

DSR **2000**

- D** **Digitaler Satelliten CI-Receiver**
*Empfang verschlüsselter Programme (Pay-TV)
und unverschlüsselter Programme (FTA)*
- GB** **Digital Satellite CI-Receiver**
*Reception of scrambled (Pay-TV)
and non scrambled Free-to-Air (FTA) Programmes*
- NL** **Digitale Satelliet Ontvanger met Common Interface (CI)**
*Ontvangst van gecodeerde (Pay-TV) en
ongecodeerde vrije ontvangst (FTA) kanalen*
- F** **Recepteur Satellite Numérique avec CI**
*Réception des programmes cryptés (Pay-TV)
et non-cryptés libre d'accès*



Let's make things better.



PHILIPS

Dear customer,

Congratulations on choosing the Philips DSR 2000 satellite receiver.
These operating instructions are designed to assist you to make optimum use of the extensive range of functions of your Philips satellite receiver in order to receive digital satellite channels and services.

We wish you much viewing pleasure with your new Philips DSR 2000.

Note : This product is destined for Germany, Austria, Switzerland and the Benelux.

GB

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Important remarks on operation

The following section contains important remarks concerning the operation, location and connection of the receiver.

Please read these instructions carefully before using the unit for the first time.

Extended absence/use during adverse weather conditions

Always switch off the unit during periods of extended absence and during thunder storms by means of the power switch located on the front right-hand side. This also applies to other units that are connected to the receiver.

Check if the timer is programmed and switch the unit on again in sufficient time for the recording.

Mains cable

Ensure that the mains cable (power supply cable) is not damaged. Never use the unit if the mains cable is damaged.

Cleaning

Disconnect the mains cable before cleaning the unit. For cleaning purposes use a dry cloth and only clean the surface of the unit.

Do not open the casing under any circumstances due to risk of electric shock if contact is made with any parts inside the unit.

Children

Take care that children do not insert any objects into the ventilation slots due to danger of electric shock.

Repair

Any repairs or adjustments may only be performed by qualified personnel. The warranty will become void if the user attempts to open and repair the unit.

Improper intervention may interfere with the electrical safety of the unit.

The manufacturer assumes no liability for any accidents suffered by the user if the unit has been opened.

Connection

Incorrect connection may result in incorrect operation or defects in the equipment.

Important remarks on location and assembly

Location

All electronic equipment generates heat, which is however not dangerous. Delicate furniture surfaces and finishes may become slightly discoloured over time due to the permanent heat source. Likewise, the feet of the equipment may cause discolouring on treated surfaces. If need be, place the unit on a suitable mat.

Ventilation

Heat occurring in this unit is discharged adequately. However, never install the receiver in a cabinet or on a shelf where there is inadequate ventilation. Never cover the ventilation slots of the unit.

Never place any objects on the unit and ensure that there is a space of at least 10 cm above the unit to ensure that any heat occurring is discharged.

Humidity, sunlight, heat

Protect the unit from humidity, water droplets and spraying.

Do not locate the receiver in the vicinity of a heating source and avoid exposing it to direct sunlight.

Electrical supply

Operate the unit only using a power source of 230 V/50 Hz. Connect the unit to the power supply and switch on only after it has been connected to the antenna and television unit.

Earth

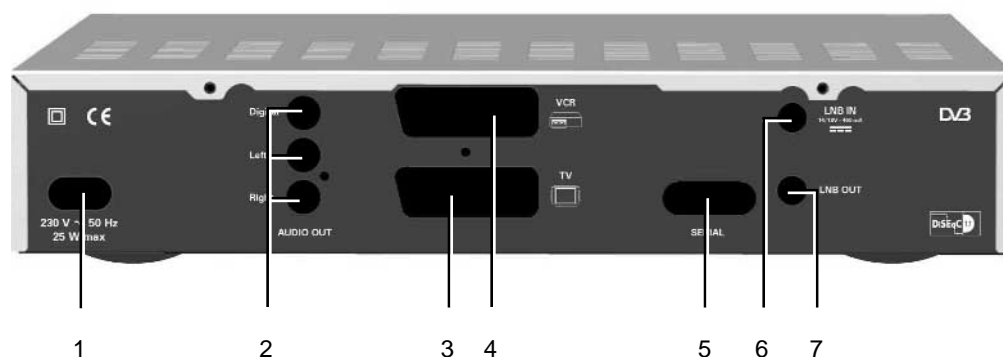
Ensure that the parabolic antenna is correctly earthed observing the relevant local and/or CE regulations.

Remote control

Insert the batteries supplied in the remote control. Ensure that the battery polarity is correct observing the + and - markings in the battery compartment.

2 CONNECTIONS

The following connections are located on the back of the unit:



1 - 230 V/50 Hz: Connect the power cable to the power socket.

2 - Digital Audio TV: Digital (coaxial) audio output.
AUDIO TV L & R: Audio output, left and right-hand channel for connecting to a stereo unit.

3 - TV: Connect the TV connection socket to your television unit using the SCART cable supplied.

4 - VCR: VCR SCART socket for connecting a video recorder.

5 - DATA INTERFACE: RS 232 interface for serial data transfer during servicing.

0-modem cable (pins 2 and 3 crossed, pins 1, 4, 6-9 are not used).

Receiver:		PC:
Pin 2 = RXD	—	Pin 2 = RXD
Pin 3 = TXD	—	Pin 3 = TXD
Pin 5 = GND	—	Pin 5 = GND

