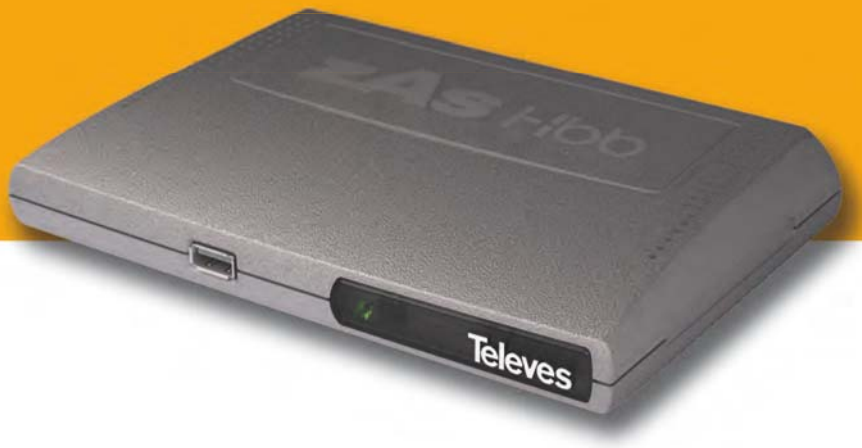
Televes®




# zAs Hbb

Ref. 511501

**HD DTT Set-top Box with TV on demand Access "zAs Hbb"**

**User Manual**

DVB T TERRESTRIAL MPEG HDMI DOLBY DIGITAL PLUS mp3

# Index


1. Precautions ..... 6
2. General information ..... 7
   2. 1. Main characteristics ..... 7
   2. 2. Contents ..... 7
3. Description of connections ..... 8
   3.1. Remote control unit ..... 9
4. Installation of equipment ..... 10
   4.1. Connecting to a TV ..... 10
5. Installation wizard ..... 12
   5. 1. Language selection ..... 12
   5. 2. Menu Positioning ..... 12
   5. 3. Country Selection ..... 12
   5. 4. Region Selection (if the country has several time zones) ..... 12
   5. 5. Terrestrial Scanning ..... 13
6. Basic functions ..... 14
   6. 1. Channel selection ..... 14
   6. 2. Volume control ..... 14
   6. 3. Standby mode ..... 14
   6. 4. Teletext ..... 15
   6. 5. Pop-ups ..... 15
      6. 5. 1. Interactive pop-ups ..... 15
      6. 5. 2. Informational pop-ups ..... 16
7. LiveTV banner ..... 16
   7. 1. Open / close ..... 16
   7. 2. Content ..... 16
   7. 3. Detailed programme information ..... 17
   7. 4. Options ..... 17
8. Timeshifting ..... 18
   8. 1. Switching from Live to TimeShifting ..... 18
   8. 2. TimeShifting banner ..... 19
   8. 3. Trick modes ..... 19
9. Main menu ..... 20
   9. 1. Structure ..... 20
   9. 2. Layout ..... 21
   9. 3. Navigation ..... 22
10. Channels list ..... 22
   10. 1. Channel selection ..... 22
   10. 2. Options ..... 22
11. Electronic programme guide (epg) ..... 23
   11. 1. Events list ..... 23
   11. 2. Detailed programme information ..... 24
   11. 3. Options ..... 24

12. Recording ..... 25
12.1. Start ..... 25
12.1.1. From LiveTV banner ..... 25
12.1.2. From channels list ..... 25
12.1.3. From EPG ..... 26
12.2. End time modification ..... 26
12.2.1. From LiveTV banner ..... 26
12.2.2. From channels list ..... 26
12.2.3. From EPG ..... 26
12.3. Stop ..... 26
12.3.1. From livetv banner ..... 26
12.3.2. From channels list ..... 27
12.3.3. From EPG ..... 27
12.4. "My recordings" menu ..... 27
12.4.1. Manage schedules ..... 27
12.4.2. Manage recordings ..... 29
12.4.3. Add a schedule ..... 29
12.5. Conflicts ..... 30
12.6. Failures management ..... 30
13. Media center ..... 31
13.1. Media selection ..... 31
13.2. Video banner ..... 32
13.2.1. Open / close ..... 32
13.2.2. Content ..... 32
13.2.3. Detailed information ..... 32
13.2.4. Options ..... 32
13.2.5. Preview browsing ..... 33
13.2.6. Trick modes ..... 33
13.2.7. End of playback ..... 34
13.3. Audio banner ..... 34
13.3.1. Open / close ..... 34
13.3.2. Content ..... 34
13.3.3. Detailed information ..... 34
13.3.4. Options ..... 35
13.3.5. Preview browsing ..... 35
13.3.6. Trick modes ..... 35
13.3.7. End of playback ..... 35
13.4. Photo banner ..... 35
13.4.1. Open / close ..... 35
13.4.2. Content ..... 36
13.4.3. Detailed information ..... 36
13.4.4. Options ..... 36
13.4.5. Zoom ..... 36
13.4.6. Preview browsing ..... 37
13.4.7. Trick modes ..... 37
13.4.8. End of playback ..... 37
14. HbbTV content ..... 38
14.1. How to access/exit HbbTV ..... 38
14.2. HbbTV navigation ..... 38

EN

15. Settings ..... 39
15.1. Structure ..... 39
15.2. Favorites lists ..... 40
15.2.1. List selection ..... 40
15.2.2. Add / remove ..... 40
15.2.3. Reorder ..... 41
15.2.4. Re-scanning ..... 41
15.3. Video & audio ..... 42
15.3.1. Screen ratio ..... 42
15.3.2. HDMI resolution ..... 42
15.3.3. Scart video format ..... 42
15.3.4. Picture format ..... 42
15.3.5. Audio output ..... 43
15.4. User preferences ..... 43
15.4.1. Menu language ..... 43
15.4.2. Audio language ..... 43
15.4.3. Subtitle language ..... 44
15.4.4. Interface configuration ..... 45
15.4.5. HbbTV ..... 45
15.4.6. Low power consumption ..... 45
15.5. Storage & recording ..... 46
15.5.1. Storage ..... 46
15.5.2. Start padding ..... 47
15.5.3. End padding ..... 47
15.5.4. Default recording duration ..... 47
15.5.5. Timeshifting ..... 47
15.6. Advanced settings ..... 47
15.6.1. Parental control ..... 48
15.6.2. Network configuration ..... 49
15.6.3. Time zone ..... 49
15.6.4. Channels search ..... 49
15.6.5. Logical channel number ..... 50
15.6.6. Upgrade ..... 50
15.6.7. Factory reset ..... 50
15.7. Technical information ..... 51
15.7.1. Connections state ..... 51
15.7.2. System information ..... 51
15.7.3. Legal notices ..... 51
16. Software ugrade ..... 52
16.1. Through USB ..... 52
16.2. Through IP ..... 52
Appendix A. Operating instructions for Remote Control Unit ..... 53
Appendix B. TV brand codes ..... 55
Appendix C. Brand codes ..... 58
Troubleshooting ..... 60
Technical Characteristics ..... 62

## 1. Precautions

***¡Please read this manual before handling or connecting the equipment!***

We recommend you to read the following safety instructions carefully.

**POWER SUPPLY:**

230V~ / 12V⎓ adapter.

The power supply adapter is the equipment's disconnection device.

The power input base should be near the equipment and be easily accessible.

**OVERLOAD:**

To avoid the possibility of fire or electrical discharge, do not overload power inputs, extensions or adapters.

**LIQUIDS:**

Do not expose the power adapter to water spills or splashes.

Do not place objects or containers filled with liquid on or near the apparatus.

**SMALL OBJECTS:**

Avoid placing the equipment near small metal objects. They could enter through the grooves or connectors on the adapter and cause serious damage.

**CLEANING:**

Unplug the adapter from the mains before cleaning.

Use a soft, damp cloth (without detergent) to clean the outside of the adapter.

**VENTILATION:**

Place the adapter in a well ventilated place with the grooves uncovered.

Avoid exposure to sun, heat sources or flames.

Do not place on top of other equipment.

**CONNECTIONS:**

Only use the recommended connections to avoid damaging the equipment.

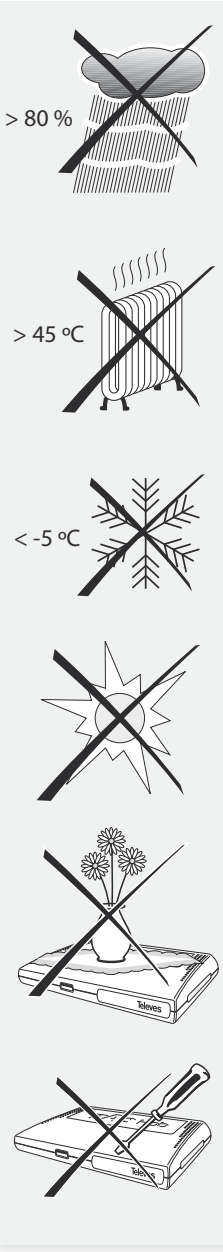
**CONNECTION TO TV:**

Unplug the adapter before connecting or disconnecting it to a TV.

**IF THESE GUIDELINES ARE NOT FOLLOWED, THE TV COULD SUFFER DAMAGE.**

**LOCATION:**

Position the adapter in an inside location protected from overloads, rain or direct sunlight.



## 2. General information

The ZAS Hbb is a hybrid DVB-T and IP, PVR over USB* ready, set-top box.

DVB-T is the international standard for DVB (Digital Video Broadcasting) terrestrial digital television. This standard allows the transmission of multiple television services with an extraordinary sound and image quality.

The reception of these programmes can be carried out simply through an external or internal antenna, an ZAS Hbb adapter and a television set.

In addition, to receive IP programmes, the ZAS Hbb must be connected to the internet.

The ZAS Hbb is also compliant with the new HbbTV standard.

Hybrid Broadcast Broadband TV or "HbbTV" is a major pan-European initiative aimed at providing both broadcast and broadband/web content on a flat panel screen in the living room.

Through the adoption of HbbTV, consumers will be able to access new services from entertainment providers such as broadcasters, online providers and CE manufacturers – including catch-up TV, video on demand (VoD), interactive advertising, personalization, voting, games and social networking as well as programme-related services such as digital text and EPGs.

To receive HbbTV services, the ZAS Hbb must be connected to the internet.

This manual explains to you how to carry out the ZAS Hbb installation and the necessary steps for using its different functions.

### 2.1. Main characteristics

- Free to Air channels (FTA) adapter.
- Compatible with MPEG2 and MPEG4/H.264
- HbbTV 1.1.1 compliant.
- PVR over USB* ready: allows recording directly onto external disk (formatted in FAT32, NTFS or ext3). Recordings can be scheduled and recurrent.
- Advanced reproduction functions (slow and fast forward/rewind, pause, skip, go to).
- USB Timeshifting function (manual or automatic).
- Easy-to-use menu.
- Initial installation is guided.
- Multimedia function compatible with mp2/mp3 for audio files, jpeg/jpg for photos and the following formats for videos:

| Container | Video codec | Audio codec |
|---|---|---|
| AVI (.avi, .divx)[1] | MPEG-2 Part 2<br>H.264/MPEG-4 AVC<br>Xvid (MPEG-4 ASP) | AC-3<br>AAC<br>MPEG audio (1,2,3) |
| MKV (.mkv) | | |
| ISOM (.mp4, .mov, .m4v, m4a, .3gp, .3gp2, .3gpp, .3gpp2). | MPEG-2 Part 2<br>H.264/MPEG-4 AVC | AC-3<br>AAC<br>MPEG audio (1,2,3) |
| MPEG TS (.ts) | | |
| M2TS / M2T (.m2ts, .m2t) | | |
| MPEG PS (.mpg, .mpeg, .m2v, .m2p, .vob, .ps) | MPEG-2 Part 2 | AC-3<br>AAC<br>MPEG audio (1,2,3) |

1 *Non indexed AVI files are not supported*

- HDMI/SCART video output.
- Support of 8 interface languages (English, French, Spanish, Italian, Polish, German, Portuguese and Russian).
- Support of LCN (Logical Channel Number).
- 7 lists of favourites (All TV, All Radio, A, B, C, D, E).
- Up to 1000 channels.
- Electronic Programme Guide (EPG).
- Parental control.
- OSD Teletext full and transparent.
- Subtitles (ETSI EN 300 743 V1.2.1 & ETSI 300 472 V1.3.1).
- Automatically saves last channel.
- Low power consumption.
- Fast and simple software upgrade via USB or IP.

### 2.2. Contents

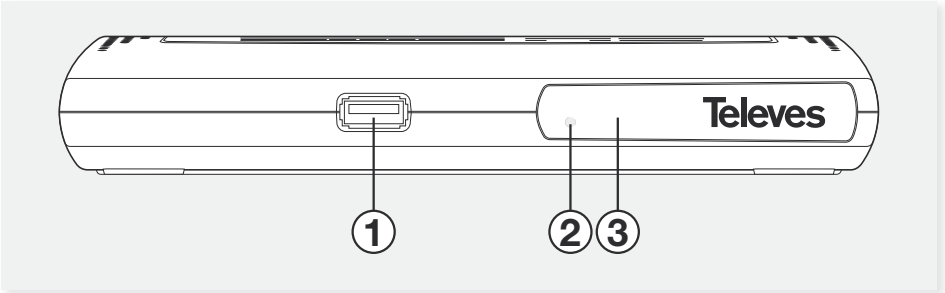
Verify that the following components are included in the packaging:

- 1 x ZAS Hbb adapter.
- 1 x remote control.
- 1 x antenna cable.
- 1 x HDMI cable.
- 1 x power adapter.
- 2 x type "AAA" batteries.
- Instructions for use.

* Televés does not guarantee 100% compatibility with all USB devices.

