



## Index

### Chapter 0 Control elements and connections

0.1.	Receiver front panel.....	4
0.2.	VFD-Display.....	4
0.3.	Receiver back panel.....	5
0.4.	Remote control.....	6

### Chapter 1 First installation

1.1.	Complete Content.....	7
1.2.	Accessories.....	8
1.3.	Safety rules.....	9
1.4.	Fast installation guide.....	10
1.5.	Menu overview.....	16

### Chapter 2 Standard functions

2.0.	Switch on the receiver.....	17
2.1.	Standby.....	17
2.2.	Teletext.....	17
2.3.	Mute.....	17
2.4.	Numeric keyboard on remote control.....	17
2.5.	Switch channels.....	17
2.6.	Change between TV and Radio channels.....	17
2.7.	Volume.....	17
2.8.	Stop functions.....	18
2.9.	Open Main menu.....	18
2.10.	Watch the last viewed channel.....	18
2.11.	Channel list.....	18
2.12.	EPG Electronic Program Guide.....	18
2.13.	Favourite channel list.....	19
2.14.	Menu Audio.....	19
2.15.	Signal and channel information.....	19
2.16.	Changing favourite channels.....	19
2.17.	Zoom Function.....	19
2.18.	Subtitle.....	19
2.19.	Short-circuit protection.....	20
2.20.	Fast record.....	20
2.21.	Time Shift.....	20



## Chapter 3 Channel management

3.1	TV-Channel list.....	21
3.1.1.	Skip channels.....	21
3.1.2.	Lock channels.....	21
3.1.3.	Delete channels.....	21
3.1.4.	Delete channels groups or all channels.....	22
3.1.5.	Edit Channel.....	22
3.1.6.	List of favourite channels.....	22

## Chapter 4 PVR management

4.1	Play record.....	23
4.2	Lock record.....	23
4.3	Delete record.....	23
4.4	Movies, MP3, Photos.....	23
4.5	Sorting.....	24
4.6	HDD management.....	24
4.6.1.	Folder management.....	24
4.6.2.	Delete folder.....	24
4.6.3.	Lock folder.....	24
4.6.4.	Add folder.....	25
4.6.5.	Move file.....	25

## Chapter 5 Timers

5.1	Sorting.....	26
5.2	Delete Timer.....	26
5.3	Edit / Add Timer.....	26

## Chapter 6 Tools

6.1	Calculator.....	28
6.2	Calendar.....	28

## Chapter 7 System settings

7.1.	Menu Language.....	29
7.2.	Audio Language.....	29
7.3.	Time Zone.....	29
7.4.	TV Settings.....	30
7.5.	Recording Settings.....	31
7.6.	OSD Settings.....	31
7.7.	Version.....	32
7.8.	Factory Default.....	32
7.9.	Software upgrade.....	32



## Chapter 8 Parental Control

8.1.	Set Lock.....	33
8.2.	Channel Lock.....	33
8.3.	Record Lock.....	33
8.4.	Installation Lock.....	33
8.5.	Change Password.....	33

## Chapter 9 Installation

9.1.	Connection Type.....	34
9.2.	Antenna Configuration.....	35
9.3.	Channel Search.....	36
9.4.	Satellite Management.....	37
9.5.	Transponders Management.....	38
9.6.	SatcoDX Update.....	38
9.7.	Backup.....	39

## Chapter 10 Equipment Features

10.1.	Technical data.....	40
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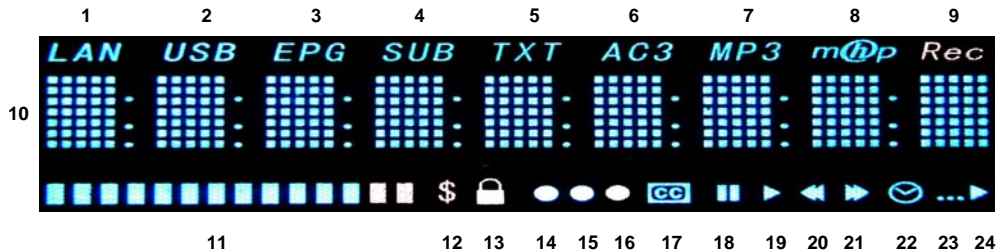
## Chapter 0 Control elements and connections

### 0.1. Receiver front panel



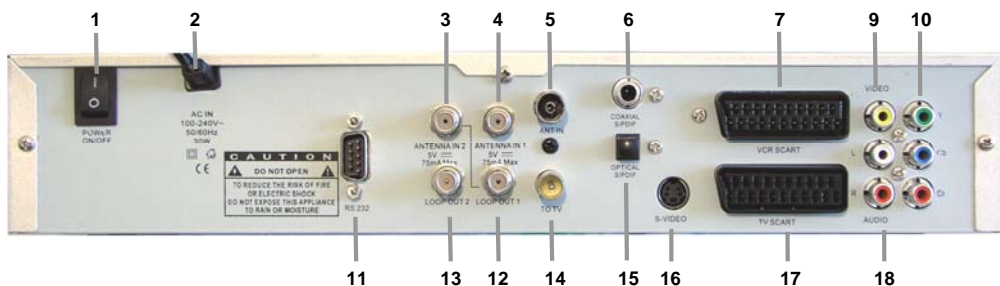
- |   |                       |   |
|---|-----------------------|---|
| 1 | <b>POWER:</b>         | Switches the receiver ON or in Standby mode. For total switching off, use the main switch at the back side of the receiver. |
| 2 | <b>STANDBY-LED:</b>   | Shows if the receiver is in Standby mode (when LPC mode is ON).   |
| 3 | <b>Front Buttons:</b> | Buttons for administrating, the buttons have the same functions like the buttons on the Remote Control.                     |
| 4 | <b>VFD-DISPLAY:</b>   | Shows information like channel name and receiver functions.   |
| 5 | <b>IR-SENSOR:</b>     | Reception device for signals coming from the remote control.  |
| 6 | <b>Front Cover:</b>   | Cover for USB connector. There are no card readers installed inside.  |
| 7 | <b>USB:</b>           | Connector for external USB 2.0 HighSpeed devices.   |

### 0.2. VFD-Display



- |    |                                      |    |                                      |
|----|--------------------------------------|----|--------------------------------------|
| 1  | <i>Without function currently</i>    | 13 | <b>Channel is locked by password</b> |
| 2  | <b>USB-device is connected</b>       | 14 | <b>Tuner 1 signal OK</b>             |
| 3  | <b>Channel has EPG- information</b>  | 15 | <b>Tuner 2 signal OK</b>             |
| 4  | <b>Subtitle available</b>            | 16 | <i>Without function currently</i>    |
| 5  | <b>Channel have TXT information</b>  | 17 | <i>Without function currently</i>    |
| 6  | <b>Audio signal in AC3 available</b> | 18 | <b>Time shifting is working</b>      |
| 7  | <i>Without function currently</i>    | 19 | <b>Record is playing</b>             |
| 8  | <i>Without function currently</i>    | 20 | <b>Record will be moved backward</b> |
| 9  | <b>Receiver records one channel</b>  | 21 | <b>Record will be moved forward</b>  |
| 10 | <b>Alpha numeric display</b>         | 22 | <b>Sleep mode is active</b>          |
| 11 | <b>Bar to show adjusted volume</b>   | 23 | <i>Without function currently</i>    |
| 12 | <b>Channel is coded</b>              | 24 | <i>Without function currently</i>    |








### 0.3. Receiver Back Panel



- |    |                      |  |
|----|----------------------|--|
| 1  | <b>POWER ON/OFF:</b> | Main switch to switch off totally the receiver   |
| 2  | <b>AC IN:</b>        | Power cord 230VAC/50Hz.  |
| 3  | <b>IF IN 2:</b>      | Input of the second digital tuner  |
| 4  | <b>IF IN 1:</b>      | Input of the first digital tuner   |
| 5  | <b>ANT IN:</b>       | Antenna input for analogue signals, it must be connected to <b>LOOP OUT 2</b>  |
| 6  | <b>S/PDIF:</b>       | Coaxial output for digital audio (AC3)   |
| 7  | <b>VCR SCART:</b>    | SCART connector for video recorder, DVD recorder or DVD player   |
| 9  | <b>VIDEO:</b>        | Video output for external monitor, TFT or video beamer   |
| 10 | <b>Y, CB, CR:</b>    | Components video output for external monitor, TFT or video beamer  |
| 11 | <b>RS-232:</b>       | Serial port to update the firmware of the receiver   |
| 12 | <b>IF OUT 1:</b>     | Output from first digital tuner, please connect to <b>IF IN 2</b> in case of using the LOOPTHRUOUGH function with the supplied bridge. |
| 13 | <b>IF OUT 2:</b>     | Output from second digital tuner.  |
| 14 | <b>TO TV:</b>        | Modulator output to connect one TV set. Audio signal is available in Mono.   |
| 15 | <b>S/PDIF:</b>       | Optical output for digital audio (AC3)   |
| 16 | <b>S-VIDEO:</b>      | S-Video output for external monitor, TFT or video beamer   |
| 17 | <b>TV SCART:</b>     | SCART output for connecting one TV set, mode RGB or CVBS selectable  |
| 18 | <b>AUDIO:</b>        | Audio output for home audio systems or a Hi-Fi device.   |



### 0.4. Remote Control

- 1. **POWER:** Switches receiver ON or in stand-by-mode.
- 2. **3-set LED:** Shines as function control, showing the selected transmission code 1, 2 or 3
- 3. **TEXT:** Opens and closes teletext.
- 4. **MUTE:** Switches audio on and off.
- 5. **CODE:** Changes transmission code of the remote control.
- 6. **NUMERIC KEYS:** For direct typing values and names.
- 7. **CH+ CH-:** Changes channel up and down.
- 8. **VOL+ VOL-:** Adjusts audio volume up and down.
- 9. **TV/R:** Switches between TV and Radio channels.
- 10. **EXIT:** Exit menus or stop operations.
- 11. **MENU:** Opens the main menu.
- 12. **Back:** Watch the last viewed channel.
- 13.  : Adjusts audio volume or controls the cursor in menus.
- 14.  : Changes channels volume or controls the cursor in menus..
- 15.  : Confirms selections or opens channel list.
- 16. **Color Keys:** Controls menu options.
- 17. **App:** *Without function currently.*
- 18. **EPG:** Shows the EPG information.
- 19. **List:** Opens channel list.
- 20. **Fav:** Opens favourite channel list.
- 21. **Audio:** Opens audio menu.
- 22. **Sub:** Switches subtitle on and off.
- 23. **INFO:** Shows channel information with signal bar.
- 24. **Zoom:** Zoom function.
- 25. **Pup Pdw:** Moves cursor in block steps
- 26. **Fav+ Fav-:** Moves favourite channel up and down.
- 27.  : Start / Stop button for recording and TimeShift.
- 28.  : Backward button for recording and TimeShift.
- 29.  : Forward button for recording and TimeShift.
- 30.  : Stop button for recording and TimeShift.
- 31. **PVR :** Opens PVR menu.
- 32. **MARK :** Places marks within recording process.
- 33. **REC :** Quick start for recording.
- 34. **PIP :** Starts Picture In Picture function.