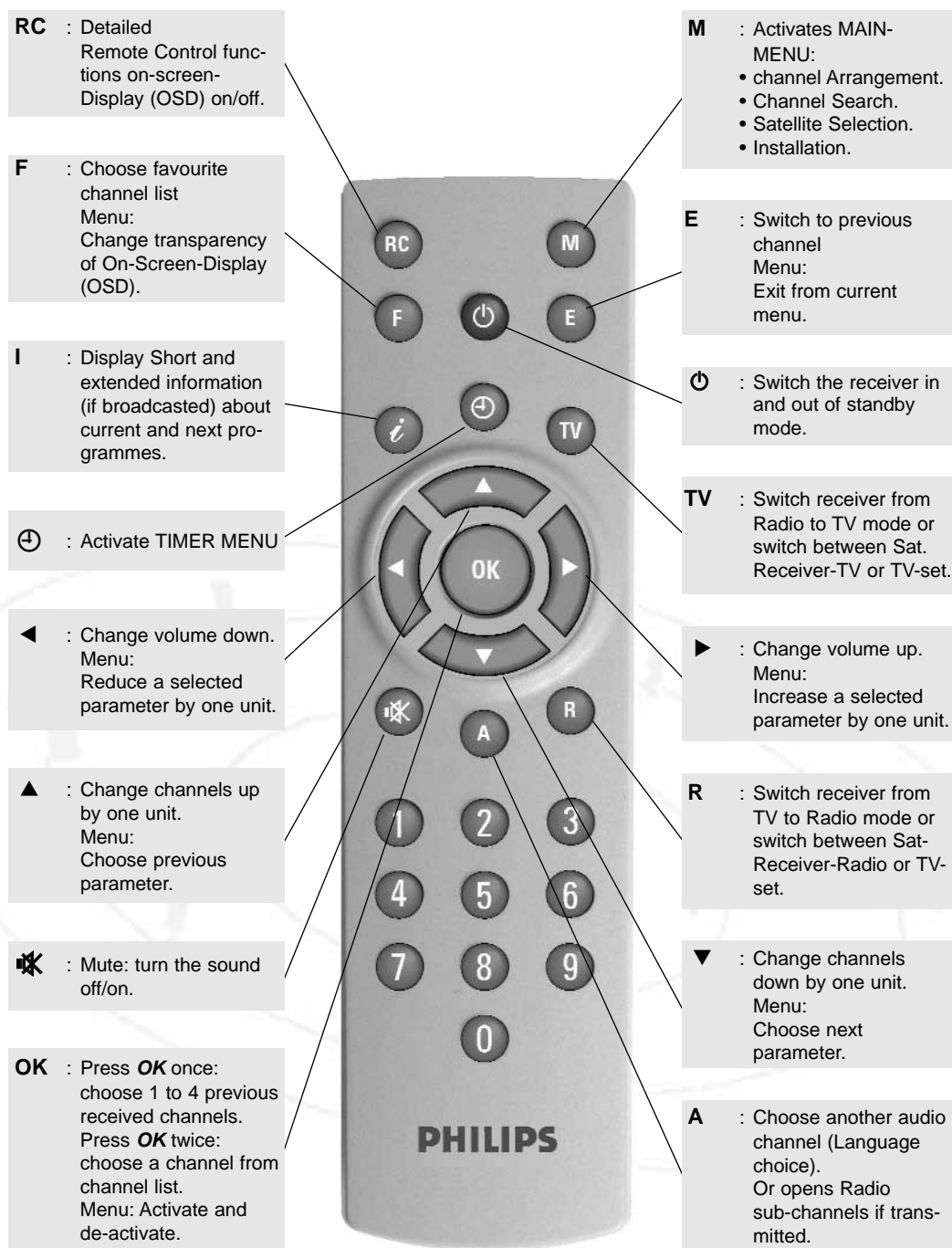
6 - SAT-IF INPUT: Sat-IF signal input and output for LNB supply and control signals - connect the cable of your satellite unit to this socket.

7 - SAT-IF OUTPUT: IF signal output (e.g. for feeding through an analogue receiver).

Note: The label showing the type and serial number is underneath your receiver.

YOUR REMOTE

GB

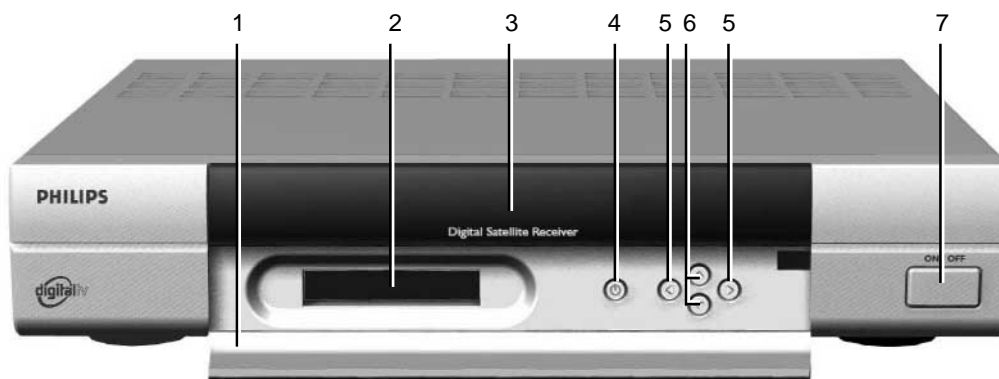


3 OPERATING YOUR UNIT

3.1 LOCAL OPERATION

Open (and close) the flap on the front of the unit by pressing the marked area (on the right-hand side).

Local operation is by means of the keys **STANDBY**, ▲ and ▼ for switching between channels upwards/downwards (CH -/+), as well as ◀ and ▶ for adjusting the volume (VOL -/+). To switch between radio and TV, press the **STANDBY** key briefly and then within one second the ◀ key for radio or ▶ for TV mode.



- | | |
|---|---|
| 1 - Flap | 5 - ◀ and ▶ : adjust volume key (Vol -/+) |
| 2 - Two CI-Module slots (Common Interface - Module) | 6 - ▲ and ▼ : upwards/downwards channels key (CH -/+) |
| 3 - 4 Digit LED front indicator | 7 - ⏻ : standby key |
| 4 - ON/OFF switch button | |

r t

The LED indicator shows **Radio/TV** selection mode for one second.

The unit has an on/off switch with power separation.

The indicator for the channel number is via the 4-digit green 7-segment indicator.

P 9 9 9

TV channel indicator

r 25

Radio channel indicator

t 1 2 3

Indicator t = TV mode (+ channel number of satellite receiver)

N.B.: If the unit has been switched to TV mode by means of the TV key, the image on the TV unit is the one transmitted by the TV unit, e.g. from an additional cable source.

P 2.3.4.

The points are indicated if the unit is switched to «mute».

V c r

VCR indicator:

During play-back the video/audio signal from the video recorder is automatically switched to the television unit - in standby mode also.

V c r -

VCR indicator: switched through in standby mode.

-

The unit is in standby mode and can be switched on using the **STANDBY** key.

3.2 REMOTE CONTROL FUNCTIONS

Switching on from standby mode is done using the red key or using the number keys **0 ... 9**.

The unit software contains a functional description for the remote control. To consult this, simply press the **RC** key on the remote control and then the keys for which you require assistance - the appropriate help instructions appear on the screen.

Exit the help menu by pressing the **RC** key again.

The keys located around the **OK** key ◀ ▶ and ▲ ▼ operate the functions Volume +/- (VOL +/-) and Channel +/- (CH +/-) in standard mode.