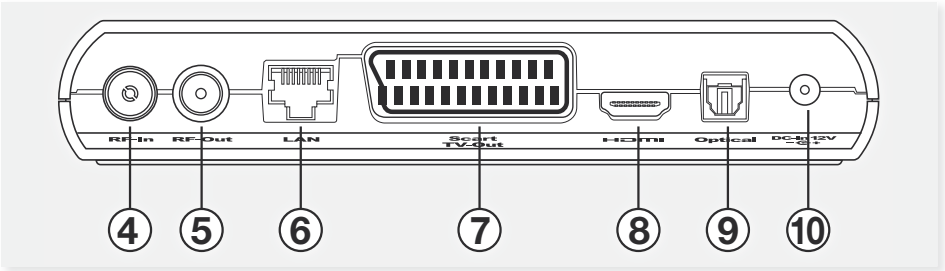
## 3. Description of connections

### Front panel




| No. | Name | Function |
|---|---|---|
| 1 | **HOST USB** | Connection for a pen drive, memory card reader or external hard drive (FAT 32, NTFS and EXT3). Some HDD models could require external power. |
| 2 | **LED** | Operation Led. (Green: On, Red: Standby, Orange: No input signal). |
| 3 | **IR** | IR sensor. |

### Back panel




| No. | Name | Function |
|---|---|---|
| 4 | **RF-IN** | Signal input of terrestrial antenna. |
| 5 | **RF-OUT** | RF signal output to connect to a TV or VCR. |
| 6 | **LAN** | Ethernet connector. |
| 7 | **SCART TV-OUT** | To connect to a TV via SCART (Euro) connector. |
| 8 | **HDMI** | Interface for high definition signal connection. |
| 9 | **OPTICAL** | Optical digital audio output. |
| 10 | **DC-IN 12V** | Input to connect the 12V AC adapter. |

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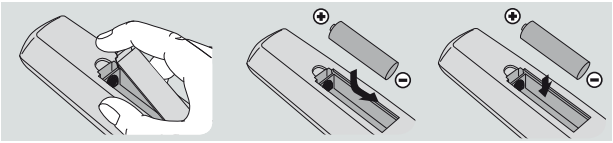
### 3.1. Remote control unit

| Button | Function description |
|---|---|
| ⏻ | Switches between "power ON" and "STANDBY" mode. |
| **0 ... 9** | To select a desired program number.<br>Direct data entry on the menu. |
| ⏎ | This button is operative only in TV mode. |
| ↻ | Return to the previous channel.<br>Go to the previous page in some interactive applications. |
| **Guide** | Activates the EPG to the current program level. |
| **Info** | Information about the TV program watched, and additional contextual information. |
| **MENU** | Activates the main menu on the screen. |
| **Quick Menu (OPT)** | Shortcut to contextual options. |
| **▲ / ▼ / ◀ / ▶** | Lets you move through the different menus and options in each menu. |
| **OK** | Confirm an option or a value in the menu. |
| **Users** | Button not operative in this model*. |
| **(iTV)** | Shortcut to the Media Center menu (video, music, photos). |
| **(TV)** | Change to TV mode or show the list of channels. |
| **(Radio)** | Change to Radio mode or show the list of channels. |
| **FAV** | Activates favourite list. |
| **Vol +/-** | Adjusts volume. |
| **✕ (Exit)** | Exit from menu or open window. |
| **(Mute)** | Switch-off the sound (Mute). |
| **Ch ▲ / ▼** | Changes channel in TV or Radio modes. |
| ● | Starts recording the selected channel. |
| ▶ | Play the selected file. |
| ⏸ | It pauses the live program or pauses the file being played. |
| ■ | Stops either recording or playing. |
| ◀◀ | Fast reverse play mode. |
| ▶▶ | Fast or slow forward play mode |
| **(Txt)** | Activates teletext for the displayed channel. |
| **PiP** | Button not operative in this model*. |
| ● ● ● ● | Functional buttons with interactive applications. |

*Reserved for future use.

**STB:** Indicates operation in STB mode.
**TV:** Indicates operation in TV mode (Universal Remote Control Unit, *see appendix A: Operating instructions*).

**Note**: *The following keys are not active if the menu is opened or if the option panel of a banner is opened:* , , *and* **FAV**.



# 4. Installation of equipment

Different types of televisions and other equipment can be connected to **ZAS Hbb**.

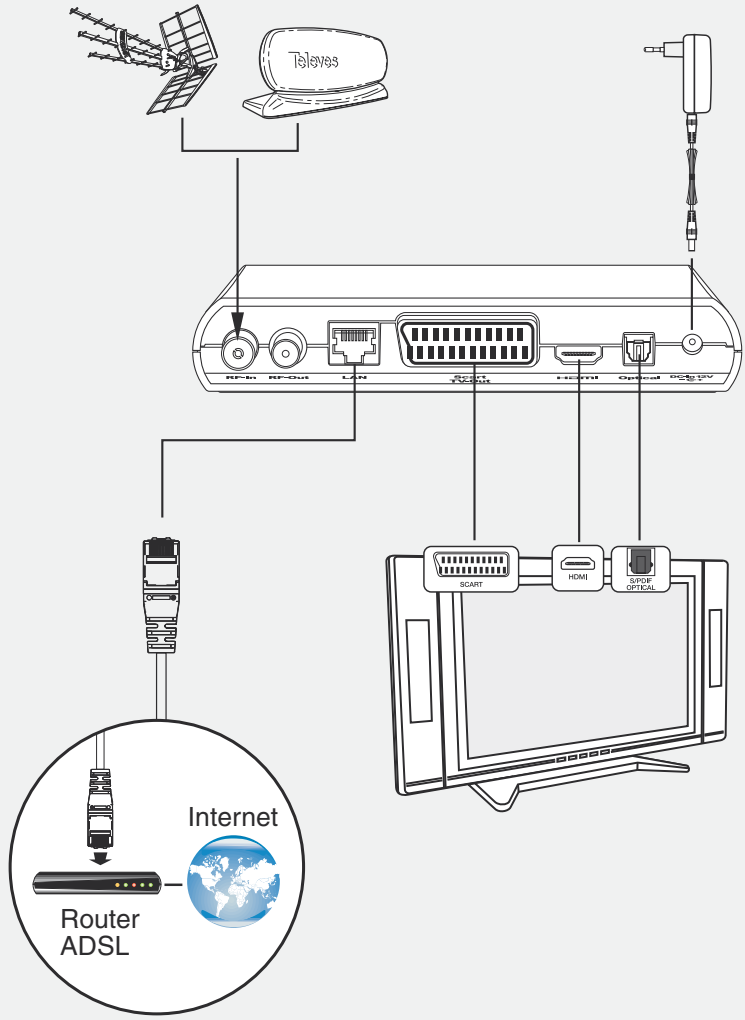
The most common forms of connecting it are shown in this manual. If you have any problems connecting your adapter, please contact your vendor.

There are two ways to connect the **ZAS Hbb** adapter to your TV: by SCART lead or HDMI cable. If your TV has a HDMI connector, use this type of connection to obtain the best quality image.

When the connection is made using a SCART cable, the **ZAS Hbb** can supply RGB or CVBS signals. By default, the **ZAS Hbb** is already configured to supply the CVBS signal, as some TVs do not support the RGB output. However, for optimum image quality, it is recommended to select the RGB option (as long as your TV is compatible with these signals). To change the configuration from CVBS to RGB, do it through the "Video Scart format" (*see 15.3.3.- Scart video format*).

## 4.1. Connecting to a TV

- Connect the antenna signal to the RF IN connector of the **ZAS Hbb**.
- Connect the audio and video between the **ZAS Hbb** and the TV via SCART cable or HDMI connection (recommended).
- Connect the RJ45 output (Ethernet output) to your Internet router using an RJ45 patch cable.
- Switch on equipment sets (TV).
- Power the **ZAS Hbb** through the mains adapter.




- *All the cables used for the adapter connections shall be shielded type.*
- *DO NOT PLUG IN the adapter to the mains before finishing all the unit connections.*
- ***If you are using an inside antenna, verify that it is connected to the power supply.***

- *Televés recommends using a HDMI cable category 2.*
- *If your TV only has a DVI connector, use a HDMI-DVI adapter. Connect an audio cable for the sound output.*

## 5. Installation wizard

Once all equipment connections have been made and the adapter has been plugged into the electricity mains, when powering on your product for the first time after purchase, the installation wizard will operate automatically.

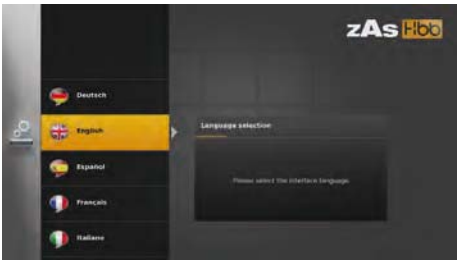
**Note**: *The installation wizard can be rerun from the beginning by performing a reset to factory settings (see "Factory reset" section).*

### 5.1 Language selection

First you must select the language in which you would like the screen menus to be displayed.

Select the menu language using the arrow keys ▲ and ▼.

Press arrow key ▶ to confirm the selection.



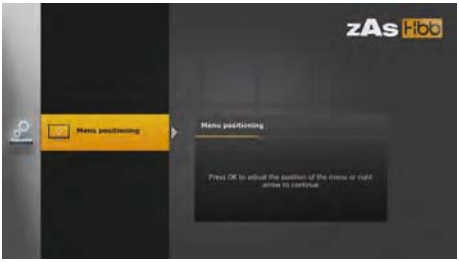

**Note**: *Default audio language is set according to language selection.*

**Note**: *Languages supported are English, French, Spanish, Italian, Polish, German, Portuguese and Russian.*

**Note**: *In all the screens of the installation wizard (except the first one), press arrow key ◀ to go back to previous screen.*

### 5.2 Menu Positioning

Then you have the possibility to fine-tune the position of the main menu on the screen.




Press **OK** key to do so and use arrow keys ▶, ◀, ▼ and ▲ to adjust the position of the menu.

Press **OK** key again to confirm the new position.

Press arrow key ▶ to move to next screen.

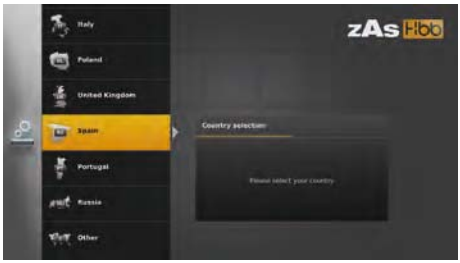
**Note**: *The positioning area is limited to ± 90 pixels compared to the factory position.*

### 5.3 Country selection

On the next screen you must indicate the country where the adapter is installed.

Select the country using the arrow keys ▲ and ▼.

Press arrow key ▶ to confirm the selection.



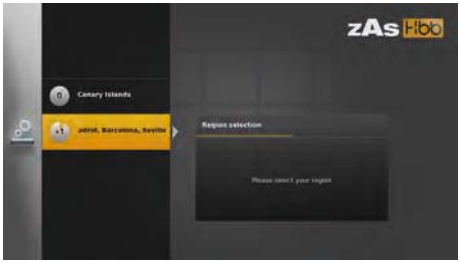

**Note**: *Countries supported are England, France, Spain, Italy, Germany, Poland, Portugal, Russia and Other.*

### 5.4 Region selection (if the country has several time zones)

This screen is only displayed if you have chosen a country with several time zones.

Select the region using the arrow keys ▲ and ▼.

Press arrow key ▶ to confirm the selection.




**Note**: *If you selected the country "Other", instead of choosing a region you have to choose your time zone.*

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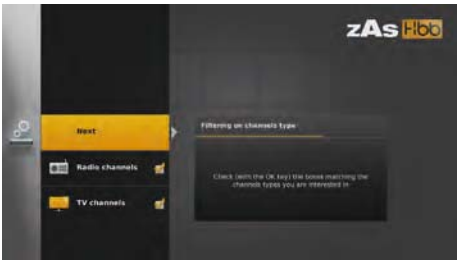
### 5.5 Terrestrial scanning

You can then apply filters to the channels scanning.

In a first screen you can filter between radio and TV channels.

By default, all channels types are scanned. To change that, select a filter using the arrow keys ▲ and ▼ and press **OK** to uncheck it.

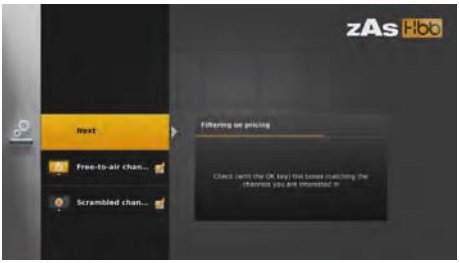
Press arrow key ▶ on the top item to confirm the filters and move to next screen.




In the second filtering screen you can filter between free to air and scrambled channels.

By default, all channels types are scanned. To change that, select a filter using the arrow keys ▲ and ▼ and press **OK** to uncheck it.

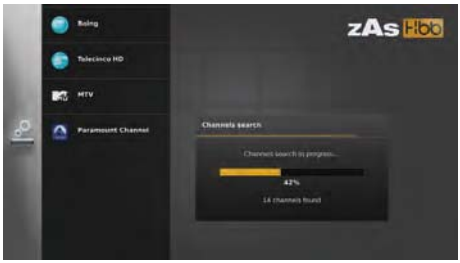
Press arrow key ▶ on the top item to confirm the filters and start the scanning.




Then channels search starts automatically.

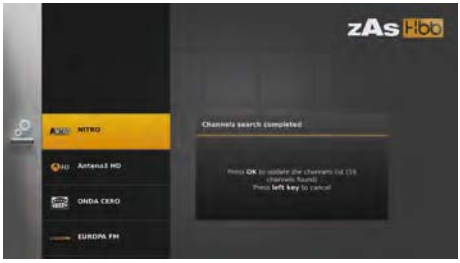
This process may take some time. Please wait.

At the end of the search, channels are re-ordered and numbered according to country LCN (Logical Channel Number) if available.




When this is done you can navigate through the channels list using arrow keys ▲ and ▼.

Pressing **OK** exits the installation wizard and zaps to the channel currently focused.




**Note**: *You can cancel the search and go back to previous screen at anytime by pressing arrow key ◀.*

**Note**: *If the adapter has not found any channels at the end of the search, a warning message is displayed. Once the connections have been checked, press **OK** key to make another search.*

# 6. Basic functions

This chapter describes some basic functions the product provides such as channel selection, volume control and standby mode.

## 6.1 Channel selection

You can switch the current channel by pressing the **CH+/CH-** keys or entering the channel number directly using the **NUMERIC (0..9)** keys.

**Note**: *If there is no channel corresponding to the number entered, the zapping is done on the first lower channel available in the channels list.*

**Note**: *The zapping sequence using **CH+/CH-** keys corresponds to the order of the channels in the current favorites list.*

**Note**: *The channel number is coded on 4 digits maximum.*

**Note**: *You can also switch channels from the channels list or EPG of the main menu.*

To return to the previous channel, press ↻ key.

In case of scrambled channel the following image is displayed.

In case of signal loss the following image is displayed.

## 6.2 Volume control

Press **VOL+/VOL-** keys to adjust the audio volume.

Press mute key (🔇) to stop the audio temporarily.

Press this key again, or **VOL+/VOL-** to restore the sound.