# 1. First installation

## 1.1 Complete Content

The following goods must be included in this package when you open it for the first time.

### Remote Control



### Installation Guide



### Two batteries Type AAA, Micro, 1,5V



### Bridge for Loophrough connection

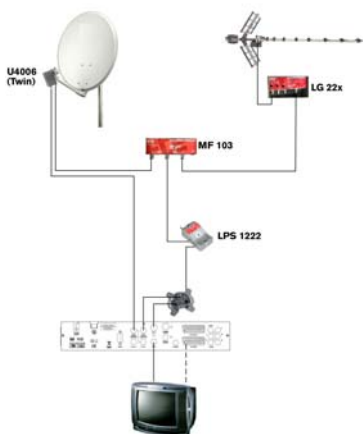


### Antenna connection cable

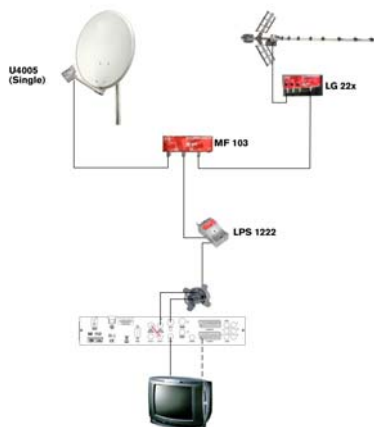


## 1.2 Accessories

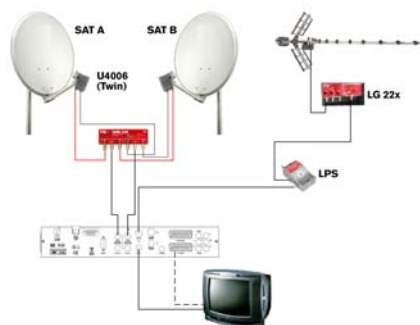
<b>U4301</b>	Offset Dish 80cmØ
<b>U4005</b>	LNC universal single
<b>U4006</b>	LNC universal twin
<b>U4500</b>	Double DiSEqC Switch
<b>LOG3235F</b>	DVB-T Compatible Antenna
<b>LG 229</b>	DVB-T Mast Amplifier
<b>MF 103</b>	Mixer Terr-SAT
<b>LPS 1222</b>	Power Supply
<b>U0301</b>	3 connectors outlet
<b>AO 100</b>	4 connectors outlet



Example 1



Example 2



Example 3

### Example 1:

It is the recommended installation with an LNC Twin type. Through this combination, the reception is the same in both tuners; therefore there are no limits in the selection/viewing channels. The terrestrial signals are mixed with one of the SAT lines.

### Example 2:

Installation using a Single LNC. In this case the possibilities of recording/viewing or PIP are limited to the signals of same band and polarity. The Terrestrial signal is mixed with the Satellite one.

### Example 3:

Complete Reception of two satellites using Twin LNCs and one double DiSEqC switch. The Terrestrial signal in this case is distributed separately.



### 1.3 Safety rules

Please read the manual carefully before using the receiver.  
You will receive a lot of information to use this product correctly and you will prevent incidents.  
Please keep the manual on a safe place.



This sign warns you about high voltages, with risk of electric shock



**Caution:** Do not open the housing of this receiver. Repairs can only be made by professionals authorized. If not, warranty will not be valid anymore.



This sign informs about special information which is important to know.

**Caution:** Keep this receiver far away from liquids. Do not place it on placements close to water like flowers vases, wash basin, aquariums or pools. It exists a high risk of electric shock when water or high humidity filters inside the receivers. Never place other devices on it; they can overheat the receiver as well as daring fire risk. The receiver must be used only with original power cord to 230V main plug. Please read carefully this manual and do not hesitate to contact to professional help if you have any doubt.

Opening the receiver housing as well as the Hard Disk case will mean a total lost of warranty.

#### Installation:

1. Never work during a thunderstorm or staying near of the antenna systems.
2. Before adjusting the receiver, make sure that your antenna is well aligned and works properly.
3. Unplug the main connection (230V) every time you work with receiver connections. Do it also when you stay away for a long time out of home like in holiday periods.
4. The best placement for the receiver is close to the TV and your other equipment like DVD, VCR, CD, and game stations. Select a stable place where you can make the necessary connections in a safety way. The 230V main plug should be in a place easy to reach, that you can unplug it when it is necessary.

**Cleaning:** Before cleaning the receiver with a slightly damped cloth, please disconnect the main 230 V connection from the receiver. Please use only mild cleaners.

**Accessories:** Please, do not use accessories which are not agreed by the manufacturer of the receiver. Unsuitable accessories could increase the risk of getting on fire, an electrical impact or other damages.

**Placement:** Select a placement where the Receiver has air circulation enough, otherwise it may have overheating accumulation. Do not cover the openings of the housing. Unsuitable placements are also places close to heaters or soft locations like e.g. sofas and beds.

**Power connection:** Select a main plug with easy access, in case of unplugging necessity; it will be easier and faster. Please, make sure that the cord as well as the plug is in perfect conditions. Do not pull the cable, use always the plug.

**Housing:** Please, make sure that no liquid will filter into the housing of the receiver. If so, disconnect immediately the receiver from the main 230 V plug and bring the receiver to a professional.

**Air humidity:** When you take the Receiver from a cold to a warm place, please wait until the receiver gets the same temperature as the new environment, in order to avoid problems of humidity condensation.

**Maintenance / Repairing:** Within the warranty time all the repairing processes should be done by authorized technical staff. Otherwise, the warranty will be lost.

## 1.4 Fast installation guide

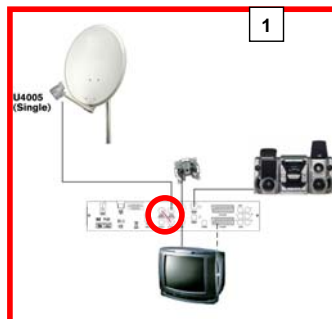
Please, follow the instructions for a faster and simpler installation of the receiver.

### Step 1: Connections

#### Connect the cable from the LNB and Dish:

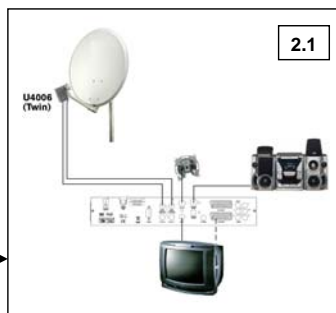
There are two possibilities of connection, based in how is the antenna installation:

1.- One single satellite cable: in this case, this cable should be connected to **IF IN 1** connector, at back panel. The **IF OUT 1** output should be connected to **IF IN 2** through the supplied bridge. This kind of connection limits the possibilities of your receiver. See the Chapter 9 for further information about Installation.



2.- Two independent satellite cables: in this case, please connect the Cable 1 to the **IF IN 1**, and the second one to **IF IN 2**. In this way, it is possible to dispose of independent signals in each tuner. Depending in how are these signals, it may arise two situations:

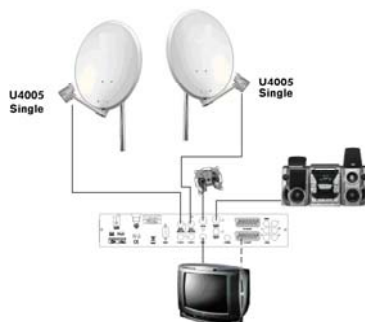
2.1.- Both signals are exactly the same (for example with a Twin LNC): In this case, no limitation will appear in the PiP and Recording functions.



**RECOMMENDED INSTALLATION** →

2.2.- The two signals are different (for example, one from Astra and the other one Hotbird satellites). In this case, during the recording process of one channel of Input 1, it only will be possible to view channels of the same frequency that the one is being recorded, or from the other satellite. The same limitation is applicable to PiP function.

In this case, in addition, you can dispose of more combinations of some satellites with a DiSEqC switch for whatever of the Antennas.



In the chapter 9 is explained with further details these connections, with the limitations that appear.

## Connecting the TV, LCD or video beamer

Your TV or other equipment can be connected in different ways:

<b>SCART / RGB</b>	In this connector you will find the best Picture quality in RGB and RGB-YUV modes. This is the connector that you will use normally to connect the TV. To do it, you should use a Standard SCART – SCART cable.
<b>S-VHS</b>	This connection gives a high quality, lightly higher than the SCART one (it doesn't admit the RGB mode). To use it, you will need a S-VHS Cable.
<b>Modulator</b>	This output gives the worst Picture quality. You only need to use it in case that your TV does not have another input tyoe. The connection cable is included. Use the <b>TO TV</b> output and tune the receiver in the TV like it was one channel more in the TV. Take in account that the sound is, in this case, in mono mode.
<b>Video / DVD</b>	In regards to scart VCR-Scart connection, you can connect a VCR or a DVD. The DVD signal can also be watched through the receiver if the TV is connected using a Scart. You will find more information in the chapter 7.4 – System adjustments.