3.3 SELECTING THE MENU LANGUAGE

The menu language can be switched between German, English, French, Italian, Spanish, Dutch and Turkish.

Press the **M**, **4** and **2** keys to display respectively the main menu, installation menu and language selection menu. Press the **OK** key and the choice of language is made as usual using the ▼ and ▲ keys.

The language originally set remains selected when you quit the menu using the **E** key.

The selected language is stored when you quit the menu using the **OK** key.

3.4 CHANNEL SELECTION

3.4.1 Channel selection using the number keys 0...9, ▲, ▼ and list

The channel is set by directly entering the channel number via the number keys (N.B. 0 is also a channel number).

Move back/forward between the next/previous channel using the ▲ / ▼ keys.

A sequential list of channel numbers appears after pressing the **OK** key twice. The desired channel can be selected using the ◀ / ▶ and ▲ / ▼ keys and can then be set using the **OK** key. Pressing the **OK** key again or pressing the **E** key quits the list.

3.4.2 Last channel using the E key

Pressing the **E** key switches between the two last set channels.

3.4.3 Zapper function using the OK and ◀ ▲ ▼ ▶ keys

When the currently selected channel takes an advertising break, many users zap between one, two or more alternative channels. It is easy to forget which was the original channel being viewed.

The zapper function notes three other alternative channels starting from the selected channel. However, note that only those channels that have been viewed for at least 5 seconds are stored in the memory.

The last 4 channels stored in this way can be accessed directly using the **OK** key followed by the ◀ ▲ ▼ ▶ keys.

3.4.4 Channel management using 10 favourite lists

Digital television technology provides viewers with a wide range of channels. Depending on the number of satellites that can be received, up to 1000 TV and 1000 radio channels are available. To manage this (extremely) large number - who can remember several hundred channels and the associated channel numbers? - the user has ten custom definable favourite lists, enabling him to manage and sort the channels clearly.

A favourite list is a list in which channels selected from a channel pool can be organised. By default the names of the favourite lists are pre-defined similar to the following example. However, the name of the favourite list can be changed according to individual preferences. Each favourite list has the available channel numbers P000....P999.

	Favourite list	Name sorted channels (example)
Example:	F0: ALL	(e.g. all free channels from the channel pool)
	F1: NEWS	(e.g. PHOENIX, n-TV, N-24, Bloomberg etc.)
	F2: SPORT	(e.g. DSF, EuroSport, Motors-TV etc.)
	F3: MUSIC	(e.g. MTV, VIVA, VIVA 2, Video Italia, Hit-Channel etc.)
	F4: TRAVEL	(e.g. Canal Canarias, Travel-Channel etc.)
	F5: SHOPPING	(e.g. Home Shopping, QVC, Wishline, ONYX etc.)
	F6: CHILDREN	(e.g. KIKA + other children's channels etc.)
	F7: MISCELLANEOUS	(e.g. - all channels not previously allocated)
	F8: ABC	(e.g. ...)
	F9: XYZ	(e.g. ...)

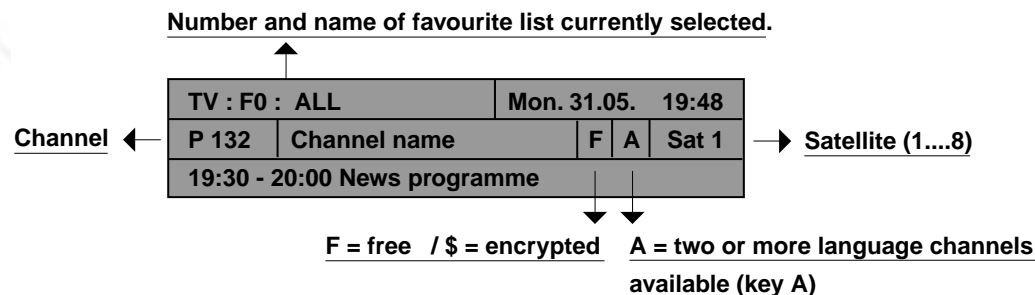
The desired channels can be taken from the channel pool, which contains all channels in alphabetical order, and copied into the target, i.e. one of the 10 favourite lists.

All free channels from the channel pool as stored by default in the favourite list 0 = «ALL». Favourite list Fav 0 = ALL thus corresponds to the channel allocation you may already be familiar with from satellite receivers.

Some of the channels transmitted by the Astra 19 and Eutelsat Hotbird 13 satellites are also already contained in various favourite lists.

Selecting a favourite list is done by pressing the **F** key and one of the allocated number keys **0...9**.

N.B.: After selecting a channel the following message is displayed:



3.5 SWITCHING BETWEEN TV AND RADIO

Switching between radio and TV is done using the **R** or **TV** keys. Both keys also affect the switching impulse voltage of the TV SCART socket. If you also receive channels on your TV set via antenna or cable, you can switch between the channel received by your TV set or by the satellite receiver using the **TV** key provided that the switching impulse voltage is detected and processed by your TV set.

N.B.: All channel functions available for TV (last channel, zapper function, favourite lists, channel lists and channel pool etc.) are also available separately for 1000 radio channels.

3.6 SELECTING THE CHANNEL LANGUAGE

Press the **A** key to display the language selection menu. The number of available languages depends on the particular channel. The choice of language is made as usual using the **▼** and **▲** keys.

The language originally set remains selected when you quit the menu using the **E** key.

The selected language is stored when you quit the menu using the **OK** key.

N.B.: Please note that many channels only offer one language. Many radio stations do, however, offer up to 20 or more «sub»-channels. These channels can be selected in radio mode also by pressing the **A** key.

3.7 ADJUSTING THE SOUND

a) The volume of the receiver can be adjusted in 20 stages using the **◀** or **▶** keys.

L 20

The current volume level is indicated in the channel indicator.

b) Switching the sound **🔊** on/off (mute) - when the sound is switched off, the OSD displays a message for approx. 2 seconds. The «mute» function is cancelled by pressing the volume keys **◀** or **▶** again.

3.8 TIMER

The timer programming menu is accessed by pressing the **⌚** key. Up to 8 timer events can be input for TV or radio channels, as required.

N.B.: Please note that the video recorder must also be set to identical recording times.

N.B.: Please note that the remote control is not active during timer recording to prevent accidental recording of OSD messages. The volume is switched to full level during recording.

r E c

If the remote control is activated, the channel indicator on the unit displays «r E c» to indicate that a timer recording is currently active.