**VOL+/VOL-** and mute keys are always active, except when a pop-up is displayed.

**Note**: *The mute function remains set while you switch channels.*

**Note**: *20 steps are defined to reach the maximum volume level from the minimum one.*

## 6.3 Standby mode

You can switch off the adapter (standby mode) using the standby key ⏻.

When the adapter is in standby mode, press standby key ⏻ to activate it. The last viewed channel is then displayed.

When you start the adapter from power off, the adapter goes into the state (standby or running) that was active before the power cut. The last viewed channel before the last standby is then displayed.

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**Low Power Consumption (LPC) mode:**

LPC mode is a mode in which most of the adapter elements (A/V tuner, ethernet port, etc…) are cut to decrease the adapter consumption below 1W.

After 5 minutes in standby mode, the adapter goes automatically to LPC mode (this function can be deactivated, see "*Low power consumption*" section).

**Note**:

- *Pressing the standby key while recording does not stop the recording, the adapter goes to standby until the recording completion then goes to LPC.*
- *When entering standby, if a recording is scheduled in less than 5 minutes, the adapter does not go to LPC. As described above, it will only go to LPC after the recording completion.*
- *When the adapter is in LPC, 5 minutes before the start of a scheduled record, it goes to standby mode, in which the recording is possible.*

## 6.4 Teletext

On channels supporting Teletext, press successively **TXT** key to start Teletext:

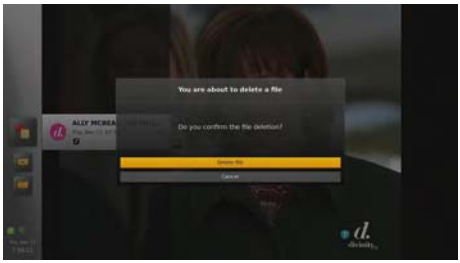
1. Start broadcast Teletext in full mode.
2. Start broadcast Teletext in transparent mode.
3. Close Tetelext.

**Note**: *Teletext subtitles can be accessed on a particular teletext page (for instance, usually page 888 in France).*

## 6.5 Pop-Ups

### 6.5.1 Interactive pop-ups

Pop-up windows can be displayed at any time to allow you to make a choice between alternative behaviors, to enter information needed by the adapter or to actively acknowledge a situation.




Interactive pop-ups can be displayed in the following situations:

- Conflict management: A choice has to be made between a zapping and a recording, or between two or more schedules.
- A recording will start in 3 minutes and there is no proper storage device connected.
- A new recording is scheduled in less than 3 minutes from "My recordings…Add a schedule" or from the EPG and there is no proper storage device connected.
- Removal of a channel from "All TV" or "All radio" favorites lists, when this channel is in another favorites list, or a recording is in progress or scheduled on this channel.
- Favorites lists reorder confirmation.
- Password input.
- File suppression confirmation.
- File suppression error: An error as occurred during file deletion, you have to acknowledge.
- Recording lock confirmation.
- Storage device ejection confirmation (when recording/timeshifting/playback in progress).
- Formatting confirmation.
- Recording in progress while starting formatting.
- Formatting progression/result: Pop-up during formatting progression, and to acknowledge the completion.
- OSD positioning instructions: You have to confirm when OSD is positioned as desired.
- Video resolution modification confirmation.
- Playback resume: Start from last stopping point/start from beginning.
- Playback stop / end.
- System update available: Update/Later.
- System update confirmation.

#### 6.5.2 Informational pop-ups

Informational pop-ups are displayed when an event occurs, but no direct user interaction is needed.

These pop-ups are displayed in the following situations:

- A storage device has been plugged.
- A storage device is installed and ready to be used.
- The storage device can be safely unplugged.
- A storage device has been unplugged.
- A recording has started.
- A recording is finished.
- A recording has failed. This pop-up is displayed for instance when a recording or timeshifting cannot start because there is no proper storage device connected or when a recording is stopped because the storage device is unplugged during the recording.
- The recording medium has reached a low threshold.
- The recording medium is full.
- The media being played has changed.
- The current favorites list has changed.
- You try to record or activate timeshifting function on a radio channel (not allowed).
- Radio key is pressed whereas there are no radio channels.
- A remote control key reserved for a future functionality, is pressed (for instance **Users** or **PiP** keys).

## 7. LiveTV banner

The LiveTV banner is the navigation interface you use to navigate and interact with the adapter when watching live content.

### 7.1 Open / Close

While watching live content, the LiveTV banner is displayed when zapping using **CH+/CH-**, **0...9** or ⟳ keys, or when pressing **INFO**, **OPT**, **FAV** or ● (record) keys.

**Note**: ***0...9*** *and* ⟳ *keys could be caught by an HbbTV application (note that the red button popup IS an HbbTV application) and hence could not work as described above in some cases.*

To close the LiveTV banner:

- Wait for a few seconds, the banner closes automatically (duration configurable, see "*Banner display duration*" section).
- Press EXIT key.
- Press arrow key ▲ or ▼. This closes the banner and opens the main menu on the EPG of the current channel.

### 7.2 Content

The LiveTV banner contains the following information:

- Channel number and name (displayed only after a zapping).
- Channel logo.
- Event name.
- Start and end time of the event and a progress bar indicating the elapsed time of the current event in relation to the total duration.

**Note**: *The progress bar is displayed only if the banner corresponds to the event currently watched.*

- Icons indicating some of the event attributes (displayed only if the banner corresponds to the event currently watched):
  - Video format: 4/3 or 16/9
  - If the event is in HD: HD
  - Age classification (possible values depend on country): 10, 12, 16, ...
  - If event is streamed in Dolby Digital Plus audio format:
  - If the channel has Teletext: TXT
  - If the event is streamed in various audio formats:
  - If the event has subtitles: one or more
  - If subtitles for impaired hearing are available:
- Event cover or a logo of the event type if the cover is not available. Nothing is displayed if neither is available.

**Note**: *If there is no programme information available, only the channel number, name and logo are displayed.*

**Preview browsing:**

When watching a channel with the LiveTV banner displayed, if you press arrow keys ◀ or ▶, the content of the banner is changed to display the information of next or previous event (passed events are not displayed). However, the full screen video does not change.

When the banner is not on the current event, if you press **OPT** key, record key ● or stop key ■, the focus comes back to the current event, if an action corresponding to the key pressed is applicable for the current event.

## 7.3 Detailed programme information

While the LiveTV banner is displayed, press **INFO** key to get detailed programme information.

If the text occupies more than one page, use arrow keys ▲ and ▼ to scroll up and down.

Press **INFO** again to close the detailed programme information.

**Note**: *Recording and timeshifting functions remain available.*

## 7.4 Options

While watching live content or while the LiveTV banner is displayed, press **OPT** key to display the options available for the current programme.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ◀ and ▶ to move about the possible values (current value is highlighted), and press **OK** to select one.

Available options are:

- Audio language (if several languages are available).
- Subtitle language (if subtitles are available).

**Note**: *For audio and subtitles, both available languages and special options (see "Special options" section of the settings) are proposed. If an unknown language/ special option is available (means with an unknown ISO 639 code), the ISO 639 code is displayed unchanged. For instance it could be "v.o" or "org", etc...*

- Picture format (if applicable).

**Note**: *Persistency of the options audio language, subtitle language and picture format is limited to the media currently watched.*

- Favorites list (if at least 2 non empty favorites lists are available; only non empty lists are displayed).

  Changing of favorites list zaps on the first channel of the newly selected favorites list, if the channel currently watched is not in the newly selected favorites list.

  **Note**: *While watching live content or while the LiveTV banner is displayed, press **FAV** key to display the LiveTV banner with the option panel and the focus sets on the favorites list's field.*

  *This key is not active if there is only one non empty favorites list.*

- Enable / disable (default) slideshow (only for radio channels). This option is available if a photo or folder has been previously selected as background slideshow (see options on photo files in "Media Selection" section). When enabled, the slideshow is played in loop mode. Press **OPT** key again to close the options panel.

Press **INFO** key to replace the option panel by the detailed programme information panel.

**Note**: *Options remain available during timeshifting, and changes done during timeshifting remains when going back to live.*

# 8. Timeshifting

***For this function to be possible a storage device formatted in FAT 32, NTFS or ext3, not read-only, with a minimal available space of 3,6 Gb must be connected to the adapter.***

***This storage device must be set as "default storage device" in the settings (see "Storage" section).***

If such a medium, properly configured in the settings, is not connected to the adapter, an information pop-up is displayed when you try to activate the timeshifting function, indicating that the timeshifting is not possible.

The timeshifting buffer is a circular buffer limited to 50% of the available space on the storage device; with a high limit set to 18,8 Go. 3 modes are available (see "Timeshifting" section of the settings):

- Disabled: timeshifting function is not available.
- Manual (default): buffering starts only when you press pause key ❚❚. Going back to live resets the timeshifting buffer.
- Automatic: the programme is automatically buffered (temporarily) on the storage device as soon as you zap onto the channel.

## 8.1 Switching from live to Timeshifting

While watching live content, press pause key ❚❚ to freeze the image and switch to timeshifting. The timeshifting banner is then displayed.

Pause makes the time gap or delay between the broadcasting (live) point and watching point. The time gap is equivalent to the period the programme has been paused. Operations such as slow motion and fast rewind also make the time gap.

**Note**: *If the automatic mode is activated, you can also switch from live to timeshifting by pressing directly the rewind key ◀◀.*

To stop the timeshifting and go back to live:

- Press stop key ■.
- Use fast forward function until the current reading position reaches the live point.
- Perform a zapping using **CH+/CH-**, **0...9** or ⟲ keys. This also resets the timeshifting buffer.

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### 8.2 Timeshifting banner

The timeshifting banner is displayed each time you use trick modes, or when you press **INFO** key during timeshifting.

**Note**: *Pressing **INFO** key when the banner is already displayed has no effect as detailed programme information is not available during timeshifting.*

The timeshifting banner contains the following information:

- An icon on the channel logo indicating the operation in progress (pause, play, forward, rewind) and the image speed.
- A timeline indicating the filling level of the timeshifting buffer.
- A cursor indicating the position of the live in the timeshifting buffer.
- A cursor indicating the current reading position and the delay compared to the live.

As with the LiveTV banner, to close the timeshifting banner:

- Wait for a few seconds, the banner closes automatically (same duration as the LiveTV banner, see "*Banner display duration*" section)
- Press **EXIT** key.
- Press arrow key ▲ or ▼. This closes the banner and opens the main menu on the EPG of the current channel.

Press **OPT** key to display the options available for the current programme.

Available options are the ones described in the LiveTV banner section.

### 8.3 Trick modes

To continue watching the programme from the same point where it was paused, press play key ▶.

**Note**: *Whatever the watching speed in progress, pressing play key ▶ will always go back to normal speed.*

To navigate the time bar to search for a particular scene:

- When video is playing (at normal speed or more):
  - Use the key ◀◀ for a fast rewind. Each time you press the key, the rewind speed increases in the following sequence: x-1, x-2, x-4, x-8, x-16, x-32, x-MAX (x-64).

    **Note**: *You can fast rewind back to the start point. If you reach the start point while rewinding, the programme is automatically played at normal speed from that point.*
  - Use the key ▶▶ for a fast forward. Each time you press the key, the speed increases in the following sequence: x2, x4, x8, x16, x32, xMAX (x64).
- When video is paused (or in slow motion mode):
  - Use the key ▶▶ for a slow forward. Each time you press the key, the speed increases in the following sequence: x1/8, x1/4, x1/2, x1.

    **Note**: *When reaching normal speed (x1 or x-1), you exit the slow motion mode.*
- Skip function (jump of 30 seconds) can be activated by:
  - A long press on key ▶▶ or ◀◀. In this case a unique jump forward or backward is done.
  - Using skip keys. In this case a jump is done each time the key is pressed.

To watch the programme frame by frame, press the pause key ❚❚ successively.

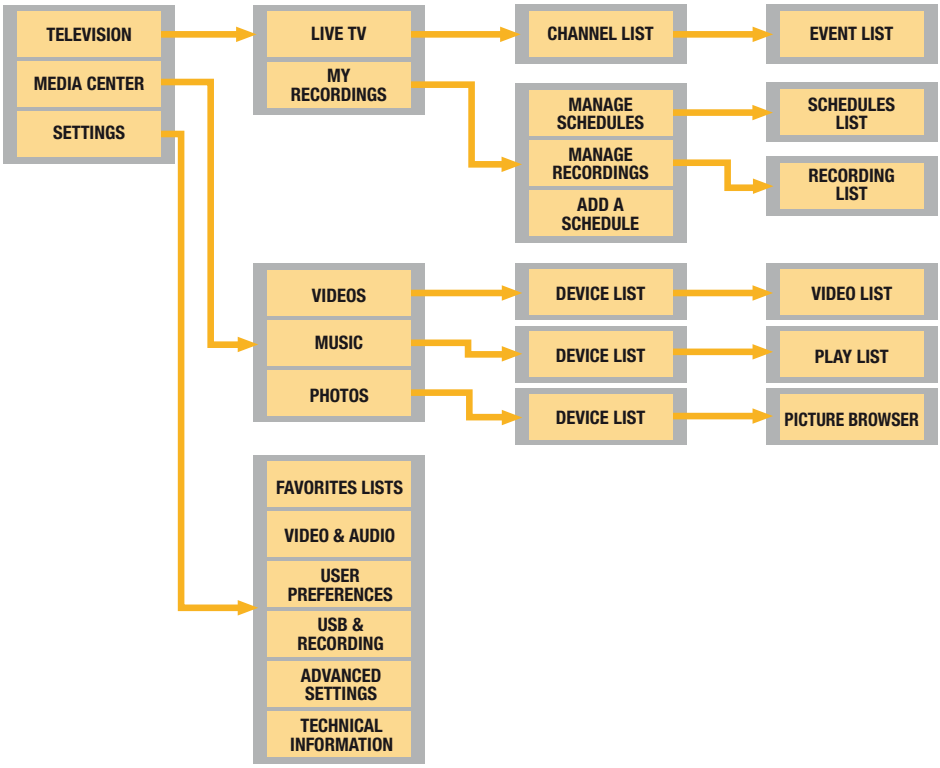
**Note**: *Frame by frame function is only available when the video is playing at a speed of x1/8, x1/4, x1/2, x1, x2 or x4.*

## 9. Main menu

Press **MENU** key to activate the main menu.
Press **MENU** or **EXIT** key to close the main menu.

### 9.1 Structure

The following diagram describes the main menu's structure.




The settings sub-menus are described in details in the "Settings" section.

