0713
Astro	0133	0173	0501 1099	0658 1100	0607 0200
Athena		1115	1055	1100	0668
Atlanta					0871
Aurora Austar	0863	0642	0497	0879	0879 1176
Avalon	0005	0012	0157	0075	0396
Axiel				0668	0710
Axis Beko				1111	0834 0455
Bentley Wa	lker				1017
Blaupunkt					0173
Blue Sky Boca				0713	0885 0713
Boston			0132	0710	0668
Broco					0713
BskyB BT				0847 0668	1175 0710
Bubu Sat				0008	0710
Cambridge					0501
Canal Satel	lite				0853
Canal+ Cherokee			0123	0710	0853 1323
Chess		0157	0605	0713	1085
CityCom		1176	0115	0607	0299
Clemens Ka Cobra	impnus	<b>b</b>		0834	0396 0396
Colombia				0668	0132
Columbia					0132
Columbus Comag					0668 0132
Condor					0607
Connexions	5	0007	0572	0115	0396
Conrad Conrad Eleo	ctronic	0607	0575	0115	0501 0713
Cryptovisio				0455	0795
Cyrus			1127	1114	0200
D-box Daeryung			1127	1114	0723 0396
Daewoo				1296	0713
Delfa Deltasat					0863 1075
DGTEC					1242
Digatron					1294
Digenius Digiality					0299 0607
Digiality Digipro					1105
DigiQuest					0863

	5 0157	0571 0750	0879	0885			Manhattan	1083	0455	0710				0853		
Diskovery 0668	3 0710				1297	1330				0834		0710 0668	0571	0173	0133	1336
Disegc	0710	Hanseatic		0605	1099	1100	Marantz				0200	Phonotrend		0863	1017	1200
Distratel 0084 088	5 1205	Hänsel & Gretel			0132	0607	Maspro	0750	0713	0173	0571	Pioneer		0329	0853	0352
Distrisat	0200	Hauppauge				1294	Matsui		0571	0710	0173	Planet			0871	0396
DMT	1075	HDT				1011	Max		0071	07.10	0607	Polytron				0396
	0396	Heliocom				0607	MB				0605	Praxis				0511
DREAM multimedia.TV	1237	Helium				0607	Mediabox				0853	Preisner	0122	0396	1101	
			0200	0000	1117											
DStv 0642	2 0879	Hirschmann		0882			Mediacom			0504	1206			1127		
		017:	3 0573				MediaSat			0501		1176 1195	1100	0249	0658	
Echostar 0610 1169 0871 0167				0/10	0607		Medion		0/13	0299		Primacom				1111
1086 1200 0454 0396		Hitachi				0455	Medison				0713	Profile			0668	
0668 051	l 0453	HNE			0742		Mega				0200	Promax				0455
Einhell 0132 0713	3 0501	Houston			0668	0396	Metronic 0713	1215	0084	0885	1205	Prosat				0628
Elap 0713 1129 0668	3 0710	Humax			1176	0863	Metz				0173	Prosonic				0742
Elsat	0713	Huth	0132	0607	1017	1075	Micro		0607	0501	0713	Pye				0571
Elta	0200	Hyundai			1159		Micro electronic				0713	Pyxis				0834
Emme Esse	0871	ID Digital		1011	1176		Micro Technology	,			0713	Quadral	0628	0668	0710	
	7 0713	Imex			1170	0084	Micromaxx				0299	Quelle	0020		0742	
J -					0396							•		0607	0742	
EP Sat	0455	Ingelen			0390		Microtec				0713	Radiola		0200	4440	0200
Eurieult 0084 0885		International				0132	Minerva				0571	Radix		0396	1113	
Eurocrypt	0455	Interstar			1105		Mitsubishi				0455	RFT				0200
Europa 0863 0607 050		Intervision			0628		Morgan's		0200	0713		Roadstar				0713
Europhon 0299	9 0607	Invideo				0871	Motorola				0856	Rover			0628	0713
Eurosky 0607 0132 0299	9 0115	IRTE				0609	Multichoice			0642	0879	Saba	0710	0885	0115	0607
0114	1 0501	Italtel				0871	Multitec				0157	Sabre				0455
Eurostar 0607	7 0115	ITT Nokia		0573	0455	0723	Myryad				0200	Sagem		0820	1114	1253
Fenner 0668 0157 0605	5 0713	JOK				0710	Mysat				0713		1243	1343	0853	1206
Ferguson	0455	JVC				0571	Netgem				1322				1293	
Fidelity	0501	K-SAT				0713	Neuhaus	0501	0713	0834		SAT				0501
Finlandia	0455	Kamm				0713	Neusat		07.15	0713		Sat Control				1300
	3 0455	Kaon				1300	Nikko		0713	0723		Sat Partner				0501
Flair Mate	0713	KaTelco				1111		1114				Sat Team				0713
Force	1101	Kathrein	0650	0249	1057			0573				Satcom			0605	
	7 1083						0633	0373	1225						0713	
		122	1 0200				Manalas e a da			1310		Satec			0/15	
Foxtel 0879 0720 045				0115	1323		Nordmende				0455	Satline				0628