E n d

The timer recording can be interrupted prematurely only via the **⌚** key. After interrupting the recording, the display indicates «End». The unit then reverts to normal operation.

If a timer recording is started from standby mode, the unit reverts to standby mode after the recording has finished.

1...8 Select the next free input field using the number keys **1...8** or using the **▼** or **▲** keys.

▶ ◀

Select consecutively the input fields for {Date} {Start} {Stop} and {Channel} (the input field is highlighted in white).

OK Activate the input for the selected field using the **OK** key (the input field is highlighted in black).

Input the appropriate event either directly via the number keys **0...9** or by scrolling through the options using the **▶** **◀** keys.

OK Confirm your selection using the **OK** key and select the next input field.

E After inputting {Date} {Start} {Stop} and {Channel}, you can exit the timer menu by pressing **E** and quit or input further timed events. You can also programme the timer for radio programmes in the Programme section using the **R** key.

If the data for timer programming are transmitted, they can also be transferred directly to the timer via the menu 'EPG... preview' using the **⌚** key.

Deleting timer programming:

1...8 Select the timer row to be deleted using the number keys **1...8** or the ▼ or ▲ key

OK and delete the programmed data using the **OK** key.

N.B.: *If you accidentally delete a row and wish to reconstitute the original information, exit the timer menu by pressing the **E** key twice.*

N.B.: *The time and date are programmed from the DVB data transmitted by the channel. Please correct the 'Time offset' in the Installation menu when switching from summer to winter time and vice versa.*
CET summer time = {+2 h}
CET winter time = {+1 h}
Please note that some 'exotic' channels do not transmit correct time signals. Check the date and time in the 'Timer programming' menu when performing programming.

3.9 EPG - PROGRAMME INFORMATION (BASIC NAVIGATOR)

The EPG (Electronic Programme Guide) contains information on current and subsequent programmes.

The extent of this channel-related information is determined by the individual provider and varies greatly from one channel to the next. Many channels are also transmitted without usable additional information (SI data).

This is also the case for the preview. Some providers do not transmit any data; others already transmit a preview, including additional information, up to a few days in advance.

The EPG information is accessed and quit using the **i** key.

a) Current and next programme

i shows the **title, start and end of the current programme**, and additional information on the programme, depending on the provider.

i shows the **title, start and end of the next programme**, and additional information on the programme, depending on the provider.

i to exit channel information again.

E to exit channel information immediately.

b) Further preview and additional information

i Activate the basic navigator, show information on the current programme.

OK Access the preview.

Depending on the provider, you receive a list of programmes for the current day or for several days in advance.

You can skip forward or backward to the desired programme row-by-row or page-by-page using the ▼ ▲ or ► ◀ keys.

OK Once you have selected the desired programme, you can consult additional detailed information using the **OK** key. If no additional information is available, you will receive the relevant message.

If the text of the additional information skips a page, you can skip forward or backward row-by-row using the ▼ ▲ keys.

Exit the additional information display using the **OK** key or the **E** key, which displays the preview again.

c) Timer programming

The data from the preview can be transferred to the recorder timer using the relevant key. If a preview is available, then select the desired programme and transfer the data directly to the timer using the ⌚ key.

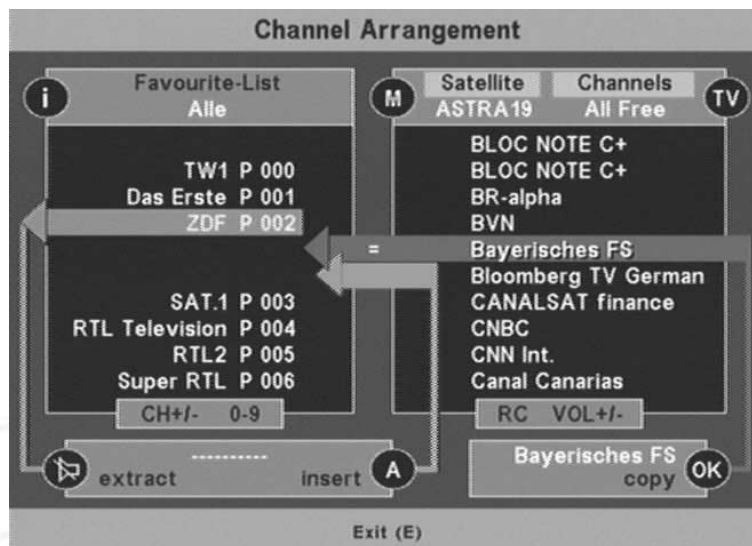
4 MENU STRUCTURE

4.1 CHANNELS

4.1.1 Favourite list

Call up the main menu using the **M** key and then press the **OK** key twice.

Sorting, swapping, copying and deleting channels - in one single menu!



- i** Select one of the favourite lists 0...9.
- M** Select the relevant satellite (e.g. Astra, Eutelsat or other).
- TV** Select the channel source (e.g. NEW or ALL channels).
- ▼ ▲** Select the target position in the favourite list (tip of grey or green arrow).
- ◀ ▶** Select the channel from the source channel list (right-hand window).
The channels are arranged in alphabetical order.
- 🔊** Remove the current channel from the favourite list to the tray (= remove).
- A** Copy from the tray back into the favourite list (= insert).
- OK** Transfer the channel selected in the source to the favourite list (left-hand window) (= copy).

Swap:

Place the red bar over the desired channel using the **▼ ▲** keys or by inputting the channel number, move to the clipboard using the **🔊** key, select the target channel number using the **▼ ▲** keys or **0...9**, insert using the **A** key - **done!**

Delete:

Place the red bar over the channel to be deleted using the **▼ ▲** keys (or by inputting the channel number), and then place it on the clipboard using the **🔊** key.
Exit the menu using the **E** key and 'delete' using the **OK** key - **done!**

N.B.: «Deleted» channels are only removed from the favourite list, but continue to be available in the channel pool and can be inserted again at any time.

Switching to the left menu window is done using the ▼ and ▲ keys; switching to the right menu window is done using the ◀ and ▶ keys.
The highlighting of the windows heading and channel will show which window is active.
For each action (copying, swapping or deleting) you thus see the appropriate TV channel in the current window.

The search function also locates channels that do not contain a usable TV channel. A test picture, for example, may initially be detected and is thus stored by error in one of the channel lists.

N.B.: The transparency of the superimposed image can be switched between variable and fixed (fixed in not transparent) using the **F** key.
In 'VAR' mode the transparency can be increased or decreased using the ◀ ▶ keys.
This function is very useful when sorting and copying channels, as high transparency gives the user the chance to quickly decide on the type and content of a particular channel.