You can find more detailed information in the chapter 0.3 Back Panel







**This receiver has a main switch at the back panel.**  
**If you see a message “shortcircuit in the antenna” in the screen, you have a shortcircuit in the antenna. Please, verify it and restart the receiver.**

When you configure the system for the first time, the current date will be stored in **Menu > System Preferences > Version** as the warranty start time.

### Second Step: Main settings on the receiver

When you start the first time the receiver or when you execute a “factory default” process, you will see this installation guide in English language.



The selection of the menu options will be done with the arrow buttons   ,   and the button **OK** of the remote control.

Your remote control disposes of 3 different code tables for the communication with the receiver. By default, the selected table is the number 1, which corresponds to the Satellite reception equipment. Normally it should not be changed when the batteries are installed for the first time.

Please, verify that when you push whatever key, the lighted code is the 1. In other case, use the **CODE** key to modify this selection.



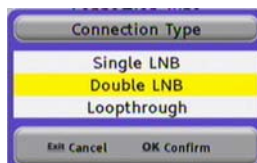
**Menu Language:**

Here you have to select the language for the Receiver menu and information. Select the language with the arrow buttons   and press the **OK** button.

**Connecting type:**

Select the option based in your connections.

Use the arrow keys   to select and press **OK**.

**Time Zone:**

In order to the receiver is able to display the correct time and adjust the timer recordings correctly, it is needed to fix the time zone to the place you live.

Select here the time delay according to your position comparing to Greenwich Time.

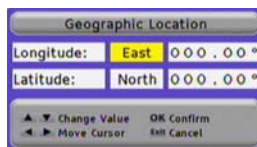
In UK: Summer time: +1 hours  
Winter time: GMT hour

Select with the arrow buttons   and press the **OK** button.

**Geographical Location:**

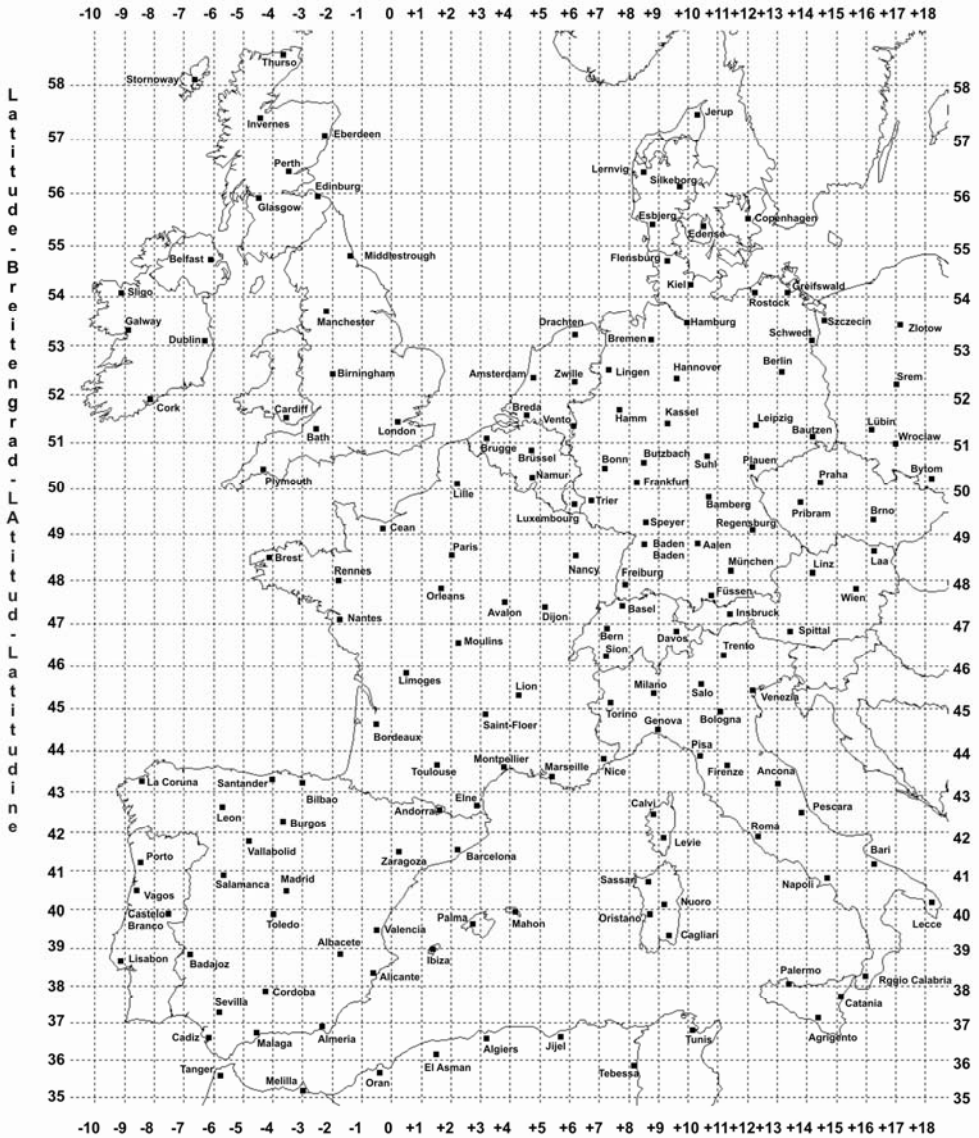
To adjust the positioners of the antenna, it is recommended to have the Latitude and Length of your location.

**It is not absolute needed to introduce these data.**



You can look out the following map in order to know this data:

Longitude / Längengrad / Longitud / Longitudine



## Selection of the Pre-Stored Channel List

This option allows loading the channel list stored in your receiver, and you will not need to tune channels. The list includes Astra / Hot Bird / Hispasat / Turksat channels, and it is supposed that the same input signal is available in both inputs.

If you select **Load Channel List**, the installation assistant finishes at this point and it begins the viewing of the channels.



In case of having a different configuration, please select **Tune new channels** and continue with the installation assistant, configuring the antennas.

## Antennas configuration:

In this menu, you should configure the connected signals in the **IF IN** of your PVR.

By default, the equipment comes with the configuration that you can see in the Picture, with four satellites.

The available options in this screen allow:

**Red Button:** Deletes the selected satellite. It asks for confirmation.

**Green Button:** Edits the selected satellite. The options appear at the image below.

**Yellow Button:** Adds a satellite. The options appear at the below image.

Satellite	Type	LNB	DiSEqC	Motor	KHz	Power
ASTRA 1C,1E,1F,1G	KU U.	A	0	n/a	Auto	18H/13V
HOTBIRD 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22	KU U.	B	0	n/a	Auto	18H/13V
HISPASAT 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22	KU U.	C	0	n/a	Auto	18H/13V
EUTELSAT S,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22	KU U.	D	0	n/a	Auto	18H/13V

Antenna Options:

- Name: Your PVR disposes of several pre-configured satellites. You can find the one you want in the list or add a new one. They are sorted by its orbital position.
- Band: There are two available bands: C and Ku. The differences basically are the frequencies in the transmission. The Ku band has two possibilities; the most common is the Universal Ku.
- Low Band / High Band: It is used when the band selection is the Ku, and it programmes the local oscillators of the LNC.
- DiSEqC 1.0 / 1.1 Port: To configure the use of switches.
- Motor: Activates the motor option to direct the antenna.
- 22 KHz: tone of switching the band of the LNC.
- LNB Power: LNB Feeding. By default the selection is for an Universal LNB.
- Signal: It shows if there is available signal in this selected configuration.

Satellite	ASTRA 1C,1E,1F,1G
Band	KU Universal
Low band	9750 MHz
High band	10600 MHz
DiSEqC 1.0 Port	LNB A
DiSEqC 1.1 Port	0
Motor	n/a
22 kHz	Auto
LNB Power	H=18V ; V=13V
Signal	75%

**LIST Button:** Change the selection of the antenna to the Input 2. This function is only possible when it has been selected the input 2. This function is only possible when it has been selected previously that there are two LNB. In case of selecting only one or LOOPTHROUGH, the second input is not available. The system to select the satellites to the antenna 2 is exactly the same to the input 1, using the **Yellow Key** to add satellites.

Alter whatever change, it should be confirmed with the **OK** key when you exit the menu.

## Channel Search:

Once the antenna configuration is completed, you should proceed to tune the satellite channels that you have selected. There are different ways to tune the channels: through LNB, through Satellites and through Transponders.

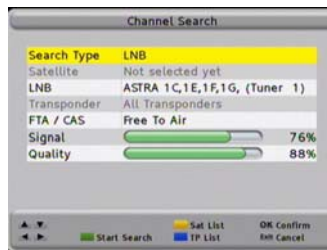
When you select the channel searching through LNB, you only can select one LNB, which corresponds to the programmed tuner.

When you are searching by satellites, you are allowed to select a Wide range of satellites, so you could programme the searching of all the satellites that you have configured.

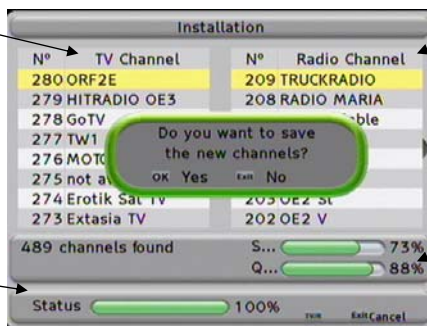
The searching through Transponder is the most selective. It allows selecting all the frequencies that you're going to tune and searching channels.

In whatever selection, you always will have available to search **Free To Air** channels (uncoded channels), channels with **Conditional Access** or **All** the channels.