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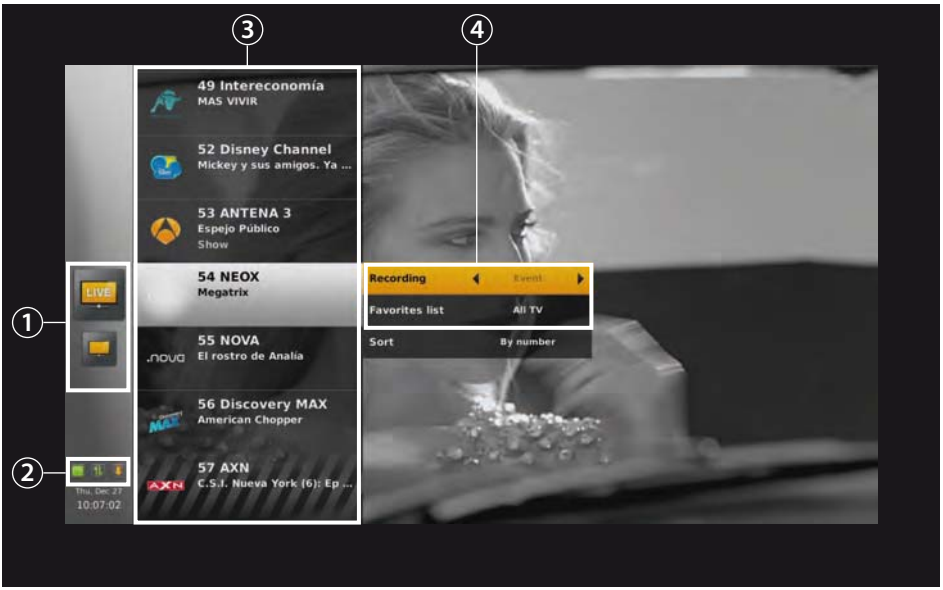
### 9.2 Layout

Graphically, the main menu is organized around the following elements:




1. History area: This area presents the navigation status; each menu you have passed through is stacked in this area.
2. Notification area: Icons representing various system states:
   - First icon represents the available space on the connected storage device. If several storage devices are connected, it represents the available space on the default one (see "*Storage*" section). Six states are possible:
     - Unavailable: There isn't any valid storage device connected to the adapter.
     - Full: The storage device is full. No more recordings will be accepted.
     - High: A high portion of the device is occupied. You should clean up some recordings or plug another storage device.
     - Medium.
     - Low.
     - Almost empty.
   - Second icon represents internet connection state (see also "*Connections state*" section). 3 possible states:
     - Error: Broadband link is down. Any feature involving broadband access will fail.
     - Limited: Broadband link is up, but either the bandwidth is low or high level protocol are unavailable. Some features involving broadband access may fail.
     - Connected: Broadband link is up. All features involving broadband access are available.
   - Third icon is only displayed when an upgrade is available. The upgrade can be launched from the settings (see "*Upgrade*" section).
3. Main navigation area: This area is used to display the menus and final elements.
4. Action/Option Area: This area is used to display available options/actions that can be applied on the focused element of the main navigation area.

### 9.3 Navigation

Use arrow keys ▲, ▼, ▶, ◀ to navigate in the menus.

An arrow on the right of an element means this element has a sub-menu.

Final elements (means elements without sub-menu) can be selected by pressing **OK** key.

If **OK** or **OPT** keys can be used with the current element, they are displayed on the right of the element.

While in the main menu, zapping remains possible using **CH+/CH-** or ⟳ keys, except when editing/reordering favorites lists or when performing a scanning.

Zapping is not possible using **0...9** keys that are reserved to enter values, such as passwords, etc....

**Note**: *When the focus is on the items "Television" or "LiveTV" of the main menu, and you are not watching live content, press **OK** key to zap to the last viewed channel and close the menu.*

Timeshifting remains available while in the main menu.

## 10. Channels list

### 10.1 Channel selection

To access the channels list:

- Press **MENU** key.
- Select "Television" and press arrow key ▶.
- Select "LiveTV" and press arrow key ▶.

All available channels of the current favorites list are listed with the focus on the channel currently watched.

You can navigate in the channels list using arrow keys ▲, ▼ or by entering a channel number using **0...9** keys. Note that navigating like this just change the focus position in the channels list, no zapping is performed.

Press **OK** key to perform a zapping and close the menu.

Press arrow key ▶ to access the EPG of the focused channel.

**Note**: *Doing a zapping using **CH+/CH-** or ⟳ keys does not change the focus position in the channels list.*

**Note**: *Scrambled channels are represented with a specific background (hatched).*

### 10.2 Options

While the focus is on a channel of the channels list, press **OPT** key to display the options available for the channels.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** to select one.

Available options are:

- Start a recording on this channel, if there is no recording in progress on this channel.

  **Note**: *You can also start a recording by pressing the record key* ●.

- If a recording is in progress on this channel:
  - Modify the recording end time.

    **Note**: *You can also modify the recording end time, by pressing the record key* ● *again.*

  - Stop the recording.

    **Note**: *You can also stop the recording by pressing stop key* ■.

- Watch the channel, if this channel is not the one currently displayed (equivalent to pressing OK key from the channels list).
- Favorites list (if at least 2 non empty favorites lists are available; only non empty lists are displayed). Changing of favorites list, refreshes the channels list (the menu remains opened) and zaps on the first channel of the newly selected favorites list, if the channel currently watched is not in the newly selected favorites list.
- Sort (by name, number (default)).

**Note**: *Change on this option is applied to all favorites lists, to the zapping sequence and is persistent to standby and power on/off.*

Press **OPT** key again to close the options panel.

# 11. Electronic Programme Guide (EPG)

The adapter provides a "Programme Guide" function giving the user access to the TV (or radio) guide showing information on the current or following events on the different channels, such as name, start and end times, a short summary...

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## 11.1 Events list

To access the information on the electronic programme guide (EPG):

- When in the channels list, press arrow key ▶ to access the EPG of the focused channel.
- When the LiveTV banner is displayed, press arrow key ▲ or ▼.

  This closes the banner and opens the main menu on the EPG of the current channel.

For the selected channel, the EPG is displayed as a list of events of the selected day, ordered chronologically from the top to the bottom. The first event corresponds to the event currently broadcasted or to the first event of the day (if the selected day is not the current one).

You can navigate in the events list using arrow keys ▲ and ▼.

You can also move to a specific hour in the next 24 hours by entering a time using **0...9** keys. With this method, there is no visual feedback of the time seized and only 2 digits corresponding to the hour are taken into account. If there is not event at the seized hour or after it, the focus does not move.

Press **OK** key on an event currently broadcasted to perform a zapping on it and close the menu.

**Note**: *Doing a zapping using* ***CH+/CH-*** *or* ⟳ *keys does not change the focus position in the events list.*

**Note**: *The information that appears in the guide is supplied by the service provider, and is sometimes unavailable. In this case, the message "No data available" is displayed.*

### 11.2 Detailed programme information

Press **INFO** key to get detailed programme information.

If the text occupies more than one page, use arrow keys ▲ and ▼ to scroll up and down.

If the option panel is displayed, it remains opened.

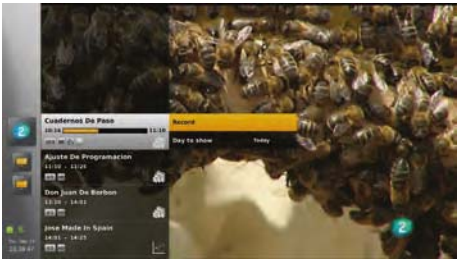
Press **INFO** again to close the detailed programme information.

### 11.3 Options

Press **OPT** key to display the options available for the events.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** to select one.



Available options are:

- Start / schedule a recording on this event.

  **Note**: *You can also start a recording by pressing the record key ●.*

- If a recording is in progress or scheduled on this event:
  - Modify the recording end time.

    **Note**: *You can also modify the recording end time, by pressing the record key ● again.*

  - Stop the recording.

    **Note**: *You can also stop the recording by pressing stop key ■.*

- Watch the channel, if this channel is not the one currently displayed and the event is the current one (equivalent to pressing **OK** key from the channels list).
- Change the day of the displayed events (from today (default) to the 6 upcoming days).

  **Note**: *Persistency of this option is limited to the current events list browsing.*

Press **OPT** key again to close the options panel.

EN

## 12. Recording

***For this function to be possible a storage device formatted in FAT 32, NTFS or ext3, not read-only, must be connected to the adapter.***

If such a storage device is not connected when you try to start a recording, a notification popup is displayed to inform you that the recording cannot be done.

**Note**: *3 minutes before the starting of a scheduled recording, if such a storage device is not connected, a popup is displayed informing you that the recording will fail if you do no plug in a storage device. This popup closes after the 3 minutes or if you press **OK** key.*

**Warning**: *This popup is not displayed if you power on the adapter or goes out of standby, in the interval between 3 and 0 minutes before the starting of a scheduled recording.*

When several medium are connected to the adapter, the one configured as "default storage device" is preferred (see "*Storage*" section).

There are no requirements regarding the size of the storage device or the available space on it. If the free space on the hard disk drive is insufficient, recording will stop.

**Note**: *Recording a one-hour programme may require up to two or three GB of hard disk space. The space necessary for recording a one-hour programme may be different depending on the programme.*

**Note**: *On a device formatted in FAT32, the size of a file is limited to **4 GB**.*

**Note**: *Timeshifting function remains available while a recording is in progress.*

**Note**: *Only 1 recording can be done at a time, in addition to timeshifting.*

### 12.1 Start

#### 12.1.1 From LiveTV banner

While watching live content (main menu is closed), press record key ● to record the programme you are viewing.

The LiveTV banner is then displayed with a specific panel.

Select the recording duration using arrow keys ▶ and ◀.

Possible values are:

- Current event duration (if programme information is available).

  Default value if available.
- 30 min, 1h, 2h, 3h, 4h, 5h, 6h, 8h and 12h. If programme information is not available, default value proposed is configurable (see "*Default recording duration*" section).
- Cancel

Press **OK** key to validate the duration. The recording starts immediately (except if cancel is selected), and the recording icon is displayed in the top right corner of the LiveTV banner.

#### 12.1.2 From channels list

While in the channels lists, press **OPT** key to display the option panel.

After choosing the recording duration and pressing **OK**, the recording starts immediately, the option panel is closed and the recording icon is displayed in the right corner of the channel name.

**Note**: *You can also start a recording by pressing the record key ●. In this case, the recording duration is automatically set to the current event duration (if programme information is available), or to the default recording duration (see "Default recording duration" section) otherwise.*

#### 12.1.3 From EPG

To start a recording from the EPG, press **OPT** key to display the option panel and select the record option, or press directly the record key ●.

This starts or schedules (if the event is in the future) a recording on the selected event. The option panel is then closed and the recording icon ● is displayed in the right corner of the event name.

**Note**: *Time-based recordings (means recordings started with duration different from "Current event") can extend on several events or on parts of events. For this reason, in the EPG, the recording icon ● is not displayed on events covered by a time based recording. The icon is only displayed on events on which an event based recording was started.*

**Note**: *If the event is in the future, should start in less than 3 minutes, and there is no proper storage device connected, a popup is displayed informing you that the recording will fail if you do not plug in a proper storage device. This popup closes if you press OK key or at the start time of the recording.*

### 12.2 End time modification

End time can be modified by steps of 10 minutes in a range of -/+4h.

**Note**: *If you modify the end time of a recording by event, the recording name remains the name of the event, even if the duration is no more synchronized with the event.*

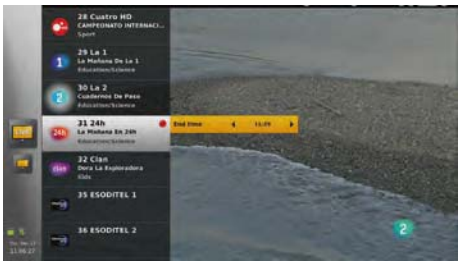
#### 12.2.1 From LiveTV banner

To modify the duration of a recording in progress, press record key ● again on the channel being recorded.

The LiveTV banner is then displayed with a panel where you can change the end time of the record. Use arrow keys ▶ and ◀ to choose the end time and **OK** to validate.

#### 12.2.2 From channels list

While in the channels list with the focus on a channel being recorded, you can modify the recording end time, by displaying the option panel (by pressing the **OPT** key), select the end time option and change the value using arrow keys ▶ and ◀ and **OK** to validate.




You can also modify the recording end time by pressing directly the record key ● again. In this case, a specific panel is displayed (see picture above), where you can change the end time value using arrow keys ▶ and ◀ and **OK** to validate.

#### 12.2.3 From EPG

While in the EPG with the focus on a event being recorded or scheduled, you can modify the recording end time, by displaying the option panel (by pressing the **OPT** key), select the end time option and change the value using arrow keys ▶ and ◀ and **OK** to validate.

You can also modify the recording end time by pressing directly the record key ● again. In this case, a specific panel is displayed, where you can change the end time value using arrow keys ▶ and ◀ and **OK** to validate.

**Note**: *Time-based recordings are not visible in the EPG and hence cannot be modified from the EPG.*

### 12.3 Stop

#### 12.3.1 From LiveTV banner

To stop a recording, press stop key ■.

The LiveTV banner is then displayed with a confirmation panel.

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Choose "yes" or "no" (default) using arrow keys ▶ and ◀, and validate your choice with **OK** key.

If you choose "yes", the recording is immediately stopped and the recording icon is removed from the LiveTV banner.

**Note**: *If a timeshifting is performed during a recording, pressing stop key ■ stops the timeshifting. Press stop key ■ again to stop the recording.*

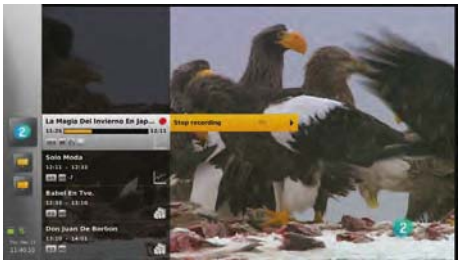
### 12.3.2 From channels list

While in the channels list with the focus on a channel being recorded, you can stop the recording by displaying the option panel (by pressing the **OPT** key), select the stop recording option and press **OK**.

You can also stop the recording by pressing directly the stop key ■. In this case, a confirmation panel is displayed, where you can choose "yes" or "no" (default) using arrow keys ▶ and ◀, and validate your choice with **OK** key.

### 12.3.3 From EPG

While in the EPG with the focus on an event being recorded or scheduled, you can stop the recording, by displaying the option panel (by pressing the **OPT** key), select the stop recording option and press **OK**.




You can also stop the recording by pressing directly the stop key ■. In this case, a confirmation panel is displayed (see picture above), where you can choose "yes" or "no" (default) using arrow keys ▶ and ◀, and validate your choice with **OK** key.