Copying:

Adjust the desired source channel using the ◀ ▶ keys, then locate the position in the favourite list where the channel is to be inserted using the ▼ ▲ keys or directly via the number keys **0...9**.
Press the **OK** key - done!

N.B.: The unit detects channels, which are already stored in the current favourite list - if this is the case the equal symbol (=) is displayed in the grey bar.

N.B.: If you have accidentally deleted channels or wish to cancel the changes made, then exit the menu using the **E** key and then press the **E** key again.

Any changes made will not be stored until you press the **OK** key.

4.1.2 Changing the favourite name

Call up the list using the **OK** key.

Select the input field {NAME} using the keys **0...9** or ▼ ▲ and activate by pressing **OK**.

You can select letters (upper or lower case) or numbers using the ▼ or ▲ key.

You can shift the input position right or left using the ▶ or ◀ key.

After inputting the desired name, the input field is deactivated again by pressing the **OK** key.

4.1.3 Channel pool (for advanced users)

The channel pool contains all channels in alphabetical order. Selection depending on satellite is done using the **M** key; free or encrypted channels are chosen by pressing the **TV** key. All free (or all encrypted) channels on the selected satellite are contained in the «All Free» section, also the new free or encrypted channels after performing satellite search mode.

▼ ▲ Select channels in rows. ◀ ▶ Select channels in columns.

All selected channels are set immediately by the receiver and indicated in the background. In the case of scrambled channels the relevant CA module must be provided. The screen transparency can be changed using the **F** key and (within 2 seconds) the ◀ or ▶ key.

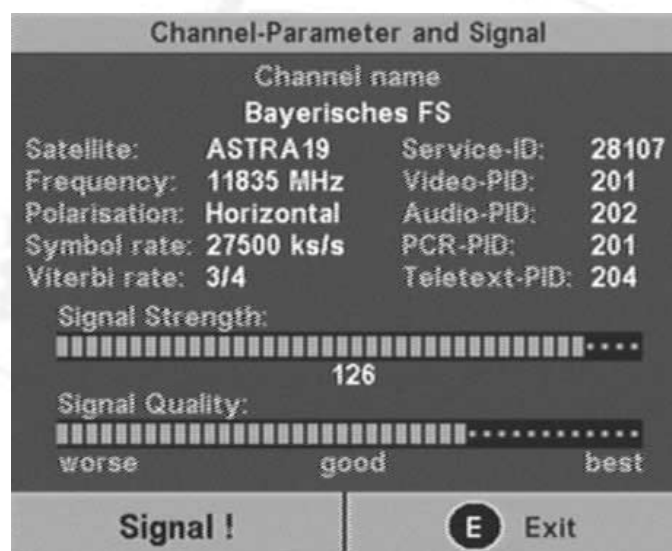
M Selection of satellite using the **M** key.

TV Selection of free or encrypted channels using the **TV** key.

🔊 After pressing the **MUTE** key, individual channels can be deleted - e.g. channels that are no longer on the air.

R The channel pool activated using the **M** and **TV** keys can be managed here, i.e. all «unused» channels or also all indicated channels can be deleted.
(Cf. MANAGING under point 4.5.2)

i Show **antenna signal** and **reception parameters**.



If necessary, you can align your parabolic antenna using the sub-menu «Antenna signal». Turn the antenna to the optimum position in the scales indicating field strength and signal reception quality.

If the signal is very weak, the field strength scale may also fall to 0 - in which case you should optimise the signal using the reception quality scale.

If the message «No signal» appears and only the field strength signal is indicated, the antenna may be aligned with a satellite for analogue signals (which cannot be received by this receiver).

4.1.4 Parental control

The five-digit security code (PIN) is set to **0 0 0 0 0** in the factory by default.

a) Changing the security code (PIN)

Select the «Parental control» menu using key **4** from the Main menu «Channels». Then select the {PIN} input field using key **2** or the **▼** key and activate it by pressing the **OK** key. Enter the 'old' and **your 'new' PIN** in the following sequence.

1. Please enter the current PIN. (= **0 0 0 0 0** for first use)
2. Please enter the new PIN.
3. Please repeat the new PIN.

N.B.: **Do not forget your PIN.**
 Resetting to the default settings is only possible by factory customer service!

All channels are accessible using the default settings - you can block each individual channel against unauthorised access.

Marking the channels to be blocked is done either via the «**Favourite list**» or «**Channel pool**» menus using the **RC** key.

After marking, the channel name is preceded by a «?», after which the next channel is called up to enable marking of several channels by repeatedly pressing the **RC** key.

To delete the marking, press the **RC** key again when the relevant channel is highlighted.

Example: Sky News
 ? Super Action
 ? Super Spezial
 Südwest BW

b) Activating the parental control

To activate blocking of the channels marked «?», switch **ON** the {Security} input field in the «Parental control» menu and confirm by pressing the **OK** key when exiting the menu.

When calling up the marked channels you will be required to enter **your own** five-digit PIN.

N.B.: *Please note that, when the parental control is activated, the «**Favourite list**», «**Channel pool**» and «**Search mode**» menus can only be accessed by entering the five-digit PIN.*
 This is to prevent overriding the parental control function, e.g. by deleting the marking or adjusting the blocked channels via the transponder search mode (... the block also cannot be overridden using the timer).

N.B.: *To deactivate the parental control temporarily, e.g. in the evening, you can switch the {Security} input field to **OFF** in the «Parental control» menu.*
 *The «?» marking is not cancelled in this mode and appears again when the parental control function is reactivated, i.e. when the {Security} input field is switched to **ON** again.*

4.2 SEARCH MODE

4.2.1 Satellite search mode

Satellite search mode is performed for all frequencies on the selected satellite. Select the desired settings in the menu sequence.

Selecting the individual parameters is performed after activating using the **OK** key and then using the ► or ◀ key.

We recommend launching the search mode occasionally in order to detect new channels. For this purpose use the basic settings shown in **{bold}**.

If you wish to search for one single channel individually, you can shorten the search mode duration by restricting certain known parameters, e.g. {Low} and {22}.

- (1) the desired satellite **{ASTRA}** > {Hotbird} > {Sat 3} > to {Sat 8}
- (2) the band **{Low/High}** > {Low} > {High}
- (3) the symbol rate **{22+27.5}** > {22} > {27.5} > {FREE}
- (4) or a free symbol rate **{XXXX}**
(only possible if the symbol rate under point (3) has been changed to {FREE})
- (5) and then start the search mode using the **OK** key

and select whether the search is to be for non-encrypted or encrypted channels or both simultaneously: select: «FREE» or «CA» or «FREE+CA».