Please, choose the searching pressing the **Green** button. Once you have finished (the time will depend on the number of transponders it will have to find) you will get a window like the following one:



Detected TV Channels



Detected Radio Channels

Searching process

Level and Quality Meter

You can select the channel searching whenever pressing the **Exit** button.

Once the searching is finished, you must confirm the storing of a new Channel List. Press the **OK** button.

The receiver will come back to the Channel Search menu.

You can search again if you want, or exit by pressing the **Exit** button.

Here it finishes the **Fast Installation Guide**.



1.5 Menus

**Main Menu**

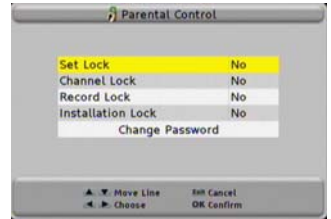


**Channel Management**



Move, rename or delete channels, Program and, create favourite list.

**Parental control**



Activate parental control.

**PVR Management**



Administration for recordings, Pictures and MP3 files as well as connecting external USB devices.

**Tools**



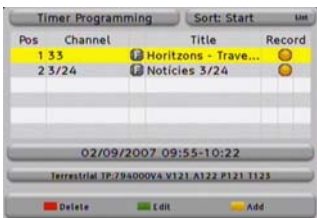
Calculator, Calendar with date management.

**Installation**



Receiver and antenna settings  
Search channels  
Frequency manager  
Backup

**Timers**



Administration for recordings, manual activation for timer events.

**System Settings**



Main settings for receiver for OSD and adapt TV set  
Factory default  
Software upgrade



## Chapter 2 Standard Functions

### 2.0 Switch on the receiver

The receiver has a main switch at the back panel. To switch on, take the switch in position **1**. Now the receiver begins to run and show information on its display.

### 2.1 StandBy

To switch the receiver from Standby (sleep mode) to the working mode, press **Orange** Power button on the left corner at the top of the remote control.

If the receiver had been working before and you did not switch on by main switch, the receiver show the last displayed channel.

When you press it again, the receiver goes back to the stand by mode.

### 2.2 Teletexto

The button **Text** opens the teletext generator.

Automatically the receiver loads page 100 as standard.

Like in your TV set you can open the pages by pressing the buttons **0-9**.

If you want to open, for example, the page 140, you have to press the buttons **1 – 4 – 0**.

When you want close the page, press **Exit**.



### 2.3 MUTE

With this function, you will be able to shut down the audio completely.

To do it, press the button **Mute** and the warning symbol will be displayed.

By pressing again the button **Mute** the function will be disabled.



### 2.4. Numeric block on remote control

In regards to the numeric block in the remote control, you can select directly the channels when you know the stored program place.

If you want for example place 23, you have to press the buttons 2 and 3 and after the button **OK**.

### 2.5. Switch channels

With the buttons **CH+ / CH-** or   you can change the channels also.

Press one button for getting one channel up or down.

### 2.6. Change between TV- and Radio channels

When you want change between TV and Radio channels, you have to press the button **TV/R** on the remote control.

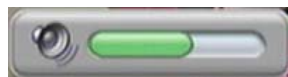
### 2.7. Vol+/Vol- Volume

With the buttons **Vol+ / Vol-** or   you can regulate the audio volume.

To do it, you will see a graphic like the one at the left side.

For using this function properly, you need to make an alignment with you TV set.

Turn off the volume of the receiver. For this, press the button **MUTE** on remote control. Now turn up the volume on TV until the moment you hear a noise. Now turn down the volume until the noise disappears. Normally this is around 50-75% of the total volume of the TV set.



## 2.8. Stop the functions

With the **Exit** button you can stop functions like channels search or close menus.

## 2.9. Open Main menu

To open the main menu, you have to press the button **MENU**.  
The menu system is made in a tree structure.

## 2.10. Watch the last viewed channel

With the **Back** button, you can access to the channel viewed previously.

## 2.11. Channel list

When all the menus are closed, you can open a channel list by pressing the button **OK**.

With the button **TV/R** you can switch between TV and Radio channels.

With the button **FAV** you can sort this list as follows:

**POS**, Position in channel list

**Name**, by alphabetic sort

**FTA / CAS** sort by free or coded channels

If the position or the name of the channel fits, you can carry out a searching. Press the **Green** button to select the searching mode until the symbol (...) appears in the row *Pos* or *Name*, and introduce the characters with the alphanumeric keyboard.

The handling of the keyboard is like in a mobile phone.

When you press one button several times you will have different results.





Example: If you press button 2: a, b, c and 2

You will get a channel list with the information requested.



## 2.12. EPG Electronic Program Guide

By pressing the button **EPG** you will start the electronic program guide. The receiver gets the information of the tuned channel. The information only will be available in case the broadcaster transmits it.

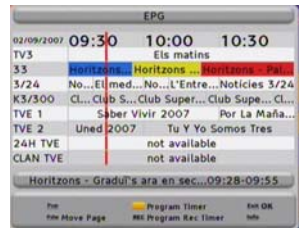
With the buttons   you can select a channel and with   one event. The **Blue** colour field highlights the current selected event and the **Red** line shows the current time.

With the **Yellow** button you can mark one event. The receiver will switch to this channel once the event has begun. If you select an event which has already started, the receiver switches to this channel immediately.

Using the **REC** button (over and event) the receiver will record this event into the internal hard disk.



Pressing the button **INFO** you will get more detailed information about the event.

With the arrow buttons   you can move along the text.



### 2.13. Favourite channel list

If no menu is opened, you can get your favourite channels list by pressing the button **FAV**.

With the buttons **Pup / Pdw** you can switch between 8 different lists, if you have marked channels before. With the buttons   you can select a channel from this list.



### 2.14. Menu Audio

If all menus are closed you can open the menu **Audio** by pressing the **Audio** button.

You can change here the audio output in **Stereo**, **Left** and **Right** audio format..

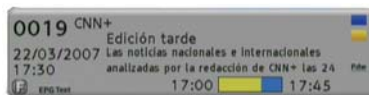
Testing the channels, you will be able to make the most suitable selection. Standard selection is **Stereo**.



### 2.15. Signal and Channel information

Pressing the INFO button, with no menu activated, you will see the channel information and the Signal Level Bar. information is the same that appears when you change the channels.

In the signal bar we can see the following information: Channel Number, Channel Name, current Time and Date, Name of the current event and brief description given by EPG. Start and Stop time of the event and the indication of the current time from the beginning in yellow color.



This menu disposes of 2 keys of advanced functions. Blue and Yellow keys. Through Blue key, you can get the technical information of the shown channel at the top part of the window, as you can see in the image:

Yellow key allows seeing which will be the next event indicated by EPG, with its start and stop times.



### 2.16. Changing favourite channels

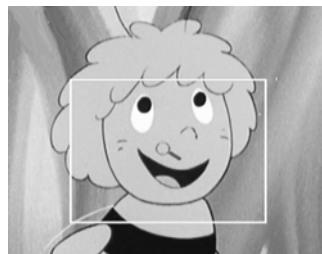
With the buttons **FAV+** and **FAV-** you can switch the favourite channels directly.

The Sequence for the channels is the established one before in main channel list.

### 2.17. Zoom Function

With the **Zoom** button you can see more details of the image.

By pressing the button **OK** you can select the enlargement. If you want to stop, please press **Exit**



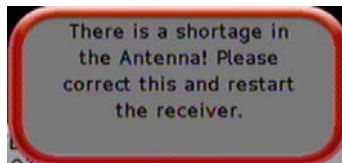
### 2.18. Subtitles

When no menu is opened, you can start with **Sub** button the subtitle function. Subtitles only can be displayed when the operator transmit them.

### 2.19. Short-circuit protection

If you see one message like this, you have a short circuit or to high power in the antenna system.

In this case switch off the receiver and check the system.  
The displayed information stops automatically when the problem is solved.



### 2.20. Fast record

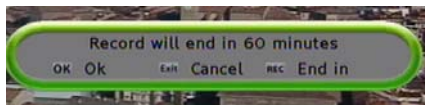
If you want to record one event immediately you must press only the button **REC** on the remote control. You will see the event as usually and you will see a red point for a while in screen.

If you press **REC** more that one time, you can select how long the record will be.

Selection: 30min, 60min, 90min, 120min, 180min, 240min

If you press only one time the record time will be according your selection, which will be done in:

**Menu > System Settings > Recording settings**



### 2.21. Time Shift

If you want to use time shift function to stop one event, you only need to press only the button ►|| one remote control.

The program stops and it will be stored on the hard disk until you restart to watch it. The OSD shows you the information about the time delay from the original event.

When you want continue you only press again ►||.

As the information you see now comes from the hard disk, you can also use forward and backward functions.

If you press several times ►► you can adjust the speed for forward.

Selection: 2x, 4x, 8x speed .

You also have the option 5m, in this case the receiver moves in 5 minutes steps.

Through INFO Key, you can see the time difference between you playback and the realtime, in an horizontal bar which appears in the top part of the picture.

The maximum time that the equipment allows recording meanwhile it is paused is for 4 hours.







The red bar is the recorded time, the yellow bar is the played time, the rest of time is the time in Time Shifting mode.

When you exit of the Time Shifting mode, the receiver will give you the option of storing the Time Shifting in the Hard Disk like a recording. Press **OK** to save the recording.



## Chapter 3 Channel Management

### 3.1. TV-Channel list

Here you will find an overview about all channels. Channels can be administrated, moved, deleted or blocked. The navigation is with the buttons   and  .

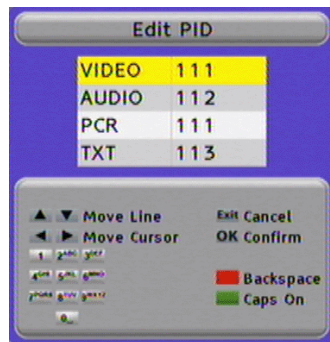
With the button **TV/R** you will switch between TV and Radio channels.