	5 1176	Kathrein Eurosta	ſ			0115	Nova				0879	Satstation				1083
	0668	Kiton				0114	OctalTV				1294	Schneider		0668		
	l 0173	Klap			0668		Okano				0668	Schwaiger	0605	0157		
Freesat	0882	Konig				0607	OnDigital 0751	0329	0241	0867				1111	0132	
FTEmaximal 0713	3 0863	Koscom			0834		Optex				0834	SCS			0115	
Fuba 0396 0173 0573 0115	5 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	3 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
	1043		0115	0132	0157			0847	0887	1175		Skantin				0713
GF Star	1043	Lenco	0115		0115			0123				Skinsat				0501
GOD Digital	0200	Lenson		0/15	0115	0501	0720 0497					SKR				0713
Goldbox	0200	Lexus				0200	Packsat	0200	0055	0710	0710	Sky	00/7	0856	0007	
	1017	LG				1075							0647	0630	0007	1175
Goldvision			0005	0200	1042		Palcom			0571	0299	SKY+	0710	0005	0157	
Gooding	0571	Lifesat	0005	0299			Palladium			0571		Skymaster	0/13	0605		
	1 0455	Logix	400.		1017		Palsat				0501	<b>c</b> 1		1085	1075	
Gradiente	0887	Lorenzen 0299	1294	060/			Panasat			0879		Skymax				0200
Granada	0455	Luxor			0573		Panasonic			0455		SkySat		0157	0605	
Grandin	0084	M&B1				0605	Panda	0455	0607	0173		SL			0132	
Grundig 0173 0847 1150 129	I 1435	Manata		0710	0668	0713	Patriot				0668	SM Electronic		0157	0713	1200

Smart Sony SR Starland	0396	1075 0299 110 5 1113 0115 0847 0853	0713	Wisi         0173         0396         0299         0455         0501           0607         0834           Worldsat         0710         0114         0123         0668           XCOM         0123         0668         0713         0123           XSat         0668         0713         0123           Xtreme         1300
Strong Sunsat Sunstar Tantec Tatung Teac Tecatel	0879 0853	1105 1159	<ul> <li>1300</li> <li>0713</li> <li>0132</li> <li>0455</li> <li>0455</li> <li>1322</li> <li>1200</li> </ul>	YES         0887           Zehnder         1075         0742         0114         0115         0419           Zenith         0856         0200         0200         0200           Zinwell         1176         1176
TechniSat Technosat			1195 1322 1206	Austar         0276           BT         0003           Canal Plus         0443
Technowel Techsan Techwood Telasat	t	0605 0115	7 0885 1017 0114 5 0607	Comcrypt         0443           Decsat         0423           Filmnet         0443           France Telecom         0817
Teleciel Telecom Telefunken Teleka		0501 0602	1043 0713 0710 7 0834	General Instruments         0276           Jerrold         0003         0276           Kabelvision         0003         0003           Macab         0817         0817
Telesat Telestar Teletech	0501	1099 1100	5 0607 0 0114 0 0157 0114	Melita         0003           MNet         0443           Mr Zapp         0817           Noos         0817
Televes Thomson Thorn		0455 050 0853 0115 0668 0710	0607	NTL Cabletell         0276           Ono         1068           Optus         0276
Tokai Tonna Topfield Toshiba TPS	0455 0668	0501 0713	0200	Pace         1068         1060           Philips         0817         0286           PVP Stereo Visual         0003         0817           Sagem         0817         0443           Tele+1         0443         0443
Triasat Triax Turnsat		0200 0390 1296 129	0501 5 0713	Telepiu         0443           Tudi         0286           United Cable         0003           Visiopass         0817
Twinner UEC Uher Unisat		0132	2 0713 0879 0157 0200	
Universum Van Hunen Variosat		0571 0607 0115 0742	2 1087 0299 0173	
Ventana Vestel VH-Sat Viasat Visionic		1323 1023	0200 0742 0299 8 0820 1105	
Visiosat Wetekom Wewa		0710 0157 0605	0713	