N.B.: Some of the encrypted channels can also be received free or free at certain times.

Exception: The encrypted ORF channels are located under 'FREE'!

4.2.2 Transponder search mode

All channels of a transponder are searched for in transponder search mode.

- (1) **Satellite**
- (2) **Frequency**
- (3) **Polarisation**
- (4) **Symbol rate**

If the parameters (satellite, frequency, polarisation, symbol rate) of the channel being searched for are known, transponder search mode can then be used.

If, for example, a new channel belonging to a known channel group is launched, it is sufficient to set a channel from this channel group initially via channel selection - the relevant parameters are transferred to the transponder search mode.

If the message «**No signal!**» appears in the «START» line, reception is not possible. Please check the parameters satellite, frequency, polarisation and symbol rate once again. Search mode can be started if the «**Signal!**» message appears.

- (5) Start search mode using the **OK** key.

Encrypted channels are denoted by the «\$» symbol. Channels that you do not wish to transfer to the channel pool can be deleted individually using the **TV** key.

New channels are marked by «+». Transfer to the channel pool can be done by pressing the **OK** key.

4.2.3 Manual input (for advanced users)

If neither the satellite nor the transponder search mode detects the desired channel, all relevant reception parameters can be set in «Manual input» mode. Manual input is very useful e.g. if the reception data of the desired channel are known, but it only transmits at certain times.

4.3 SATELLITES

The ASTRA 19.2° and Eutelsat 13° (Hotbird) satellites are activated as per the default factory settings. Six other satellites are pre-programmed, but not activated. If you expand your reception equipment, you can make the required settings and activations for the pre-programmed satellites in the 'Satellite' menu.

Activate the desired satellite number, e.g. using the number keys **1...8**, and call up the Input menu using the **OK** key.

(1) Entering or amending a name

Activate the {NAME} input field using key **1** followed by **OK**.

You can select letters (upper or lower case) or numbers via the ▼ or ▲ key.

You can shift the input position right or left using the ► or ◄ key.

After inputting the desired name, the input field is deactivated again by pressing the **OK** key.

(2) Inputting LO1

(3) Inputting LO2

LO1 and LO2 are preset to 9750 MHz and 10600 MHz as default by the factory.

If the LNB-LO frequencies differ from the preset values, enter the relevant values here.

Activate using the **OK** key, enter the LO frequencies using the number keys **0...9**, then confirm using the **OK** key.

Please ensure that a digital-compatible LNB is installed in your reception equipment.

(4) Inputting the orbit position

The parameter «Orbit position» with possible values 1...4 must be stated when operating using the DiSEqC feature.

(5) Enabling

{ON} The selected satellite is enabled for your reception equipment.

{OFF} The selected satellite is blocked.

4.4 INSTALLATION

4.4.1 Time offset

After switching on at the mains switch or after a power cut the time and date for the system clock (timer) are transferred from the data received. To ensure that the time and date of the receiver correspond to local time, a value for the deviation from standard time must be entered. The offset value for CET summer time is {+2} hours, for CET winter time {+1} hour.

Please check or, if need be, correct the time offset value when setting up your equipment and also when the time changes in spring and autumn.

- (1) Select using key **1** or using the ▼ ▲ keys, then activate using the **OK** key and set the desired time offset value using the ► ◀ keys. Confirm the modifications using the **OK** key.

N.B.: *If an incorrect time offset value is entered, programme times will be indicated incorrectly.*

4.4.2 Menu language

- (1) Select **language**.
The **menu language** can be switched between {{German}}, {English}, {French}, {Italian}, {Spanish}, {Dutch} and {Turkish}.

- (2) Select **character set**.
Automatic switching of the character set is defined in the DVB standard - however unfortunately not all stations observe this standard with the result that characters from an incorrect character set may appear in a text.
Automatic character switching is provided in this unit, however various character sets can be installed if required, so that e.g. Greek texts are shown in the correct character set and are thus legible.
Selection: {Auto} {Standard} {Latin} {Cyrillic} {Arab} {Greek} {Hebrew}.

4.4.3 Signal paths

Activation and modification of each individual field are following the usual procedure.

Select the appropriate input field {XYZ} using keys **0...9** or ▼ / ▲ and activate using the **OK** key.

The parameters are set using the ▲ or ▼ key.

The selection is confirmed using the **OK** key.

- (1) **TV VCR Video output signals at TV and VCR SCART sockets**

----- The following groups are possible in the TV and VCR sockets.

CVBS CVBS

CVBS YC

RGB CVBS (**RGB** offers the best picture quality on the television set)

RGB **YC** (You can use **YC** with SVHS video recorders)

YC CVBS

YC YC

CVBS: = Composite Video Broadband Signal

FBAS: = Farbbild Austast Synchron Signal (equals CVBS)

YC: = like S video (Y: «brightness», C: «croma»)

- (2) **TV > VCR Video/audio return path from TV to VCR unit**

If {ON} is selected, the video and audio signals are also transmitted from the TV socket to the VCR socket in standby mode.

In {OFF} position the power consumption is reduced by approximately 0.5 watts.

- (3) **VCR signal** **VCR signal from VCR unit to VCR SCART socket**
In VCR play mode you can choose between {CBVS/RGB} or {YC} = S video for connecting a SVHS video recorder.

- (4) **Picture format**
If the {4:3} setting is set, all programmes are viewable in the 4:3 format
If the {16:9} setting is set, programmes transmitted in wide-screen format and also those transmitted with the appropriate identification code are automatically viewable in 16:9 format.
However, automatic adjustment of the picture width is only effective if your TV unit is equipped to process and display 16:9 formats (switching voltage 16:9 = 6 volts).

4.4.4 LNB settings

- (1) **LNB**
{ON} standard setting
{OFF} operation without LNB signal (e.g. only with special cabling systems)
- (2) **In standby mode**
{OFF} standard setting

N.B.: **For certain units only use the {OFF} setting, as otherwise the receiver continues to supply power to the LNB also in standby mode. The power consumption of the receiver can thus increase from 2 watts to up to 10 watts in standby mode.**

{ON} The LNB power remains on in standby mode, e.g. to supply power to an appropriate multi-consumer unit.

4.4.5 DiSEqC (Digital Satellite Equipment Control)

In the DiSEqC menu the control signals must be set in accordance with the requirements of your satellite equipment.