With the button **LIST** you can sort this list as follows:

**POS**, Position in channel list

**NAME**, alphabetically

**FTA / CAS** sort by free or coded channels





To see the PID information, you have to press the button **TEXT**.

This information will be read by the receiver automatically and it gives the information where the program is in the data stream.

It is not necessary to change it, but it can be done by the numeric keys of the remote control.



#### 3.1.1 Skip channels



With this function it is possible to skip selected with the buttons **CH+** / **CH-** or  .

If you want mark channels for skipping, you have to select the channel and then press the **Blue** Button **Skip**. Doing this, you will see that the channel has a symbol like the one at the right side. Marked channels only will be opened by channel list.



#### 3.1.2 Lock channels

If you want to lock channels with a password needed for opening them, you can do it with this function.

If you want to mark channels, please select the channel by   buttons and then press the **Yellow** button **Lock**.

Doing this, you will see that the channel now has a symbol like the one at the right side.

In order the function works properly, you have to activate the password function in menu **Parental Control**.



#### 3.1.3 Delete channels

If you want to delete one channel, you have to select it and then press the **Red** button **Delete**.

Doing this, you see now one symbol like one the right side.

You can mark more than one channel, the channels will be deleted when you close the **Channel Management**.

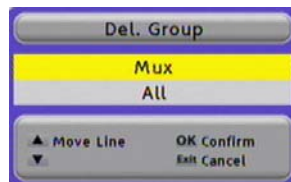


### 3.1.4 Delete channel groups or all channels

If you want to delete a channel group or all channels, you have to select them and then press the **Green** button **Del. Group**.

In the following submenu you should choose all channels from one **MUX** or **All** channels.

With the **OK** button the selection will be done



### 3.1.5 Edit channels

If you want to move channels in their position in channel list or you want to change their name, you can do it in the submenu **Edit Channel**.

To do it, press the button **INFO**.

In the line **POS** you can change the placement in channel list. In **Operation**, you can select the mode of changing the position of the channel. You can choose between Move (it will shift the rest of channels) and Exchange (it will exchange the position between 2 channels).

In the line **Name** you can modify the actual name of this channel.

The keyboard handling is like in a mobile phone.

When you press one button several times you will have different results.

Example: If you press button 2: a, b, c and 2

With the arrow buttons you can move the cursor in its position.

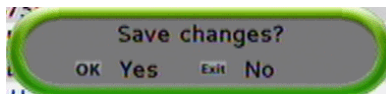
In this menu, the **Green** button change between normal and capital letters and the **RED** button delete the letters.

With the **OK** button the selection will be done.



The receiver stores the changes when you leave the menu.

Please confirm by selecting with **OK** the message.



### 3.1.6 List of favourite channels

With the buttons **1** to **8** from the numeric block you can select channels of the favourite channel list 1 to 8.

At the column **Favourite** of the Channel List, you will see which Favourite list each channel is from.

If you want to give to a favourite channel list an own name, you can do it by pressing the button **FAV**.

With the buttons **▲** **▼** you have to select one list.

In the line you can move the cursor with the buttons **◀** **▶**.

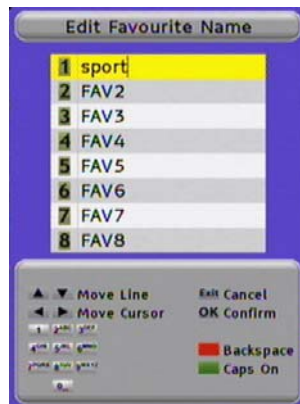
The **RED** button delete letters and the **Green** button change between normal and capital letters.

The keyboard handling is like in a mobile phone.

When you press one button several times you will have different results.

Example: If you press button 2: a, b, c and 2

With the **OK** button the selection will be done.



## Chapter 4 PVR Management

The PVR Management is similar to a file viewer.

### Internal or external data devices

With the button **TV/R** you can select between the internal hard disk or another one at the USB 2.0 HighSpeed connected external device.



### 4.1. Play record

If you want play one record, you can do it by pressing the button **OK**.

### 4.2. Lock record

With this function it is possible to lock one record and you need to give the password before playing it.

If you want to mark a record for lock, please select the file and then press the **Yellow** button **Lock**.

Behind this channel you will see now a symbol like the one at the right side.

In order to the function works properly, you have to activate the password function in menu **Parental Control**.



### 4.3. Delete record

If you want to delete a recorded file, select it and press the **Red (Delete)** button.

Doing this, it will appear a menu requesting for confirmation to delete, press **OK** to delete or **Exit** to exit without deleting.

### 4.4. Movies, MP3, Photos

The file list contains the different file formats that can be played. You can differentiate them with the icon placed at the left side of the file number.

You can select between:

**Pictures** in JPEG or PNG format

**Music** in MP3 format

**Movies** in JPEG, PNG format







#### 4.5. Sorting

In order to have a better view, you can sort the files.

Please press the button **LIST**.

With   buttons you can select the following options:

- Sort A to Z:** Sort the files related to the first letter of the name in A,B,C....
- Sort Date:** Sort the files related to the file date.
- Sort Size:** Sort the files related to the file size.
- Sort None:** No sorting



#### 4.6. HDD Management

In the HDD management submenu you can see the capacity of the hard disk. You also see the free space available.

To open this menu, you have to press the button **PVR**.

The indicated HDD capacity is lower than the one the manufacture writes.

This is due to the manufacturers often counts as follows.

1 GB = 1.000.000 bytes

More correctly is 1GB = 1.024.000 bytes.

The result for this is that a 160GB HDD indicated by the manufacturer the storage have real 148GB. This receiver shows you the real space.



If you want to delete the hard disk totally, you can do it with the **Yellow** Button **Format** and the hard disk will be completely erased.



**Caution: This process will delete also saves you have made with Backup tools.**

##### 4.6.1 Folder management

To keep sorted your HDD, you can create own folders.

To do it, open the folder management by pressing the button **Text (copy)** and then press the **Yellow (Add)** button to create a new folder.

In one folder you can create again other folders.

The navigation inside the folder management is made with the buttons  .



##### 4.6.2 Delete folder

If you want to delete one folder with all included files, you can do it with the **Red** button **Delete**.

Doing this, it will appear requesting for confirmation to delete, press **OK** to delete or **EXIT** to exit without deleting.

##### 4.6.3 Lock folder

With this function it is possible to lock one folder, you will need to give the password before playing.

If you want to mark a folder for locking, please select the file and then press the **Yellow** button **Lock**.

Behind this folder you see now a symbol like the one at the right side.

In order to this function works properly, you have to activate the password function in menu **Parental Control**.





#### 4.6.4 Add folder

In the menu of Record Management, push the **Text (Copy)** button and you will enter in a submenu.

With the **Yellow (Add)** button, you can add a new subfolder.

The keyboard handling is like in a mobile phone.

When you press one button several times you will have different results.

Example: If you press button 2: a, b, c and 2

With the arrow buttons you can move the cursor in its position.

In this menu, the **Green** button change between normal and capital letters and

the **RED** button delete letters.

With the **OK** button the folder will be created.



#### 4.6.5 Move file

If you want to move one file to another folder, you can do it as follows:

If it is not opened, please open the **PVR Management** by pressing the button **PVR**.

Press now the button **TEXT** to open the folder management.

It will appear two columns with the same files. The left column is the file origin which will be copied or moved, the right column is the destination where the file will be copied or moved.



Though the **PVR** key, you can change the order of the file, for passing to that the origin will be the USB device. In the same way, the **TV/R** key modifies the destination device, in order to select the USB or the internal HDD.

You can select the folder by pressing OK when it has been selected. To change the window where the selections are being done, use the GREEN key and you will see the yellow highlighted to the other window.

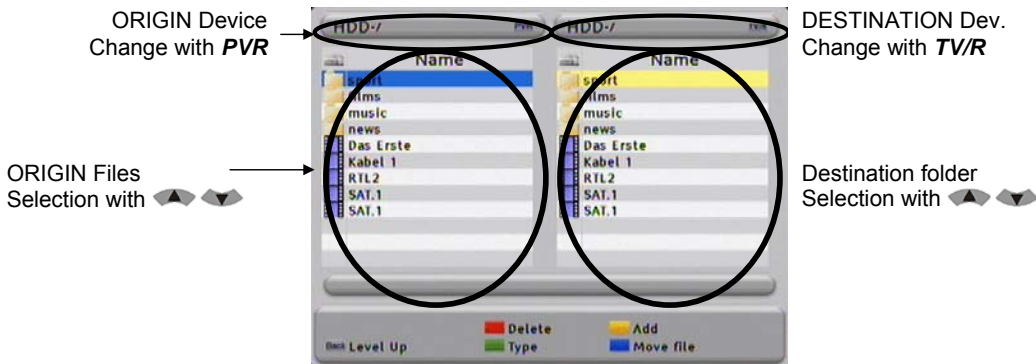


Once selected the file to copy in the left column and the destination where it will be copied in the right one, press the BLUE key to proceed to the copy or movement of the file. You should have selected the origin file in yellow, in the left column.

The receiver stores all the events in the folder **PVR**.

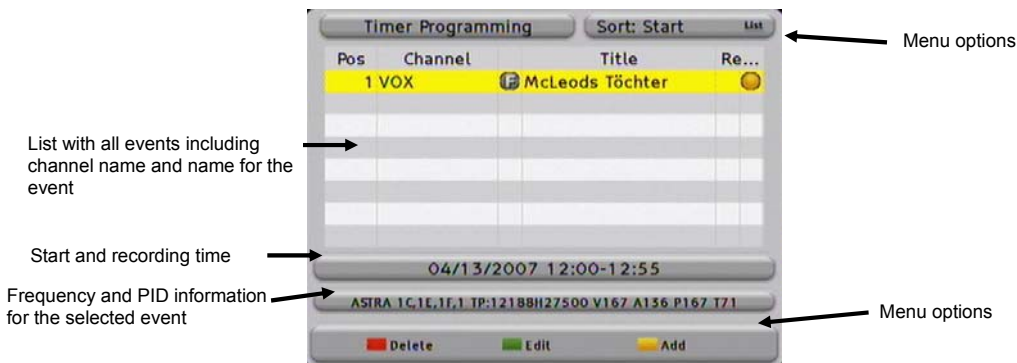
Please select with the buttons **▶▶** and **◀◀** the folder where the file is stored currently and press the **OK** button.