**Note**: *Time-based recordings are not visible in the EPG and hence cannot be stopped from the EPG.*

## 12.4 "My recordings" Menu

In addition to the LiveTV banner, the channels list and the EPG, recordings can be managed through the "My Recordings" menu.

To access the "My Recordings" menu:

- Press **MENU** key.
- Select "Television" and press arrow key ▶.
- Select "My Recordings" and press arrow key ▶.

You then have access to 3 sub-menus:

- "Manage schedules"
- "Manage recordings"
- "Add a schedule"

### 12.4.1 Manage Schedules

Select "Manage schedules" and press arrow key ▶.

The list of scheduled recordings (including recordings in progress) is displayed.

For each recording the following information is displayed:

- Channel logo.
- Event name if the recording is on an event or a name with recording start and end time if the recording is based on time.
- A progress bar if the recording is in progress.
- Date and start time of the recording.
- An icon indicating that this is a recurrent recording.
- Recording duration.

There are 3 "kinds" of scheduled recordings: simple recordings, recurrent recordings templates and recurrent recordings occurrences.

When a recurrent recording template is selected, use arrow key ▶ to access the list of corresponding occurrences (next 2 months are displayed).

Schedules that failed to start (for instance because there was no storage device connected) at the expected time remains listed here during 15 days and are tagged as failed.

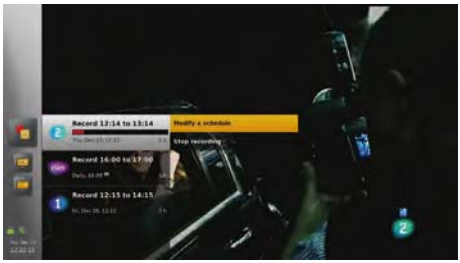
**Note**: *A recurrent recording template is not tagged as failed, even if one of its occurrences is failed.*

Use arrow keys ▲ and ▼ to move about and select a recording.

Press **OPT** key to display the options available for the recording. Use arrow keys ▶ and ◀ to navigate among the options and press **OK** key to select one and execute the corresponding action.

For simple recordings available options are:

- Delete (if failed recording).
- Stop (if recording is in progress).
  The recording can then be played through the "Manage recordings" menu.
- Cancel (if start time is in the future).
- Modify. Only the duration can be modified in this version.

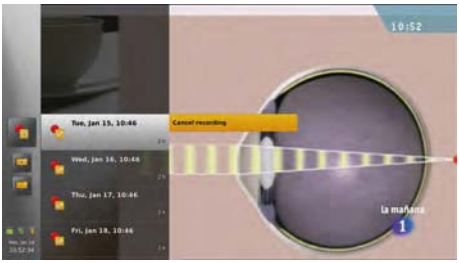



For recurrent recordings templates available options are:

- Stop (if one occurrence of the recurrent recording is in progress).
  This stops the occurrence in progress that can then be played through the "Manage recordings" menu.
- Modify. Only the recording duration can be modified in this version.
- Cancel all occurrences. To remove completely a recurrent recording.

For recurrent recordings occurrences available options are:

- Delete (if failed recording).
- Stop (if recording is in progress).
  The recording can then be played through the "Manage recordings" menu.
- Cancel/restore (if start time is in the future).



### 12.4.2 Manage Recordings

Select "Manage recordings" and press arrow key ▶.

The list of completed recordings (including recordings in progress) is displayed.

For each recording the following information is displayed:

- Channel logo.
- Event name if the recording is on an event or a name with recording start and end time if the recording is based on time.
- A red progress bar if the recording is in progress.

  A orange progress bar, if a playback of the recording is in progress .

  If neither a playback nor the recording is in progress: date, start time and duration of the recording.

  **Note**: *If you do a playback of the recording while the recording is in progress, the orange progress bar is displayed over the red progress bar.*
- Broken recording icon, if the recording is not complete, due to signal loss or power cut during the recording for instance.

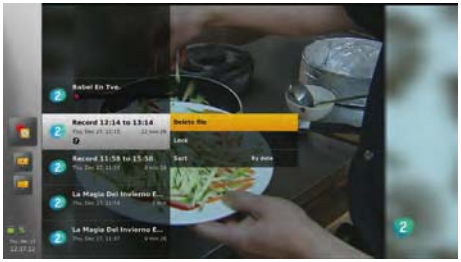
Use arrow keys ▲ and ▼ to move about and select a recording.

Press **OK** key to play the recording.

Press **INFO** key to display additional information on the file, including the broken reason for an incomplete recording and the detailed programme information if available.

**Note**: *Channel name is part of the additional information, in particular when the channel logo is not available (except if the channel is not in "All TV" / "All radio").*

Press **OPT** key to display the options available for the recording. Use arrow keys ▲ and ▼ to navigate among the options and press **OK** key to select one and execute the corresponding action.



Available options are:

- Stop (if recording is in progress).
- Delete (with a confirmation pop-up).
  This option is not available if the recording is in progress or if a playback of the recording is in progress.
- Lock (with a confirmation pop-up) or unlock (with a pop-up requiring to enter a password)
- Sort by recording name, date (default) or channel.
  **Note**: *Change on this option is persistent to standby and power on/off.*

### 12.4.3 Add a schedule

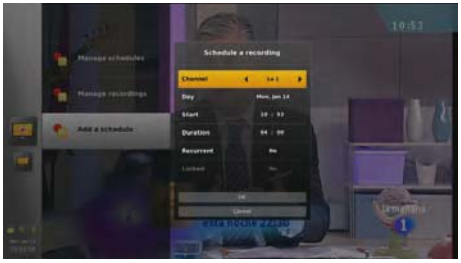
Select "Add a schedule" and press **OK** key.

An input form is then displayed so that you can schedule a recording and define the different parameters of the schedule.

The selected parameter appears highlighted.

Use arrow keys ▲ and ▼ to move about and select another parameter.

For each parameter, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** or arrow keys ▲ and ▼ to confirm one.



Parameters to define a schedule are:

- Channel name. Channels list corresponds to "All TV". You can enter a channel number to browse more rapidly the list.
- Date.
- Time.
- Duration (30 min, 1h, 2h, 3h, 4h, 5h, 6h, 8h or 12h). Default value can be configured in the settings (see "Default recording duration" section).
- If the schedule is recurrent (no, daily, weekly, working days).
- If this recording will be locked (password required to read it) (not available in this version).

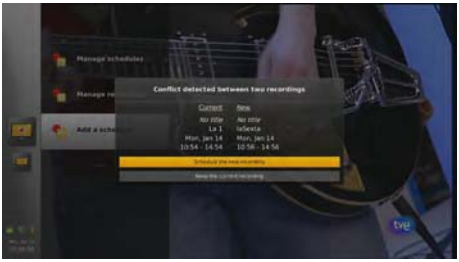
Select "OK" or "Cancel" button to close the input form.

**Note**: *If the recording is scheduled to start in less than 3 minutes, and there is no proper storage device connected, a popup is displayed informing you that the recording will fail if you do not plug in a proper storage device. This popup closes if you press OK key or at the start time of the recording.*

## 12.5 Conflicts

When a conflict is detected, a pop-up is displayed so that you can choose the action to perform to solve the conflict.

You can only record a programme at the same time, but while recording a programme, you can view another one which belongs to the same multiplex.




Possible conflicts are:

- You start/schedule a recording that overlaps with an existing recording.
- You start a recording whereas you are watching a channel on another multiplex (possible only when starting a recording from the channels list or EPG of the main menu). To start the recording a zapping is required.
- A scheduled recording will start in 3 minutes whereas you are watching a channel on another multiplex. To start the recording a zapping is required. You have 30 seconds to make your choice, otherwise the zapping is done automatically and the recording starts. If the channel on which the zapping is done is not in the current favorites list, a switch to "All TV" / "All radio" favorites list is done.
- While a recording is in progress, you perform a zapping on a channel of another multiplex.

In case of conflict between 2 recurrent recordings, the recurrent recording that you do not choose to keep is totally cancelled, even if the frequency of occurrences is different (for instance if a daily recurrent recording is in conflict with a weekly recurrent recording).

## 12.6 Failures Management

If the signal level lowers or disappears during the recording, the signal loss image is displayed and the recording is paused. The recording will resume automatically once the signal returns.

The recording duration is set to the total recording duration, including period of time when the signal was lost. When running a playback of the record, period of time when the signal was lost are jumped.

The recording is tagged as broken.

In case of power cut, ongoing recording is stopped and tagged as broken.

If you go to standby while a recording is in progress, the recording is not stopped. The adapter will only go to low power consumption after the recording completion.

EN

## 13. Media Center

***For this function to be possible a storage device formatted in FAT 32, NTFS or ext3, with the recordings or files on it, must be connected to the adapter.***

The media center allows you:

- to watch video recorded using the adapter or video files in different formats,
- to listen audio files,
- to display image files.

**Note**: *Depending on the type of compression, not all files in the formats above can be played.*

### 13.1 Media selection

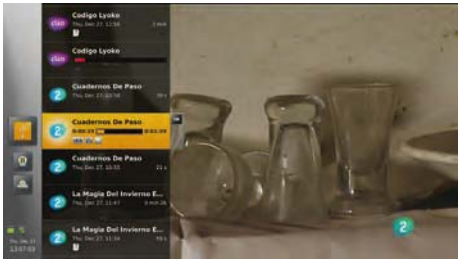
To access a file in the media center:

- Press **MENU** key.
- Select "Media Center" and press arrow key ▶.
- Select the media type (Video, Music or Photo) you want to consult and press arrow key ▶.

- The list of storage devices connected to the adapter is then displayed. The name displayed corresponds to the slot on which the storage device is connected.
  The size of the storage device is displayed in parenthesis.
- Select one using arrow keys ▲ and ▼ and press arrow key ▶.

- The list of files (of the selected media type) on the storage device is then displayed with the same hierarchy of folders than on the drive.

  **Note**: *Files with a container that is not supported, are not displayed.*
- Use arrow keys ▲, ▼, ▶, ◀ to navigate in the files and folders.
- Press **OK** key to play a file.




- Press **INFO** key to display additional information on the file.
  Press **OPT** key to display the options available for the file / folder. Use arrow keys ▲ and ▼ to navigate among the options and press **OK** key to select one and execute the corresponding action.

Available options are:

- Delete the file / folder (with a confirmation pop-up). This option is not available if the file is a recording in progress or if a playback of the file is in progress (applicable for recordings, videos and audio files, but not applicable for photos). Note: If you try to delete a folder that is not empty, the delete will fail.
- For audio files, choose the file as audio background. Hence the audio background option will be available while watching photos. When enabled, the audio background plays in sequence all the audio files in the same folder than the file selected. If a folder is selected instead of a file, the files used are the ones of the folder.
- For picture files, choose the file as background slideshow. Hence the slideshow option will be

available while listening to audio files. When enabled, the slideshow displays in sequence all the picture files in the same folder than the file selected. If a folder is selected instead of a file, the files used are the ones of the folder.

## 13.2 Video Banner

The video banner is the navigation interface you use to navigate and interact with the adapter when watching recordings or video files.

**Note**: *When starting a playback, if the file was partially played previously, a pop-up is displayed to propose to resume the play where it was stopped.*

### 13.2.1 Open / Close

The video banner is displayed in the following cases:

- When playing a recording or a video file from the media center.
- When switching to next or previous recording or video file using **CH+/CH-**.
- When pressing **INFO** key while a recording or video file is being played and the video banner is not displayed.
- When using trick modes.
- When pressing arrow keys ▶ and ◀.

To close the video banner:

- Wait for a few seconds, the banner closes automatically (duration configurable, see "*Banner display duration*" section).
- Press **EXIT** key.
- Press arrow key ▲ and ▼. This closes the banner and opens the main menu on the list of recordings / videos of the current folder.

### 13.2.2 Content

The video banner contains the following information:

- An icon indicating the operation in progress (pause, play, forward, rewind) and the image speed.
- Channel logo for a record.
  For a video, a logo of the video type.
- Recording / video name.
- If the banner corresponds to the recording / video file currently played, then a progress bar with elapsed time and total duration of the recording / video is displayed. If the banner corresponds to another recording / video file than the one currently played (possible by using preview browsing), then instead of the progress bar:
  - Date, start time and duration are displayed for a recording.
  - Size of the file is displayed for a video.
- An icon indicating that shuffle mode is enabled, when this mode is enabled (displayed only if the banner corresponds to the recording / video file currently played).

### 13.2.3 Detailed Information

While the video banner is displayed, press **INFO** key to display additional information on the file.

If the text occupies more than one page, use arrow keys ▲ and ▼ to scroll up and down.

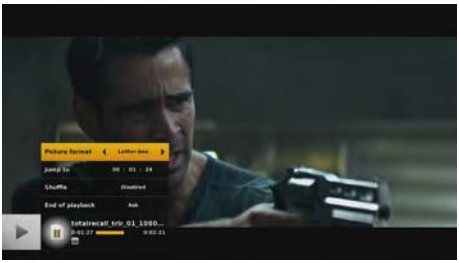
Press **INFO** key again to close the information panel.

### 13.2.4 Options

While watching a recording or a video file, press **OPT** key to display the options available for the current recording / video.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** to select one.



Available options are:

- Audio language (if several languages are available).
- Subtitle language (if subtitles are available).

**Note**: *For audio and subtitles, if an unknown language is available (means with an unknown ISO 639 code), the ISO 639 code is displayed as is. For instance it could be "v.o" or "org", etc...*

- Picture format.

**Note**: *Persistency of options audio language, subtitle language and picture format is limited to the media currently watched.*

- Jump to a particular time.
- Enable / disable (default) shuffle mode.
- Playlist mode that determine the behavior at the end of the playback:
  - "Ask" (default) means that a pop-up is displayed, so that you can choose what to do next.
  - "Next" means that the next file is played.
  - "Repeat" means that the file is played again.
  - "Live" means that you go back to the live.

Press **OPT** key again to close the options panel.

Press **INFO** key to replace the option panel by the detailed information panel.

### 13.2.5 Preview browsing

When watching a recording / video, if you press arrow keys ▶ and ◀, the video banner is displayed and its content is changed to display the information of next or previous recording / video in the current folder on the hard disk.

However, the full screen video does not change. Press **OK** key to launch the playback of the recording / video currently browsed in the video banner.

When the banner is not on the recording / video currently played, if you press **OPT** key and options are available on the file being played, the focus comes back to the recording / video currently played.

### 13.2.6 Trick Modes

While watching a recording / video, press pause key ❚❚ to freeze the image.

To continue watching the recording / video from the same point where it was paused, press play key ▶.