- (1) **22 kHz signal**
{OFF} 22 kHz not active
{High/Low} 22 kHz switches between high and low band
{Pos. A/B} 22 kHz switches between 2 satellites
- (2) **Tone burst**
{OFF}
{High/Low} activates the tone burst depending on the reception frequency
{Pos. A/B} selects orbit position 1/3 or 2/4
{Opt. A/B} switches between orbit position 1/2 and 3/4
- (3) **DiSEqC**
{OFF}, {ON} Select {ON}, if you connect the receiver to a DiSEqC-compatible satellite receiver.
- (4) **DiSEqC repeat (use for cascade arrays)**
{OFF} no repetition of DiSEqC signal
{1} the DiSEqC signal is repeated once
{2} the DiSEqC signal is repeated twice

4.4.6 Download Over Air (software update via satellite)

You can update the operating software and the channel lists (each individually) for your receiver via the ASTRA satellite (update via Download Over Air) using the Download sub-menu. The data for various units are transferred consecutively on a special receiving channel (thus the term data carousel). To receive this data your receiving unit must be aligned with the ASTRA satellite at 19.2° east.

N.B.: Please note that, when updating the channel lists, your own channel allocation in your favourite lists (10 each for TV and RADIO) will be overwritten!

- a) Launch Software download in the INSTALLATION menu after selecting menu (6) «Download» using the **OK** key. Download progresses in several stages, each stage being accompanied by relevant information! You can interrupt these stages at any time.
- b) Search for the download channel on the ASTRA satellite. This search takes place during initialisation of the unit and may last for several minutes.
The next time download is launched, the stored download channel is set directly.
- c) Load the receiver identification. This process may also take several minutes.
- d) Depending on the availability of new data (operating programme or channel lists) from the data carousel the following options are offered to you.

Download	
1	Receiver software
2	Channel lists
CH+/- selection OK	

- e) After selecting «1 Receiver software», the following menu appears.

N.B.	
Download software version V Y.Y	
Receiver software version V X.X	
Continue?	
YES = OK	NO = E

- f) After pressing the **OK** key, the software version is checked. If the data carousel contains an older version, a message is displayed - if necessary you can interrupt download prematurely.

Depending on the allocation rate of the data carousel, data downloading may take up to one hour!

- g) Save the downloaded data.

N.B.: You must not switch off the unit during this process!

4.5 CA (Conditional Access) = SCRAMBLED CHANNELS

4.5.1 General remarks

To receive scrambled channels you need a Common Interface Module (CI-Module) and a CA (Conditional Access) Smart Card supplied by your programme provider.

Please note that the CI-Modules and the assigned Smart Cards only decode the channels transmitted by your programme provider. If you have subscribed to channels of several programme providers, you may have to switch between several CI-Modules and/or the relevant Smart Cards.

- Follow your programme provider's instructions regarding the CI-Module and Smart Card.
- Switch the unit to standby mode. Open the front flap and insert the CI-Module into one of the two module slots. If available, insert a second CI-Module into the other module slot.
- Insert the Smart Card into the relevant CI-Module.
- The modules and the Smart Card are correctly in position, if you can close the front flap easily.
- Leave the CI-Modules in their relevant slots.

The Smart Card is protected by a four-digit PIN code (Personal Identification Number). Please observe your programme provider's instructions relating to the card.

After activating the «CA» (Conditional Access) menu using the **OK** key, you can call up different information on your CI-Modules and Smart Cards.

The scope and content of this information is determined by the CI-Module or by the Smart Card and does not come from the receiver - please note your programme provider's instructions and documentation.

4.5.2 Receiving scrambled channels

Depending on the satellite, up to several hundred scrambled channels can be received. You have two options to set up the channels of your own programme provider.

a) Via satellite search mode

- **SEARCH:** Launch automatic channel search (cf. 4.2.1) by selecting «CA» (= search for scrambled channels) - you will thus receive all scrambled channels of the selected satellite in the «Favourite list» menu under «New CA» (cf. point 4.1.1 Favourite list).
- **COPY:** The list in the «Favourite list» menu (cf. 4.1.1) in the right-hand window is arranged alphabetically. Select the channels of your programme provider using the **▲** or **▼** key and copy the selected channels into one (or also several) of your favourite lists using the **OK** key.
- **MANAGING:** If you now have a number of CA channels in the channel pool (cf. 4.1.3), which are not decoded by your CI-Module, you can also remove these unused CA channels from the channel pool. Delete all 'unused' channels, i.e. all channels that you have not copied into one of the 10 favourite lists using the **R** key in the 'Channel pool' menu.

b) Via transponder search mode

- **SETTING:** Refer to your programme provider's documentation for the reception parameters and enter these in the appropriate fields of the transponder search mode (cf. 4.2.2). After starting using the **OK** key, you will receive the relevant channels, which you can then save in the channel pool using the **OK** key. If the channels are spread over several transponders, please repeat the process.
- **COPY:** Select the «Favourite list» menu again, followed by «New CA» and copy the channels of your programme provider into your favourite lists. In this instance too there could also be unused CA (or FTA) channels; if so cf. above for instructions on managing them.

5 GLOSSARY

GB

Band	Frequency band of a satellite. Low band and high band.
CA	Conditional Access: denotes encrypted channels.
CVBS	Composite Video Burst Sync: video standard for TV or VCR equipment.
DiSEqC	Digital Satellite Equipment Control.
DVB	Digital Video Broadcast.
EPG	Electronic Programme Guide.
Favourite list	List of selected channels from the channel pool.
Free	Freely receivable (not encrypted) channels.
GHz	Abbreviation for gigahertz (giga = billion).
LNB	Low Noise Block Converter: electronic unit on parabolic antenna for receiving satellite signals.
LO	Local Oscillator: part of the LNB; converts the satellite signal into a frequency range receivable by the receiver.
MHz	Abbreviation for megahertz (mega = million).
MPEG	Moving Picture Expert Group: standardisation body for encoding and compression of images.
OSD	On-screen Display: indication or flashing of information on the screen.
PID	Packet Identification: identification number for video, audio, videotext etc.
PCR	Programme Clock Reference.
Pool	Channel pool: collection of all receivable TV and radio channels.
RGB	Video standard (separated into 3 individual signals for red, green and blue).
Standby	Power saving sleep mode.
SVHS	Super Video Home System: video recorder standard (S Video).
Symbol rate	indicates the data rate transferred per second (in MS/s Megasymbol/second or kS/s kilosymbol/second).
Transponder	A digital transponder is capable of transmitting several TV and radio channels simultaneously on a single transmitting frequency.
VCR	Video Cassette Recorder.
YC	(Y = luminance, C = colour signal) video signal standard for SVHS recorders.
Zapping	Frequent switching between channels using remote control.