The equipment copies when the origin and the destination have different devices, it means, from Hard Disk to external USB. However, the equipment moves files when the origin and destination are in the same device.



## Chapter 5 Timers

In menu **Timers** you get one overview about all events which you have stored. These events can be store over EPG or direct in this menu.



### 5.1. Sorting

For having a better view, you can sort the events. Please press for this the button **LIST**.

With buttons you can select the follow options:

- Sort Channel:** Sort the list related to the first letter of the program name in A,B,C....
- Sort Name:** Sort the events related to the name of event in A,B,C....
- Sort Start:** Sort the files related to the start time.
- Sort Pos:** Sort the files by date of creation.



### 5.2. Delete Timer

With the **Red** button **Delete** you can delete events.

With buttons you can select one event and then press the **Red** button **Delete**, then confirm the following message.

### 5.3. Edit / Add timer

With the **Green** button **Edit** you can modify one event, This can be useful, when you want to record one event and you do not know exactly its starting or ending time.

With the **Yellow** button **Add** you can add manual one event. The using of **Add** and **Edit** is the same.

#### Channel



Here you can change the channel which will be recorded.

Press the button and select in the new menu the channel you want by the buttons and press **OK**.



## Title



You can modify an existing title or create a new one.

If you want to change it, select this line by   buttons.

The keyboard handling is like in a mobile phone.

When you press one button several times you will have different results.

Example: If you press button 2: a, b, c and 2

With the arrow buttons   you can move the cursor in its position.

In this menu, the **Green** button changes between normal and capital letters and *the RED* button deletes letters.





## Start / Stop

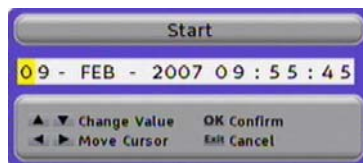
If you want to start and stop times, select this line

by   buttons.

Press now  and select with   the entry you want to change.



The entry will be modified by the buttons  .

When you have finished, press **OK**.



## Repeat

The standard value is **1x**, for one time recording.

With the buttons   you can choose the following options also.

**2x - 6x**

This repeats the recording next day, at same time, same channel.

**T**

This repeat the recording every day at same time, same channel.

**W**

This repeat the recording every week at same time, same channel.

**Monday – Friday**

It will repeat the recording since Monday to Friday in the same channel and at the same time.

## Record

Here you can select if you want to store this event to the internal hard disk, in an external device, or not.

If you select **no**, you can store one event through one DVD-Recorder over the connector **VCR Scart**.

Selection: **yes – internal, yes- external** or **no**

## Chapter 6 Tools

In this menu you can find two little helper tools.  
The calculator is useful for fast calculations and with the calendar you can mark dates for special events like birthdays.

### 6.1. Calculator

The using of the calculator is very easy.  
With numeric block remote control, input the numbers.  
For the calculations you use the colour buttons.

**Red** Button    Addition  
**Green** Button    Subtraction  
**Yellow** Button    Multiplication  
**Blue** Button    Division

The button **OK** is used for = function.  
With the buttons ◀ you restore the calculator.

### 6.2. Calendar

If you open the calendar, the yellow marked field shows the current date.  
This will be shown in the line under the calendar.

With the buttons **Fav-** and **Fav+** you can switch between the months.  
With the buttons **Pup** and **Pdown** you can change the year.  
In the first column it is marked the number of week in the year and one blue marked field shows a stored event.

You can select the individual dates with the buttons ◀ ▶ and ▲ ▼.

#### Add one event (Anniversary)

If you want to add an event, select the date and press the **Yellow** button **Add Anniversary**.

You can type the name for the event like in a mobile phone.  
When you press one button several times you will have different results.  
Example: If you press button 2: a, b, c and 2

With the arrow buttons ◀ ▶ you can move the cursor in its position.  
In this menu, the **Green** button changes between normal and capital letters and the **RED** button deletes letters.

If you select later a blue marked field you will see the name info the field.

#### Delete one event

If you want to delete an event, you have to select it and then press the **Red** button **delete Anniversary**.

#### Change Alarm

Pushing the **Green** button, you can add an alarm to the event, you will see that this symbol (\*) appears close to the date. A visual alarm will appear in the screen the day of the event.



## Chapter 7 System Settings

In the menu **System Settings** you will find all basic adjustments of the Receiver.



### 7.1. Menu Language

Here you can choose the language which will be shown in the receiver. You can select:

English, German, French, Spanish, Italian, Portuguese

Please select with the buttons   and then press **OK**.



### 7.2. Audio Language

Here you can choose the audio language for the TV and Radio channels.

Example:

If you select English and the channel you want to see have one audio carrier in English, you will get the audio in English.

If there is no audio carrier in English, you will get the first one which is supported in this channel, for example German.

You can select:

English, German, French, Spanish, Italian, Portuguese

Please select with the buttons   and then press **OK**.



### 7.3. Time Zone

In order to the receiver shows the correct time as well as adjusting the records properly, it is needed the adjustment of the Time Zone where you live.

For UK: Summer time: +1 hour  
Winter time: GMT hour

Please select with the buttons   and then press **OK**.





## 7.4. TV Settings

Here you can adapt your receiver to your TV set and you can select the screen format.

### TV-System



Select here which TV system your TV set support.

Selection: **NTSC**, **PAL**, **Secam** and **AUTO**

Please change with the buttons  .



### TV-Format

Select here which TV format your TV set has available.

Selection: **4:3**, **16:9** and **AUTO**, please change it with the buttons  .

### RF Mode



If you connect your TV or Video set with one IEC coaxial connection at the output **TO TV**, you will need to select which system is supported by this device.

Options: **PAL M**, **B/G**, **I**, **D/K** or **NTSC**, please change them with the buttons  .

### RF Channel



Here you can select which channel the modulator has to use.

This is **only** needed if you connect your receiver with the IEC coaxial connection at the output **TO TV** to your TV set.

Selection: Channel **21** to **69**, please change with the buttons  .

### Picture Format

This option is only available when you have not selected **TV format** in mode **AUTO**.


Options: **Pan&Scan** or **Letter Box**, please change with the buttons  .

In this option you can choose how the pictures in films with a big format will be adapted to your TV set.

If you select **Pan&Scan** you will see one part of the film and at the left and right sides it will be cut In **Letter Box**, the picture will become smaller and you will see on top and bottom two black bars.

### TV output

This option allows choosing how the receiver will send the colours to the TV set.

Selection: **CVBS**, **RGB**, **SVIDEO** or **YUV**, please change with the buttons  .

### Loop VCR

Here you select the priority of an external video signal.

If you have selected **Slave**, the receiver shows every time the signal coming from the VCR Scart connector, when there is signal available. It also can be a signal from DVD player or recorder.

If you have select **Master**, the signal from receiver has priority and you will see only the signal from connector VCR scart when the receiver is in Standby mode.

**INFO:** This receiver has a special LPC mode for saving current. If you select **Slave** the LPC mode will be disabled.

Selection: **Master** or **Slave**, please change with the buttons  .

### LPC Mode

This receiver has a special LPC mode for saving current. This reduces the consumption in Standby mode.

Please check your settings in menu **Loop VCR**. In the LPC mode, the antenna signal keeps cut at the output **TO TV**, so if you use the antenna signal to watch the TV through the receiver, you should disable it.



Selection: **ON** or **Off**, please change it with the buttons  .

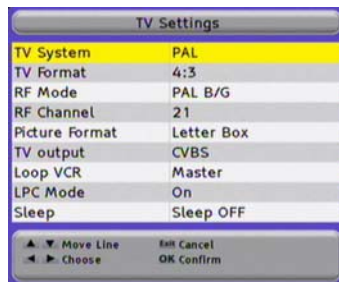
The LPC function has 2 consequences. The first one is the time it delays to switch from Stand By to working mode, and the second one is that in this mode, the signals which has to pass through the tuners or the modulator are attenuated because off the unfeeding from the main board. If whatever of these 2 effects are disturbing you during the use of your PVR, just disable this function.

### Sleep

If you want shut down the receiver automatically, you can choose here the time for the sleep timer.

Selection: **15**, **30**, **45**, **60**, **75**, **90**, **105**, **120** or **Sleep Off**

Please change it with the buttons  .



## 7.5. Recording Settings


### Impulsive Recording Limit

Select here how much time do you want to record when you activate the function Fast Recording.

Selection: **1, 2 or 4 hours**

### HDD Manager

With this menu you can open the HDD manager, which is described on chapter 4.6.

For opening, press button .

### USB

In this menu you will see the total space and the free space of your USB device. You also can format this device.

### Margin REC EPG (Before)

Here you can indicate if you want that the recording begins before the starting time of the EPG. You can select among 0, 5, 10, 15 or 30 minutes.

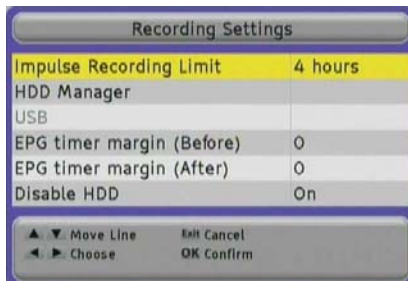
### Margin REC EPG (After)

Here you can indicate if you want that the recording ends after the ending time of the EPG. You can select among 0, 5, 10, 15 or 30 minutes.

### Disable HDD

Selecting On, the Hard Disk will switch off when nobody is accessing to it, saving energy.