**Note**: *Whatever the watching speed in progress, pressing play key ▶ will always go back to normal speed.*

To navigate the time bar to search for a particular scene:

- For recordings only, when video is playing (at normal speed or more):
  - Use the key ◀◀ for a fast rewind. Each time you press the key, the rewind speed increases in the following sequence: x-1, x-2, x-4, x-8, x-16, x-32, x-MAX (x-64).

    **Note**: *You can fast rewind back to the start point. If you reach the start point while rewinding, the file is automatically played at normal speed from that point.*
  - Use the key ▶▶ for a fast forward. Each time you press the key, the speed increases in the following sequence: x2, x4, x8, x16, x32, xMAX (x64).

    **Note**: *A few seconds before reaching the end of the playback, the speed is automatically switch to normal speed.*
- For recordings only, when video is paused (or in slow motion mode):
  - Use the key ▶▶ for a slow forward. Each time you press the key, the speed increases in the following sequence: x1/8, x1/4, x1/2, x1.

Note: When reaching normal speed (x1 or x-1), you exit the slow motion mode.

- Skip function (jump of 30 seconds) can be activated by:
  - A long press on key ▶▶ or ◀◀. In this case a unique jump forward or backward is done.
  - Using skip keys. In this case a jump is done each time the key is pressed. With video files, as fast forward/ rewind is not available, pressing ▶▶ and ◀◀ keys has the same effect than pressing skip keys.

To watch the programme frame by frame, press pause key ❚❚ successively.

**Note**: *Frame by frame function is only available when pause is done while the video is playing at a speed of x1/8, x1/4, x1/2, x1, x2 or x4.*

**Note**: *For non indexed MPEG TS files, trick modes are limited to speed from 0 (pause) to x4. Frame by frame function is also available; however skip function is not available.*

#### 13.2.7 End of Playback

When you press stop key ■ or when you reach the end of the recording / video and the playlist mode is set to "Ask". The video is frozen and a pop-up is displayed proposing:

- to go back to the recording manager or the media center,
- to go back to live TV,
- to play next file (except if the current file is the last one of the folder),
- to delete the file. Not available if the playback is a playback of a recording in progress.

## 13.3 Audio Banner

The audio banner is the navigation interface you use to navigate and interact with the adapter when listening to audio files.

#### 10.3.1 Open / Close

The audio banner is displayed in the following cases:

- When playing an audio file from the media center.
- When switching to next or previous audio file using **CH+/ CH-**.
- When pressing **INFO** key while an audio file is being played and the audio banner is not displayed.
- When using trick modes.
- When pressing arrow keys ▶ and ◀.

To close the audio banner:

- Wait for a few seconds, the banner closes automatically (duration configurable, see "*Banner display duration*" section).
- Press **EXIT** key.
- Press arrow key ▲ or ▼. This closes the banner and opens the main menu on the list of audio files of the current folder.

#### 10.3.2 Content

The audio banner contains the following information:

- An icon indicating the operation in progress (pause, play, forward, rewind) and the speed.
- A generic audio.
- Song title if available or file name without the extension otherwise.
- If the banner corresponds to the audio file currently played, then a progress bar with elapsed time and total duration of the audio file is displayed. If the banner corresponds to another audio file than the one currently played (possible by using preview browsing), then instead of the progress bar, the artist and album name are displayed if available or the file name otherwise.
- A file number in the folder represented as X/Y, where X is the index of the current file and Y the total number of files in the folder.
- An icon indicating that shuffle mode is enabled, when this mode is enabled (displayed only if the banner corresponds to the audio file currently played).

#### 13.3.3 Detailed Information

While the audio banner is displayed, press **INFO** key to display additional information on the file.

If the text occupies more than one page, use arrow keys ▲ and ▼ to scroll up and down.

Press **INFO** key again to close the information panel.

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### 10.3.4 Options

While listening to an audio file, press OPT key to display the options available for the current audio file.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** to select one.

Available options are:

- Jump to a particular time.
- Enable / disable (default) shuffle mode.
- Playlist mode that determine the behavior at the end of the playback:
  - "Ask" means that a pop-up is displayed, so that you can choose what to do next.
  - "Next" (default) means that the next file is played.
  - "Repeat" means that the file is played again.
  - "Live" means that you go back to the live.
- Enable / disable (default) slideshow. This option is available if a photo or folder has been previously selected as background slideshow (see options on photo files in "*Media Selection*" section). When enabled, the slideshow is played in loop mode.

Press **OPT** key again to close the options panel.

Press **INFO** key to replace the option panel by the detailed information panel.

### 13.3.5 Preview browsing

When listening to an audio file, if you press arrow keys ▶ or ◀, the audio banner is displayed and its content is changed to display the information of next or previous audio file in the current folder on the hard disk.

However, the audio file being played does not change. Press **OK** key to listen to the audio file currently browsed in the audio banner.

When the banner is not on the audio file currently played, if you press **OPT** key and options are available on the file being played, the focus comes back to the audio file currently played.

### 13.3.6 Trick Modes

While listening to an audio file, press pause key ❚❚ to pause the sound.

To continue listening to the audio file from the same point where it was paused, press play key ▶.

To navigate the time bar to search for a particular moment:

- Skip function (jump of 30 seconds) can be activated by:
  - A long press on key ▶▶ or ◀◀. In this case a unique jump forward or backward is done.
  - Using skip keys. In this case a jump is done each time the key is pressed.

### 13.3.7 End of Playback

When you press stop key ■ or when you reach the end of the audio file and the playlist mode is set to "Ask". The sound is cut and a pop-up is displayed proposing:

- to go back to the media center,
- to go back to live TV,
- to play next file (except if the current file is the last one of the folder),
- to delete the file.

## 13.4 Photo Banner

The photo banner is the navigation interface you use to navigate and interact with the adapter when looking at picture files.

### 13.4.1 Open / Close

The photo banner is displayed in the following cases:

- When selecting a photo file from the media center.
- When switching to next or previous photo using **CH+/ CH-**.
- When pressing **INFO** key while a photo is being displayed and the photo banner is not displayed.
- When using trick modes.
- When pressing arrow keys ▶ and ◀.

To close the photo banner:

- Wait for a few seconds, the banner closes automatically (duration configurable, see "*Banner display duration*" section).
- Press **EXIT** key.
- Press arrow key ▲ or ▼. This closes the banner and opens the main menu on the list of photos of the current folder.

### 13.4.2 Content

The photo banner contains the following information:

- An icon indicating the operation in progress: play or pause.
- A thumbnail of the photo.
- Photo name (file name without the extension).
- A file number in the folder represented as X/Y, where X is the index of the current file and Y the total number of files in the folder.
- An icon indicating that shuffle mode is enabled (when this mode is enabled) (displayed only if the banner corresponds to the photo currently displayed).

### 13.4.3 Detailed Information

While the photo banner is displayed, press **INFO** key to display additional information on the file.

If the text occupies more than one page, use arrow keys ▲ and ▼ to scroll up and down.

Press **INFO** key again to close the information panel.

### 13.4.4 Options

While looking at a photo, press **OPT** key to display the options available for the current photo.

The selected option appears highlighted. Use arrow keys ▲ and ▼ to move about and select another option.

For each option, use arrow keys ▶ and ◀ to move about the possible values (current value is highlighted), and press **OK** to select one.

Available options are:

- When slideshow mode is active:
  - Slideshow speed (slow, normal (default), fast).
  - If an information pop-up is displayed (yes by default) at the transition to another photo of the slideshow.

  When the slideshow is not active:
  - Jump to picture file number X in the folder, by entering index value of the photo (X/Y).
- Animation type between 2 photos: Fade in/out (default), bounce, translation from right to left, from left to right, from bottom to top and from top to bottom.
- Enable / disable (default) shuffle mode.
- Perform a rotation: None (default), 90° clockwise, 180° and 90° counter-clockwise. Not available during a zoom.
- Enable / disable (default) audio background. This option is available if an audio file or folder has been previously selected as audio background (see options on audio files in "*Media Selection*" section). When enabled, the audio background is played in loop mode.

Press **OPT** key again to close the options panel.

Press **INFO** key to replace the option panel by the detailed information panel.

### 13.4.5 Zoom

When the photo banner is not displayed, press **OK** key to zoom x2. Press **OK** key again to cycle through the zooming factors (x2, x4, x8, x1, etc…).

**Note**: *If the photo banner is displayed, first **OK** closes the banner.*

When zoom mode is active (means zoom > x1) use arrow keys ▶, ◀, ▼ and ▲ to move the displayed window in the zoomed photo.

A specific banner is displayed when changing the zoom factor or when moving the displayed window in the zoomed photo. This banner displays the zoom factor value and the position of the displayed window in the zoomed photo.

When switching to next or previous photo using **CH+/CH-**, the zoom factor is reset to x1.

#### 13.4.6 Preview browsing

When looking at a photo, if you press arrow keys ▶ or ◀, the photo banner is displayed and its content is changed to display the information of next or previous photo in the current folder on the hard disk.

However, the photo being displayed does not change. Press **OK** key to display the photo currently browsed in the photo banner.

When the banner is not on the photo currently displayed, if you press **OPT** key and options are available on the photo being displayed, the focus comes back to the photo currently displayed.

#### 13.4.7 Trick Modes

While looking at a photo, press play key ▶ to start a slideshow of all pictures in the current folder.

Press pause key ❚❚ to pause the slideshow, and play key ▶ again to continue looking at the slideshow.

#### 13.4.8 End of Playback

When you press stop key ■ a pop-up is displayed proposing:

- to go back to the media center,
- to go back to live TV,
- to play next file (except if the current file is the last one of the folder),
- to delete the file.

## 14. HbbTV CONTENT

**What is HbbTV?**

HbbTV is a technology platform that allows access to on-demand content and interactive services via DTT signal and an Internet connection.

Thus, the user can watch TV programs that have already been issued (Video on Demand) and participate in voting, game shows, access to social networks, etc.

### 14.1 How to access/exit HbbTV

When you change channels, you'll see a logo on the screen indicating that the channel has HbbTV services available.

To access these services, as shown in the logo, press the red button on the remote control unit. This same button is also used to exit the HbbTV content, by pressing it again.

### 14.2 HbbTV navigation

This function depends on the content and design of each TV channel, and it is provided by each operator through the Internet connection.

Use arrow buttons ▲, ▼, ▶, ◀ , **0...9**, to navigate in the menus.

An arrow on the right of an element means this element has a sub-menu.

Final elements (means elements without sub-menu) can be selected by pressing **OK** key.

# 15. SETTINGS

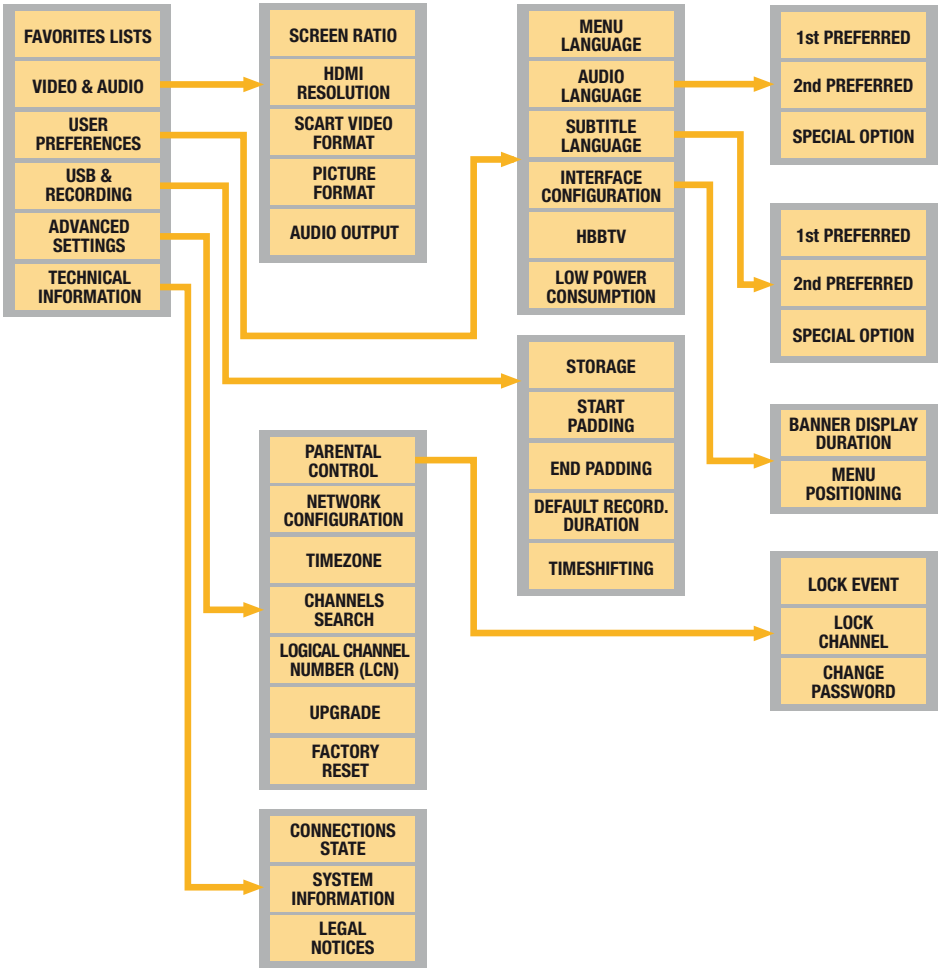
To access the "Settings" menu:

- Press **MENU** key.
- Select "Settings" and press arrow key ▶.



## 15.1 Structure

The following diagram describes the settings menu's structure.



## 15.2 Favorites Lists

This chapter will help you manipulate the favorites lists.

### 15.2.1 List selection

When entering the favorites lists menu in the "Settings" menu, all available favorites lists are displayed:

- "All TV" contains all the TV channels (free to air + scrambled) found during scanning.
- "All radio" contains all the radio channels found during scanning.
- "Favorites A", "Favorites B", "Favorites C", "Favorites D" and "Favorites E" are pre-named favorites that are empty after first time installation.

Mixing TV and radio channels in the same list is not allowed, hence favorites lists A, B, C, D and E are tagged as list of TV channels or list of radio channels. The icon on the left of the list name is different.

After first installation:

- If there are no radio channels available in the service plan, "All radio" list is not available and favorites lists A, B, C, D and E are tagged as TV channels lists.
- If radio channels are available in the service plan, favorites lists A, B and C are tagged as TV channels lists, favorites lists D and E are tagged as radio channels lists.

Below the favorites list name, the number of channels in the list is displayed.

Use arrow keys ▲ and ▼ to navigate among the lists.