6 TECHNICAL DATA

Channels

- 1000 storage positions for TV channels and for 1000 radio channels.
- 10 individually definable favourite lists each containing 1000 channel positions (e.g. for channel types SPORT, NEWS, MUSIC etc.).
- 8 satellites (individually activatable).
- 24 characters for channel and/or station names.
- Channel selection using 1, 2 or 3-digit input.
- Channel selection using UP/DOWN keys.
- Channel changing for 2 channels using one key (Last Channel).
- Fast selection of last 4 viewed channels - zapper function.
- Selection of channels from channel list.
- Channel pool arranged in alphabetical order and in accordance with satellite, free, new free, encrypted and new encrypted channels.
- Copying, sorting, deleting of channels, all in a single clear menu.

Search mode

- Automatic satellite search mode (SCPC compatible) for TV and radio channels including selection of satellite, high/low band, fixed and freely definable symbol rates, for free (and encrypted) channels.
- Automatic transponder search mode - detects TV/radio channels on a transponder.
- For advanced users - manual input of all reception parameters.
- Changing channel names.

OSD (On-Screen Display)

- Clear menu structure with variable and fixed transparency.
- Integrated operating instructions and functional description of remote control.
- Menu languages - German, English, French, Italian, Spanish, Dutch and Turkish.

EPG (Electronic Programme Guide)

- Fast programme information concerning current and next programmes.
- Preview containing additional information several days in advance (depending on channel).
- Simple transfer of data - channel, start time, end time, date - to timer.

Video/Audio

- TV socket RGB, YC (S Video /SVHS), CVBS.
- VCR socket YC and CVBS.
- Automatic VCR to TV switching.
- Automatic TV to VCR switching in standby mode (selectable).
- Separate cinch sockets for L/R audio channels.
- Volume adjustable in 20 stages, mute function.
- Language selection for multilingual TV broadcasts and selection of additional channels in radio mode.
- Stereo 24 Bit 96 kHz - Audio «Sigma-Delta» DAC.

Additional information

- Local control for Channel +/-, Volume +/-, Standby and Radio/TV switching.
- 4-digit LED indicator (green).
- Timer for 8 events (TV or radio).
- Optimum alignment of parabolic antenna depending on field strength and reception conditions.
- Tele-text reinsertion (for TV display).

RF range

- Sat-IF frequency range 950 - 2150 MHz
- Input level ranges 43 - 83 dB μ V
- Reception threshold (EB/NO) < 4.5 dB

TV system digital

- Modulation, FEC, demultiplexer DVB-S standard
- Video resolution CCIR 601 (720 x 576)
- Input data rate 2 - 45 Msymbol/s
- Bit rate 1.5 - 15 MBit/s
- Video voltage/impedance 1 V/75 Ohm
- S/N > 53 dB
- Audio decoding MPEG-1/2, layers 1+2
- Bit rate 32/44.1/48 kHz
- Audio frequency range 0.04 - 20 kHz

CPU/Memory

- 32 bit RISC CPU 60 MHz clock rate (internal)
- FLASH 2 MByte
- DRAM 2 MByte
- SDRAM 8 MByte

Power supply

- Supply voltage 230 V (+10/-15%) / 50 Hz
- Power consumption LNB = 400mA/18V 25 W max (22 W typ. ind. 2 CI-Modules)
- Power consumption without LNB 12 W max (10 W typ.)
- Power consumption in standby 2.5 W max (< 2 W typ.)

Connections

- Sat-IF input/output F socket
- TV/VCR SCART socket
- Audio 2 cinch sockets
- Digital Audio 1 cinch socket

Software update

- via data interface separately for:
 - a) operating programme,
 - b) TV channel lists,
 - c) radio channel lists,
 - d) unit adjustment
[RS 232 Sub D, 9 channel (0-modem operation)].
- via satellite separately for:
 - a) operating programme,
 - b) TV and radio channel lists.

General information

- Unit dimensions (W x H x D in mm) 335 x 68 x 280
- Ambient temperature +5°C to +40°C
- Weight 2 kg



TROUBLESHOOTING

When you have problems with your Philips DSR 2000, first check following points.

PROBLEM	POSSIBLE CAUSE	ACTION
No picture, no sound and no front panel display.	Receiver is not plugged into the mains or is not switched on.	Check mains connection. Press the ON/OFF button on the front of the receiver.
No picture, no sound ; but the front panel shows the time or "--".	The receiver is on standby.	Press on the  button on the remote control to bring the receiver out of standby.
No picture, no sound ; but the indication on the front of the receiver is correct.	You are watching TV through your UHF or VHF aerial connection.	Press the TV button on your remote control.
	The SCART connection has been made wrong.	Check the SCART connection (see chapter 2).
	The connections are right, but the television is NOT connected up to the extern AV source (AV 1 or EXT. 1, etc...).	Check the TV SCART connection.
	The cable connections are maybe faulty (damaged, broken or squashed) are missing.	Check all your connections and consult chapter 2.
Only the main menu and the corresponding sub-menus are available. You cannot choose a service.	There is no download list of the (digital) services in the memory of the receiver.	Execute all the relevant steps for installing indicated in chapter 4.
	The receiver has not been well connected up to the dish.	Check all the items of the menu Installation antenne (LNB, mains, LNB-type, LO frequency,...).
Main menu + sub-menus and information are available. But there is no reception (the screen remains black).	The dish does not receive satellite signals.	Check the installation and the positioning of the dish.
	The mains of the LNB is interrupted.	Check the cable connection between the LNB and the satellite receiver.
	The received signal is too weak.	Check the installation and the positioning of the dish. It may be due (rarely) to severe or very cloudy weather.
	The dish is damaged.	Install a new dish.
Irregular or bad reception, "mosaic" effect of the picture.	Wrong cable connections (damaged, broken or squashed connectors or wires).	Check all the connections and cables. Check antenna signal
	A weak signal because the dish is not well positioned or is not stable	Reposition the dish. Fix your dish strongly.
The remote control does not operate.	There are no batteries in the remote control, the batteries are nearby or completely used.	Check the batteries and change them eventually.
By normal receiving, you may have a black screen when you choose some services.	Your are watching a scrambled service or programme.	Choose another service.