Selecting Off, the Hard Disk will be always powered on.



## 7.6. OSD Settings

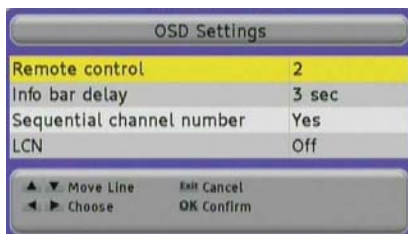
### Remote control

Here you can change the transmission code for the remote control if you have problems with other devices.

Please change it with the buttons .

For saving the changes, please press **OK**.

Do not forget to change also the code on the remote control.



For this, press the button **CODE** on your remote control until the correct LED is lighting.

### Info bar delay

Here you can select how long the information of the OSD will be displayed on the screen.

Selection: **1 to 10 sec.**

Please change it with the buttons .

### Number of Sequential Channel

Selecting **Yes** in this option, the positions of the channels will be occupied continuously and sequentially. Although you move the position of one channel, you will shift the positions to avoid leaving empty channels.

Selecting **No**, you can leave empty channels if we shift the position of one channel.

### LCN

With this option you can select, how the receiver have to sort the channels after a new search.

Please check if LCN is supported in your country.

Selection: **ON or Off**, please change it with the buttons .





### 7.7. Version

Here you get information about the hard and software from your receiver.

<b>Manufacture</b>	Manufacture of the receiver.
<b>Model</b>	Exact article name.
<b>Hardware</b>	Revisions number from main PCB
<b>Loader</b>	Version for boot loader
<b>Software</b>	Version for installed software
<b>FP</b>	Version for VFD display
<b>Software</b>	Beginning of the warranty time
<b>CRC</b>	Checksum of the EEprom

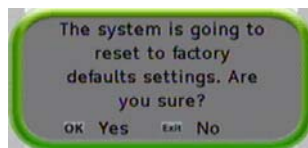


### 7.8. Factory Default

With this option you can restore the receiver totally to the status when the receiver was used the first time.

Caution: Make this only if you are 100% sure, this step can be irreversible.

Recordings on the internal hard disk will not be damaged due to this action.



### 7.9. Software Upgrade

With this menu you can transfer data and install new software.

With the buttons you can choose between the following possibilities.






- Serial port (Download)** Start data download via RS-232 connection.
- Serial port (Upload-ALL)** Send all stored channels and main software to other receivers by using RS-232 connection.
- Serial port (Upload-Backup)** Send the backup file (receiver database) and software to other receivers by using RS-232 connection.  
For this, the receiving receiver must have been executed a factory default before.
- Serial port (Upload-UserDB)** Send all stored channels to other receivers by using RS-232 connection.
- Serial port (Upload-APP)** Send the receiver software to other receivers by using RS-232 connection.
- USB (Download)** Start the data download via USB.  
Caution, on USB Stick can be only one receiver file.  
**Upload-ALL** or **Upload Backup** create two files.  
**usbupdate\_userdb\_V1\_0\_27.bin** Database  
**usbupdate\_V1\_0\_27.bin** Software  
Both can be used but one must be delete manually on PC.
- USB (Upload-ALL)** Send all the stored channels and main software to USB-Stick.  
This create two files.
- USB (Upload-Backup)** Send the backup file (receiver database) and software to USB-Stick.  
This create two files.
- USB (Upload-UserDB)** Send all stored channels to USB-Stick.
- USB (Upload-APP)** Send the receiver software to USB-Stick.



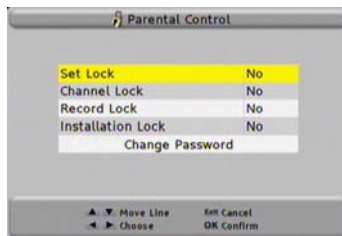
## Chapter 8 Parental Control

With this menu, you can activate the parental control where is necessary to give one password before opening channels or making settings.

### 8.1. Set Lock

To activate the parental control, select with   button **Set Lock** and then press .




You have to give the standard code **0000** or your individual one with the numeric block from the remote control. Then press **OK** button.



### 8.2. Channel lock

Here you can activate the parental control for channels if you have marked it in




#### Channel Management for Lock.

For this, select with the buttons   the line **Channel Lock** and then press .

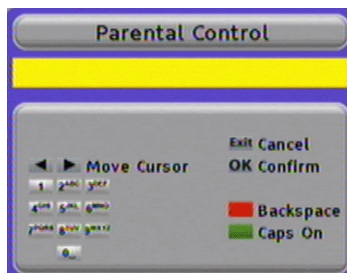
You have to give the standard code **0000** or your individual one with the numeric block from remote control. Then press **OK** button.

### 8.3. Record Lock

Here you activate the parental control for recording events.

For this, select with the buttons   the line **Record Lock** and then press .

You have to give the standard code **0000** or your individual one with the numeric block from remote control. Then press **OK** button.



### 8.4. Installation Lock

Here you can activate the parental control for the menu **Parental control, System Settings and Installation.**

For this, select with the buttons   the line **Installation Lock** and then press .

You have to give the standard code **0000** or your individual one with the numeric block from remote control. Then press **OK** button.

### 8.5. Change Password

When you want to change the standard password, select for this with the buttons   **Change Password** and press **OK** button.

**Old Password**

**New Password**

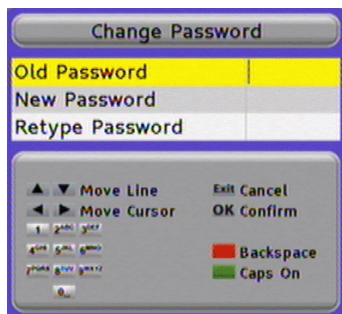
**Retype Password**

Input here the actual password

Input here the new password you want.

Password must have 4 digits.

Retype here the new password and press **OK** button.



If you loose in any time the standard or your individual password you can unlock it with master password **5100**.

## Chapter 9 Installation

In this menu, you can make the complete installation of the channels, configuring the antennas, Transponders, importing channel lists or making backup copies (**backup**).

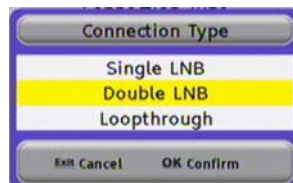


### 9.1. Connection Type

In this menu, you can configure the inputs to be viewed.

**One LNB:** In this case, you only will have channels in one tuner. This option has some limitations in how works the PVR:

- Recording: During the recording process of one channel, you only will be able to select channels which are located in the same transponder, it is, a limited number of channels will be available to be viewed.
- PiP: When this function is being executed, the active channel becomes the small window and in the main window you only can see the channels of the active transponder of the small window.



**Two LNB:** In this case, you will dispose of two active inputs. You should take in account the following indications, based in how these signals are:

- Both input signals are the same, it is, in both cables there are the same available signal. This option is very usual when it is being used Twin LNB. ***This is the most recommended installation.*** In these cases, there is no limitation in how the PVR works.
- Both signals come from different satellites. In this case, the system is limited during the recording or PiP functions, in a similar way to the example with one input, but in this case, when a channel is being recorded it is possible to see the channels which are in the same transponder or all the channels located in the other input.

**Loopthrough:** In this case it is an extension of the one input option. In this situation, you connect one bridge between the **IF OUT 1** output and the **IF IN 2** input. This bridge allows the signal which arrives to tuner 1, arriving also to tuner 2. It is important to know that the satellite signals vary depending the voltage and tone supplied from the receiver, in this way different reception bands can be selected. When this option is enabled, the available signals in both inputs are in the same satellite band, so during the recording and PiP functions, the availability of viewing channels is reduced to the same transponder channels which are being viewed or whatever channels located in the same satellite band which is being viewed.

Select with buttons   the **Type of Connection** row and push **OK**.

## 9.2. Antenna Configuration

In this menu you should configure the signals that are connected at the inputs IF IN of your PVR.

By default, the equipment comes with the configuration that you can see in the Picture with four satellites.


The available options in this screen allow:

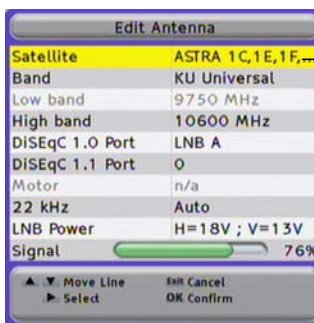
**Red** button: Deletes the selected satellite. It requests for confirmation.

**Green** button: Edits the selected satellite. The option appears in the following image.

**Yellow** button: Adds a satellite. The options appear in the below image.

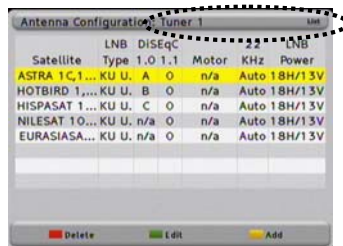
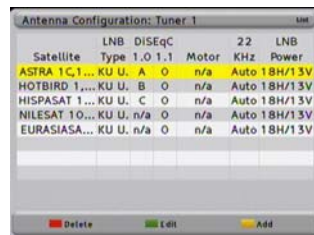
Antenna Options:

- Name: Your PVR is provided with several satellites pre-stored. You can find the one you want in the list or to add a new one. They are sorted by its orbital position. With the key  you can access to the available satellite list.
- Band: There are two available bands: C and Ku. The difference is basically the transmission frequency. The Ku band has two possibilities, the most common is the universal Ku.
- Low Band / High Band: It is used when the band selection is Ku one, and it programmes the Local Oscillators of the LNC.
- DiSEqC 1.0 / 1.1 Ports: To configure the use of antenna switch. These switches allow the reception of different satellites in a single input.
- Motor: Enables the function of using a motor to direct the antenna.
- 22 KHz: Tone to switch the band of the LNC.
- LNB Power: Feeding to the LNB. By default the selection is the one for an universal LNB.
- Signal: It shows if there is an available signal in the selected configuration.