If the list with the focus is not the one currently used, press **OK** key to switch to it.

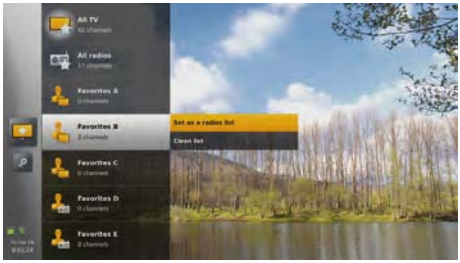
**Note**: *You can also switch off favorites list from the options of the LiveTV banner or the options of the channels list.*

Press **OPT** key to display the options available for a list. Use arrow keys ▲ and ▼ to navigate among the options and press **OK** key to select one and execute the corresponding action.

There are no options available for "All TV" and "All radio" lists.

For favorites lists A to E, available options are:

- Change the type of the list (TV or radio). This action automatically cleans the list of all channels it contains.
- Clean the list. After cleaning a list, if this list is the active one, "All TV" (or "All radio" depending on the list type) becomes automatically the new active list.




Use arrow key ▶ to edit a list. You can then choose between:

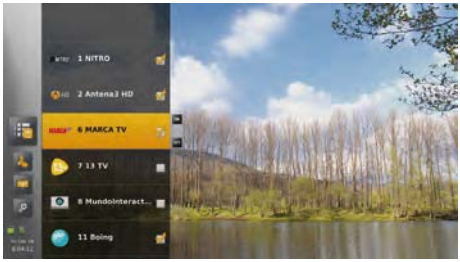
- Adding/removing channels in the list.
- Reordering the list (available only when LCN is OFF).

Use arrow key ▶ to make you choice.

**Note**: *During the edition / reordering of a list, zapping using **CH+/CH-** or ⟳ keys is not allowed.*

### 15.2.2 Add / Remove

If you select the menu to add / remove channels, a list of channels is then displayed.




If the favorites list is "All TV" or "All radio", the list of channels

displayed is the list of channels found during scanning. Channels numbers and positions are the ones at the end of the scanning.

For favorites lists A to E, the list of channels displayed is the one of "All TV" or "All radio", depending of the list type.

To add or remove a channel from the list, select the channel using the arrow keys ▲ and ▼, and press **OK** key to check / uncheck the check-box.

If you remove a channel currently watched:

- If the current favorites list is "All TV" or "All radio", a zapping is done in the next channel of the favorites list.

  **Note**: *To avoid conflicts, if a recording is in progress on a channel of the same multiplex, a zapping is done to the recorded channel instead of the next one.*

- If the current favorites list is a favorites list from A to E, a switch of favorites list is done to "All TV" or "All radio". The channel currently watched remains the same.

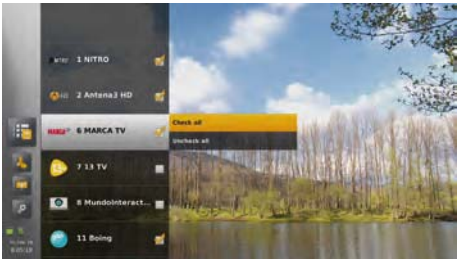
If the current favorites list is a favorites list from A to E, and you remove its last channel, a switch of favorites list is done to "All TV" or "All radio". The channel currently watched remains the same.

**Note**: - *When LCN is OFF, when a channel is removed or added, channels are renumbered automatically.*

Channels number corresponds to the index of the channel in the list. One consequence is that one channel can have different numbers in the different lists. When LCN is ON, when a channel is removed or added, channels are not re-numbered. Channels number always remains at the LCN value.

**Note**: *If you remove a channel from "All TV" or "All radio", this channel is removed from all other lists. A pop-up is displayed to warn you when the channel is in another list. A similar pop-up is displayed if a recording is in progress or scheduled on this channel. If you choose to remove the channel, then recordings in progress or scheduled on this channel are stopped/cancelled.*

Press **OPT** key to display the options available.




Use arrow keys ▲ and ▼ to navigate among the options and press **OK** key to select one and execute the corresponding action.

Available options are:

- Check all channels. Available only if at least one channel in the channel list is not checked.
- Uncheck all channels.

**Note**: *"All TV" list cannot be completely empty. If you uncheck all channels, the channel currently watched remains in the list.*

Same behavior with "All radio" when radio channels are available.

### 15.2.3 Reorder

This menu is available only when Logical Channel Number (LCN) is set to OFF (see "Logical channel number" section).

If you select the menu to reorder channels, the list of "checked" channels of the selected favorites list is then displayed.

To move a channel, use arrow keys ▲ and ▼ to move in the list and press **OK** key to select a channel. The channel is then highlighted.

Once the channel has been highlighted, use arrow keys ▲ and ▼ to move it to the desired position. At each move the channel is switched with the preceding or following one and the channel number is updated.

When the channel is at the desired position, press **OK** key again to save the change and remove the highlight on the channel.

Press arrow key ◀ instead of **OK** to cancel the move.

When exiting the menu (using left arrow ◀, **MENU** or **EXIT** keys), a pop-up is displayed so that you can re-confirm or cancel the changes.

### 15.2.4 Re-scanning

If a scanning is done, all favorites lists are updated:

- If a channel is removed from the service plan, this channel is removed from all lists. If LCN is OFF, channels are renumbered accordingly in all lists.
- If a channel is added to the service plan, then it is added in "All TV" or "All Radio", at the end of the list when LCN is OFF

EN

and at the appropriate position when LCN is ON.

- Favorites lists A to E are not cleaned, and moves done in all lists are not reset.

## 15.3 Video & Audio

This menu allows you to set settings related to video and audio.

Use arrow keys ▲ and ▼ to navigate among the list of settings.

Press arrow key ▶ to access possible values for a setting.

Use arrow keys ▲ and ▼ to navigate among the values and press **OK** to select one.

### 15.3.1 Screen ratio

This setting allows you to select the ratio of the screen. This setting, combined with the picture format setting and the format of the stream played, is used to determine the final output format.

Possible values are: 16/9 (default), 4/3 and 14/9.

### 15.3.2 HDMI resolution

This setting allows you to select the video resolution on the screen connected through HDMI.

Possible values depend on the screen capabilities. "Automatic" (the adapter adapts to the native resolution of the screen automatically) is set by default.

Once a value has been selected, the video output is temporarily modified and a confirmation pop-up is displayed. If you do not confirm the resolution after a few seconds, the previous resolution is re-applied.

### 15.3.3 Scart video format

This setting allows you to select the video output format for the Scart connection.

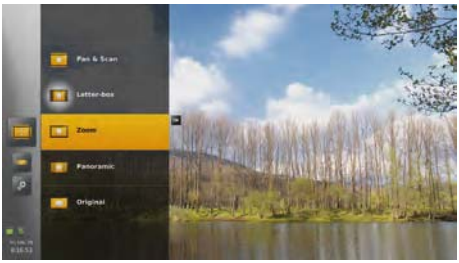
When the connection is made using a Scart cable, the adapter can supply RGB or CVBS signals. By default, the adapter is already configured to supply the CVBS signal, as some TVs do not support the RGB output.

However, for optimum image quality, it is recommended to select the RGB option Possible values are: CVBS (default) and RGB.

**Note**: *Scart resolution is always set to 720x576i.*

### 15.3.4 Picture format

In combination with the screen ratio, this setting determines the final video output format.




Effects of possible values depend on the screen ratio and format of the stream played:

- Letter-box = Preserve the video aspect and add black borders on top and bottom or on left and right sides, if needed.
- Pan & Scan = Preserve the video aspect and cut the video on left and right sides or on top and bottom, if needed.
- Zoom = Combination of letter-box and pan & scan.
- Panoramic = Letter-box if the format of the stream is larger than the screen ratio. If the screen ratio is larger than the format of the stream, then a horizontal non linear stretching is applied.
- Original (default) = Horizontal narrowing or stretching to fit the screen.

**Note**: *If the screen ratio and the format of the stream are the same, then this parameter has no impact.*

**Note**: *Icons are the same whatever the screen ratio, and represent the case "screen ratio is larger than the format of the stream".*

#### 15.3.5 Audio output

This setting allows you to select the audio output used.

Possible values are: HDMI (default) and S/PDIF.

## 15.4 User preferences

This menu allows you to personalize some functions of your adapter.

Use arrow keys ▲ and ▼ to navigate among the menu elements.

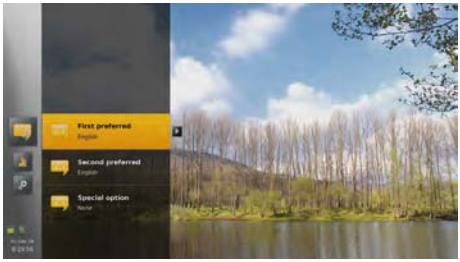
Press arrow key ▶ to access possible values for an element.

Use arrow keys ▲ and ▼ to navigate among the values and press **OK** to select one.

#### 15.4.1 Menu language

This setting allows you to select the language of the adapter interface and event information.

Possible values are: English, French, Spanish, Italian, Polish, German, Portuguese and Russian.




#### 15.4.2 Audio language

The audio language sub-menu allows you to access settings for first preferred audio language, second preferred audio language and special option for audio.

##### *15.4.2.1 First preferred audio language*

This setting allows you to select which audio track will be used by default on a multi-track channel.

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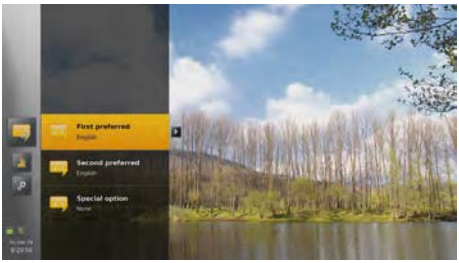



Possible values are: English, French, Spanish, Italian, Polish, German, Portuguese and Russian, plus regional languages of the country, selected during first time installation, if available, for example Catalan, Basque and Galician for Spain.

Changes will be taken into account at next zapping.

#### *15.4.2.2 Second preferred audio language*

This setting allows you to select which audio track will be used by default on a multi-track channel, if the first preferred audio language is not present (typically used for regional languages).

Available languages are the same than for first preferred audio language.

#### *15.4.2.3 Special option*

This setting allows you to select which audio type will be used by default on a multi-track channel.

Possible values are: None (default) and audio description for visual impaired.

**Note**: *The track selection in a multi-track channel is done in the following priority order*:

1) Track with 1st preferred audio language + special option.
2) Track with 2nd preferred audio language + special option.
3) Track with 1st preferred audio language.
4) Track with 2nd preferred audio language.
5) First track.

### 15.4.3 Subtitle language

The subtitle language sub-menu allows you to access settings for first preferred subtitle language, second preferred subtitle language and special option for subtitles.

#### *15.4.3.1 First preferred subtitle language*

This setting allows you to select which subtitle track will be used by default.

Possible values are: None (default), English, French, Spanish, Italian, Polish, German, Portuguese and Russian, plus regional languages of the country, selected during first time installation, if available.

Changes will be taken into account at next zapping.

#### *15.4.3.2 Second preferred subtitle language*

This setting allows you to select which subtitle track will be used by default if the first preferred subtitle language is not present (typically used for regional languages).

Available languages are the same than for first preferred subtitle language.

#### *15.4.3.3 Special option*

This setting allows you to select which type of subtitle will be used by default.

Possible values are: None (default) and hard of hearing.

**Note**: *The track selection in a multi-track channel is done in the following priority order*:

1) Track with 1st preferred subtitle language + special option.

2) Track with 2nd preferred subtitle language + special option.

3) Track with 1st preferred subtitle language.

4) Track with 2nd preferred subtitle language.

5) First track.

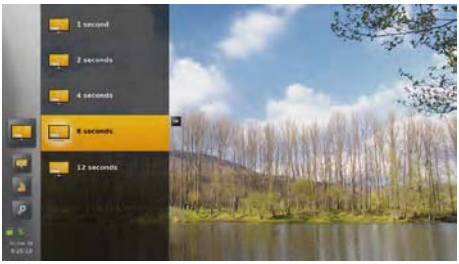
### 15.4.4 Interface configuration

The interface configuration sub-menu allows you to access banner display duration and menu positioning settings.

#### *11.4.4.1 Banner display duration*

This setting allows you to set the duration after which banners (LiveTV, video, audio or photo) are closed automatically without user's interaction.

Possible values are: 1s, 2s, 4s, 8s (default) and 12s.



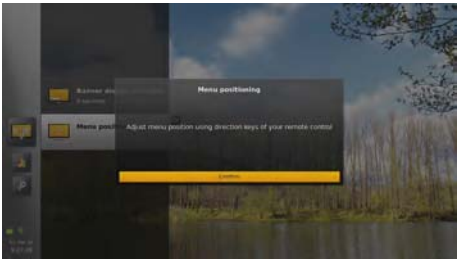

#### *15.4.4.2 Menu positioning*

This setting is used to fine-tune the position of the main menu on the screen.

When the focus is on this setting, press **OK** key. A pop-up is then displayed.

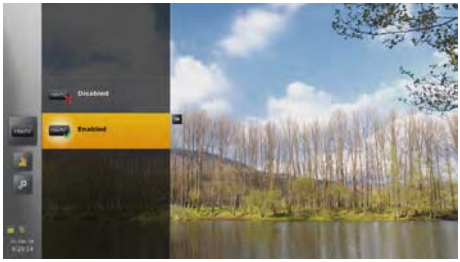
Use arrow keys ▶, ◀, ▼ and ▲ to adjust the position of the menu and press **OK** key to confirm the new position.

The positioning area is limited to ± 90 pixels compared to the factory position.



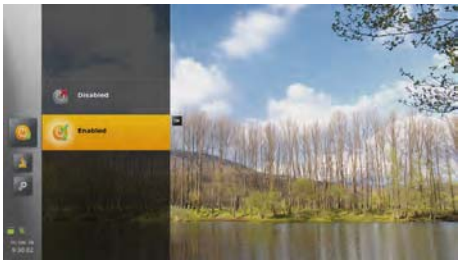

### 15.4.5 HbbTV

This setting allows you to enable (default) or disable the HbbTV function.




### 15.4.6 Low power consumption

This setting allows you to enable (default) or disable the low power consumption function.

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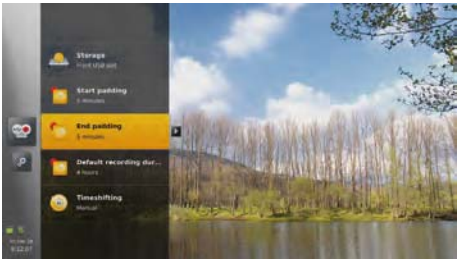
## 15.5 Storage & Recording

This menu allows you to manage settings related to storage devices and recordings.