**LIST** button: It changes the selection of the antenna to input 2. This function is only possible when it has been selected previously that there are two LNB available. In case of selecting 1 or LOOPTHROUGH, the second input is not available. The system to select the satellites to the input 2 is exactly the same to the input 1, using the **Yellow** button to add satellites.

Alter whatever change, you should confirm with the OK button when you exit the menu.



### 9.3. Channel Search

Once the antenna configuration is completed, you should proceed to tune the channels from the selected satellites. There are different ways to tune the channels: through LNB, through Satellites and through Transponders.

#### Searching channels through LNB:

When you select to search channels through LNB, you only can select one LNB, which corresponds to the programmed tuner, so if you have more than one LNB installed and configured, you should proceed with one and then the other to tune all the received channels. Close to the LNC that you have selected, you will see where it will be carried out the tuning.



#### Searching channels through Satellite:

When you search through satellite, you will have several satellite selections, so you can programme the searching of all the satellites that you have configured and in one single process you will find all the channels.

To select the satellites, use the **Green** key, to change the sort of the satellite list, use the **LIST** key, confirm your multiple selection by pressing **OK** key.



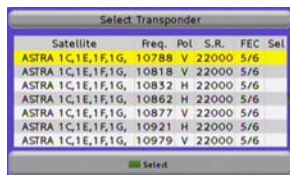
#### Searching channels through Transponder:

Searching through Transponders is the most selective of all the options. It allows you selecting the frequencies that you are going to tune and search channels. By default your equipment shows All the transponders and with the **Green** key you can change this option and make a selection of the transponders that you want to tune. The selection is made with the **Green** button and it is validated the multiple selection with the **OK** key.



In case of adding some new transponder (see point 9.5 transponders management) you should tune it in this mode.

In whatever selection, you always will have available to find **Free To Air** (Free channels), channels with **Conditional Access**, or **All** the channels.



Begin searching pressing the **Green** button. Once the searching process is finished (the time will depend on the number of transponders to be found), you will get a window as the following one:

TV Channels detected

Radio Channels detected

Searching process



Level and Quality meter

You can stop the channel searching whenever you want pressing the **Exit** key.

Once the search is finished, you should confirm the storage of the new channel list. Press the **OK** button.

The receiver will come back to the Channel Searching menu.

You can search again if you want, or exit the menu with the **Exit** key.

#### 9.4. Satellite Management

Your receiver are provided with a very important pre-stored satellite list, if in addition you want to add some one more or to change the parameters of some channels, these functions are made through this menu. The available options are:

##### Delete Satellites

If you want to delete one satellite, you can do it with the **Red (Delete)** key. Doing this, the receiver is requesting you the deleting confirmation, with the OK button you will erase the satellite, with the Exit button you will cancel.



Angle	Name	Band	X.X	
3.0°	E TELECOM 2A	KU	n/a	
5.0°	E SIRIUS 2,3	KU	n/a	
7.0°	E EUTELSAT W3A	KU	n/a	
10.0°	E EUTELSAT W1	KU	n/a	
13.0°	E HOTBIRD 1,2,3,4,6	KU	n/a	
16.0°	E EUTELSAT W2	KU	n/a	
19.2°	E ASTRA 1C,1E,1F,1G	KU	n/a	
21.0°	E AFRISTAR	KU/C	n/a	
21.5°	E EUTELSAT W6	KU	n/a	
23.0°	E ASTRA 1D	KU	n/a	

Buttons: Delete (Red), Edit (Green), Add (Yellow), Skip (Blue)

##### Edit satellites

With the **Green (Edit)** button, you can modify the parameters of one satellite. The editable parameters with its orbital position in degrees and direction, the name as well as the transmission band (C, Ku or both).

Select with the buttons   the row and with   the values, and press **OK** to confirm.

To edit the name of the satellite, the handling of the keyboard is the same than the one of a cellular telephone: pressing one button some times, you will choose the wished letter. Example: if you push the key 2: a, b, c and 2 will be shown. With the arrow buttons you can place the cursor in the wanted button. In this menu, the Green key changes between capital and normal letters, with the Red key, it erases the last character.



Angle: 3.0°  
 Direction: East  
 Name: TELECOM 2A  
 Band: KU

Buttons: Move Line (Up/Down arrows), Select (Right arrow), Cancel (Red), Confirm (Green)

##### Add satellites

With the **Yellow (Add)** button, you can add a satellite. The process is exactly the same than the before one, with the difference that the menu does not have data.

##### Skip Satellite

With this function it is possible to skip one satellite in the fast searching channels process.

The marked channels will be not selected where you search channels. Please, ensure that you mark the satellites correctly. It will appear in the right column the icon:



To select the satellites, use the buttons   and  . Press the **Blue (Skip)** button to mark them. You can place marks in more than one satellite.

## 9.5. Transponders Management

In the transponders management, we will have a screen like the following one:

With the **TV/R** they are shown the TP of the C, Ku or both bands.

With the **EPG** they are shown the different pre-stored satellites and when you select whatever of them, it is shown the TP of this satellite.

Frequency	Polarity	Symbol rate	FEC
12509 MHz	Vertical	6284 MS/s	7/8
12510 MHz	Vertical	4224 MS/s	7/8
12518 MHz	Vertical	6284 MS/s	7/8
12525 MHz	Vertical	5632 MS/s	3/4
12527 MHz	Vertical	6284 MS/s	7/8
12528 MHz	Horizontal	6111 MS/s	3/4
12536 MHz	Vertical	6111 MS/s	3/4
12547 MHz	Horizontal	6111 MS/s	3/4
12551 MHz	Vertical	6284 MS/s	7/8

UIT the **LIST** key you can change the sort which with the TP are shown. You can change the sort of the TP List, you can sort them by frequency or by polarity.

Data block of TP where it is shown the satellite frequency of transmission, polarity, symbol rate and FEC. Last two columns are for the selection of erasing and skip.

The options you have right with the list are the following ones:

**Delete Transponder:** The **RED** key allows you to make a multiple selection of transponders to be deleted. When you select a TP, it will appear the icon in its column, when you exit of the menu, you will be requested to confirm the changes.

**Edit Transponder:** This function with the **GREEN** key will allow you to vary the parameters of the transponder. You can change the frequency, polarity, symbol rate and FEC. This last parameter can be changed to AUTO mode in case of unknowing it.

**Add Transponder:** Like in the previous step, the **YELLOW** key, allow adding new TP to the list.

**Skip Transponder:** In this function, with the **BLUE** key, allows that one transponder will be kepted in the list but it will be not tuned.

Whatever change made over the list of transponders will need to be confirmed with OK button when you exit the menu.

## 9.6. SatcoDX Update

SatcoDX is a standard created by TELE-SATELLITE to update and keep updated the list of channels and TP of your receiver. You can find more details in the website: [www.satcodx.com](http://www.satcodx.com)



## 9.7. Backup

In this menu you can save your backups or preferences.

### Load Backup

It loads a backup from the internal memory of the receiver.

### Save Backup


It saves a backup copy in the internal memory of the receiver. It overwrites whatever copy which was stored before.

### Delete Backup

It deletes the backup of the internal memory of the receiver.

### Load configuration

It loads the configuration from your Hard Disk.

Select with the buttons   the line **Load Configuration** and then press **OK**.

In the submenu you can choose the configuration list that you want to load.

### Save configuration

It saves the configuration in the Hard Disk.

You can choose a customized name.

To modify the configuration name, the handling of the keyboard is the same than the one of a cellular telephone: pressing one button some times, you will choose the wished letter. Example: if you push the key 2: a, b, c and 2 will be shown.

With the arrow buttons you can place the cursor in the wanted button. In this menu, the Green key changes between capital and normal letters, with the Red key, it erases the last character.

### Erase configuration

It erases a configuration from the Hard Disk.

Select in the submenu which configuration do you want to delete and press **OK**.







## Chapter 10 Equipment features

### 10.1. Technical Data

The features of the SAT depend only in its hardware and in its electronic.  
The majority of the functions are executed by the software.

#### General

Model	U5101
Reception Range	DVB-S
Memories	8000
OSD Languages	English, German, French, Spanish, Italian, Portuguese
Codes of the remote control	3
HDD Capacity	160GB
Electronic Program Guide (EPG)	Yes
Function (PIP)	Yes
LPC Low Power Consumption	Yes
Time Shift	Yes
Easy Recording Function	Yes
Recording over EPG	Yes
MP3 Music	Yes
Pictures JPEG / PNG	Yes
Decoder teletext embedded	Yes
Memory teletext	800 pages
Data connections	RS232, USB 2.0 HighSpeed

#### VIDEO

Format	MPEG-2 & MPEG-1 compatible
Bit Rate	Max 15Mbps
Output	NTSC/ SECAM / PAL
Screen Format	4:3 / 16:9 / Auto
Resolution	720X480 @ 30fps; 720X576 @ 25fps
Connections	S-VHS, Scart (RGB), YUV or RCA

#### AUDIO

Format	MPEG-2/MPEG-1 layer 1 & 2
Frequency sampling	32 / 44,1 / 48
Connections	RCA, AC3 coaxial, AC3 optical

#### DEMODULATION

Demodulation	QPSK
FEC	All supported by DVB-S
Input data rate	2-45 MS/s

#### SIGNAL INPUT

Frequency Range	950 – 2150 MHz
Input Level	-60dBm -30dBm

#### RF MODULATOR

Band	UHF C21-69
TV Standard	PAL BG / I / DK, NTSC
Output Channels	21~69(PAL), 14~83(NTSC)

#### MISC

Antenna Feeding x2	13/18 VDC – 0/22 Khz 400 mA max
Voltage Input	90~260VAC 50Hz~60Hz
Consumption with HDD working	38,6 VA / 18 ,7 W max.
Consumption in LPC mode	5,3 VA / 1,3 W
Dimensions	360x250x65mm
Weight	2,6 Kg