Use arrow keys ▲ and ▼ to navigate among the menu elements.

Press arrow key ▶ to access possible values for an element.

Use arrow keys ▲ and ▼ to navigate among the values and press **OK** to select one.

### 15.5.1 Storage

The storage sub-menu is used to get information and do operations on storage devices. It contains the list of storage slots available on the adapter.

Use arrow keys ▲ and ▼ to navigate among the list of storage slots.

If the storage slot is connected to a storage device, the following information is displayed:

- The name of the storage slot with the total size of the connected storage device.
- A progress bar indicating the percentage of space used on the storage device, with the exact percentage value.
- If this slot is the default one. The default slot is the one used for recording in case several storage devices are connected.

  In addition, the default slot is the one used for timeshiting. **If there is no device connected to this slot, timeshifting function is not available**.

Press **OPT** key to display the options available for a connected slot.

Use arrow keys ▲ and ▼ to navigate among the options and press **OK** key to select one and execute the corresponding action.

Available options are:

- Set the slot as default one (if this slot is not already the default one). This change is taken into account at next recording start or at timeshifting buffer reset.
  After a factory reset, or when the adapter is used for the first time, the internal disk is set as default. If there is no internal disk on the adapter, the first front USB slot is set as default.
- Safely remove the storage device (if a storage device is connected to the slot). This closes all accesses to the storage device, so that you can unplug it without risk of data corruption. If a recording, timeshifting, or reading of media is in progress on this storage device, a pop-up is displayed so that you can choose between going on the action, and hence stop the recording, timeshifting, , or reading of media, or cancel the action.
  If you confirm the action while a reading of media is in progress, a zapping is done to the live.
  An information pop-up is displayed when all the accesses are closed and the storage device can be unplugged safely.
- Format the storage device (if a storage device is connected to the slot). If you execute this action, a first pop-up is displayed asking for a password. If the password is correct, a second pop-up is displayed asking you to confirm the formatting.
  If you confirm, a progression pop-up is displayed, that closes automatically at the end of the formatting and is replaced by a confirmation popup.
  **Note**: *If a recording is in progress on the storage device, an additional confirmation popup is displayed before starting formatting.*

  The storage device is formatted in ext3 format. This format is more robust (than FAT32 or NTFS formats) to storage device pull out, but requires the installation of an ext3 reader to be readable on Windows platforms.

  **Note**: *No action is allowed during the formatting.*

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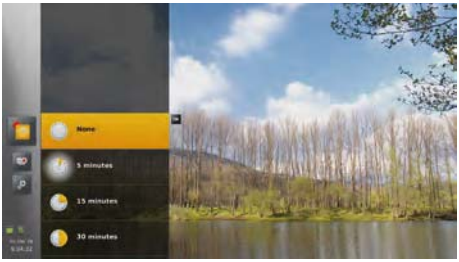
### 15.5.2 Start padding

This setting allows you to set the duration of the margin used before a schedule's start date.




Possible values are: None, 15min (default), 30min, 1h and 2h.

A scheduled recording (based on time or by event) starts at the planned time minus the start padding.

If 2 recordings have their paddings that overlap, the padding added (at the end for one recording and at the beginning for the other one) will be half of the available time between the recordings.

If there is no time available between 2 recordings, padding will be set to 0.

**Note**: *The start padding is automatically set to 0 if the recording is scheduled during the padding timeframe. For instance, if the start padding is set to 15 minutes and the recording is scheduled to start in 10 minutes, then the start padding is automatically set to 0 for this recording.*

### 15.5.3 End padding

This setting allows you to set the duration of the margin used after a schedule's end date.

Possible values are: None, 15min (default), 30min, 1h and 2h.

A scheduled recording (based on time or by event) stops at the planned time plus the end padding.

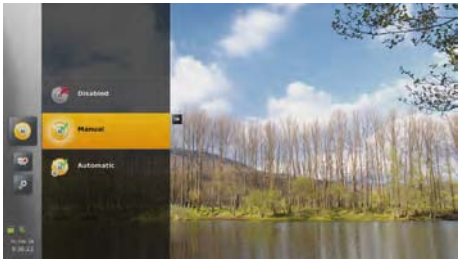
### 15.5.4 Default recording duration

This setting allows you to set the default duration for recordings based on time.

Possible values are: 30min, 1h, 2h and 4h (default).

### 15.5.5 Timeshifting

This setting allows you to set the timeshifting mode used.




Possible values are:

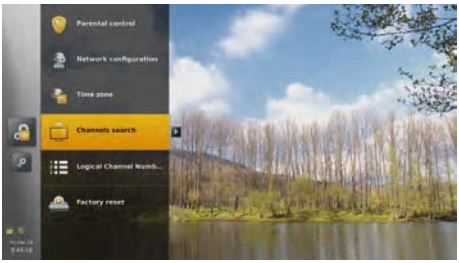
- Disabled: timeshifting function is not available.
- Manual (default): buffering starts only when you press pause key ⏸.
  Going back to live resets the timeshifting buffer.
- Automatic: the programme is automatically buffered (temporarily) on the storage device as soon as you zap onto the channel.

## 15.6 Advanced Settings

This menu is protected by a password.

Once entered, use arrow keys ▲ and ▼ to navigate among the menu elements.

Press arrow key ▶ to access to the screen related to an element.




### 15.6.1 Parental control

The parental control sub-menu allows you to access lock event and lock channel settings and to change the adapter's password.

In case of locked channel, event or recording, the following pop-up is displayed, audio and video are cut.

Use the numeric keys of the remote control to enter the password. Use left arrow ◀ key to remove last digit entered.

If you enter the correct password, the pop-up closes and audio and video are resumed.

The pop-up can be closed using the **EXIT** key. In this case a new unlock option is then available in the LiveTV or video banner, to display this pop-up again.

**Note**: *If a transition from a locked to a not locked event occurs while the pop-up is displayed, the pop-up is automatically closed and video and audio are resumed.*

#### *15.6.1.1 Lock event*

This setting allows you to select the limit over which an event will be locked.

When a programme is transmitted with the age classification information, the adapter requests the password if the programme surpasses the selected limitation.

Possible values depend on the country selected during first time installation:

- For France: None, -10, -12, -16 and -18 years old.
- For Spain and Italy: None, -7, -13 and -18 years old.
- For Portugal: None, -7, -10, -12 and -16 years old.
- For the other countries: None and from -7 to -18 years old.

**Note**: *In a stream, several age classification information can be transmitted (one per country). If during the first time installation, you have selected the country "Other", the most restrictive age classification of the stream is used.*

**Note**: *A recording (or the timeshifting buffer) can contain several events with different age classification. During the playback, the most restrictive age classification encountered in this recording (or the timeshifting buffer) applies.*

Use arrow keys ▲ and ▼ to navigate among the values and press **OK** to select one.

#### *15.6.1.2 Lock channel*

This setting allows you lock/unlock channels.

When a channel is locked, a password is requested to watch it when you zap on it.

**Note**: *The password is not required if you switch to timeshifting mode.*

Use arrow keys ▲ and ▼ to navigate among the channels and press **OK** to lock/unlock one.

Locked channels are represented with a padlock.

A recording done on a locked channel is automatically locked.

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#### *15.6.1.3 Change password*

**Note**: *Default password is "**1 2 3 4**".*

This screen allows you to change the password value. The same unique password of 4 digits is used for all protected actions with the adapter interface.

Use the numeric keys of the remote control to set the value. Use left arrow ◀ key to remove last digit entered.

Once you have entered the new password in the first edition box, the focus is automatically set to the second edition box to enter it a second time.

In case of error or invalid value ("0000" for instance) you can choose to try again or to cancel.

In case of success, a message is displayed indicating that the password was changed with success, and you can go back to the previous menu using the "Close" button or the left arrow ◀ key.

**Note**: *When both edition boxes are empty, pressing left arrow ◀ key goes back to previous menu.*

**Note**: *As long as the password was not entered twice, you can cancel the change by selecting the "Cancel" button.*

### 15.6.2 Network configuration

This screen allows you to configure your internet connection.

The screen is a form made of the following elements:

- A check box. Check it (using **OK** key) to specify that you want to use DHCP (default). In this case, the other fields (IP, Mask, Gateway and DNS) are not accessible anymore.
- 4 numeric fields IP, Mask, Gateway and DNS. Use arrow keys ▶, ◀, ▼ and ▲ to navigate in the fields and the numeric keys of the remote control to set the values. While setting a value, use left arrow ◀ key to remove last digit entered, use arrow keys ▶, ▼ and ▲ or **OK** key to validate a value.

Use arrow keys ▲ and ▼ to move among the different elements of the form, then confirm or cancel your changes by pressing **OK** key on "Cancel" or "Confirm" buttons.

If the form is empty, by default the focus is positioned on the check box. Otherwise it is on the "Cancel" button.

When the focus is on the check box, on the "Cancel" or "Confirm" buttons, or on the numeric fields when they are all empty, use left arrow ◀ key to go back to previous menu without changes.

If DHCP is selected when you confirm, in case of success, the fields IP, Mask, Gateway and DNS are updated with the values allocated to the adapter, and you can go back to the previous menu using the "Close" button or the left arrow ◀ key.

If DHCP is not selected when you confirm, in case of success, you go back automatically to the previous menu.

**Note**: *This setting is not impacted by a factory reset.*

### 15.6.3 Time zone

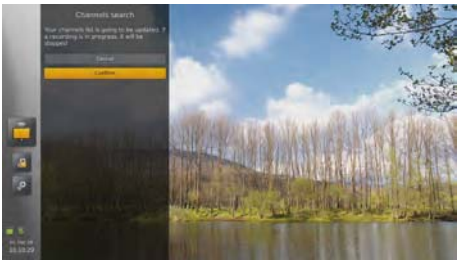
This setting allows you to change the time zone specified during first time installation.

Possible values are from GMT -12 to GMT +14. By default the focus is on the offset corresponding to the current date.

### 15.6.4 Channels search

Through this menu, you can execute a new scanning.

The sequence of screens (and the associated actions) is similar to one displayed during the first time installation (see "*Installation Wizard*" section).



In addition, once you have chosen the scanning filters, an additional confirmation screen is displayed.

This screen is made of 2 buttons:

- "Cancel" to cancel the scanning and keep your current service plan (button selected by default when entering the form).
- "Confirm", to confirm the scanning.

Use arrow keys ▲ and ▼ to choose a button and press **OK** to select it and execute the corresponding action.

Use left arrow ◀ key to go back to previous screen.

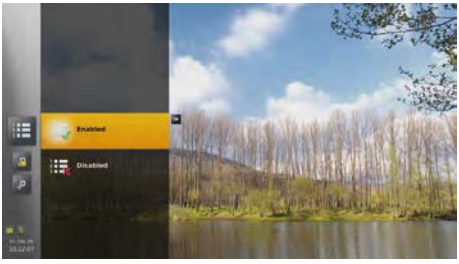
Once confirmed, the scanning starts as described in the scanning phase of the Installation Wizard section.

During this new scanning, the service plan is updated, but customizations that you did on favorites lists (see "*Favorites lists*" section) or locked channels are not lost.

**Note**: *Before starting a scanning, recordings in progress are stopped. In addition, a scheduled recording planned to start during the scanning, will fail.*

### 15.6.5 Logical channel number

This setting allows you to enable or disable the logical channel number (LCN).



LCN is enabled by default for the countries that support it, namely: France, Italy, Portugal, UK and Poland.

Channels are numbered and ordered according to the LCN.

For Germany, Spain, Russia and the country "Other" LCN is not available and hence always disabled.

Channels are numbered incrementally and ordered by order of discovery during the scanning.

If you disable the LCN for a country that supports the LCN, channels are renumbered incrementally. Their order does not change.

### 15.6.6 Upgrade

This menu is only displayed when a software upgrade, to a higher version than the one currently installed on the adapter, is available (on a connected USB device or through IP, see "*Software Ugrade*" section).

This screen is made of 2 buttons:

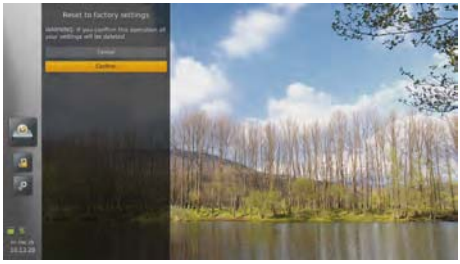
- "Confirm", to confirm the upgrade.
- "Cancel" to cancel the upgrade (button selected by default when entering the form).

Use arrow keys ▲ and ▼ to choose a button and press **OK** to select one and execute the corresponding action.

Use left arrow ◀ key to go back to previous menu (equivalent to selecting "Cancel" button).

### 15.6.7 Factory reset

This screen allows you to reset the settings to default factory values. This action also clears the favorite lists and cancels all schedules.



It is made of 2 buttons:

- "Confirm", to confirm the reset.
- "Cancel" to cancel the reset (button selected by default when entering the form).

Use arrow keys ▲ and ▼ to choose a button and press **OK** to select one and execute the corresponding action.

Use left arrow ◀ key to go back to previous menu (equivalent to selecting "Cancel" button).

Once confirmed, the adapter reboots and the first time installation procedure starts (see *"Installation Wizard"* section).

## 15.7 Technical Information

This menu allows viewing information on the adapter.

Use arrow keys ▲ and ▼ to navigate among the menu elements.

Press arrow key ▶ to access the information associated to an element.

### 15.7.1 Connections state

This information panel summarizes the state of the broadcast (terrestrial) and broadband (internet) connections.

For the terrestrial connection, a bar graph represents the signal strength, with a percentage value.

The color represents the signal quality (green = good, orange = medium, red = bad).

Below the bar graph, the name of the current channel is displayed.

For the internet connection, the connection state is represented by a bar graph and a text. There are 3 possible states:

- Error: Broadband link is down. Any feature involving broadband access will fail.
- Limited: Broadband link is up, but either the bandwidth is low or high level protocol are unavailable. Some features involving broadband access may fail.
- Connected: Broadband link is up. All features involving broadband access are available.

**Note**: *The internet connection state is also displayed in the notification area of the main menu (see "Main Menu" section).*

### 15.7.2 System information

This information panel displays versions of the hardware and software components of the adapter: Manufacturer, hardware model, hardware revision, bootloader version, loader version, kernel version, firmware version, interface version, MAC address and serial number.

### 15.7.3 Legal notices

This information panel gives an URL to the legal information related to licenses and third party software used by the adapter.

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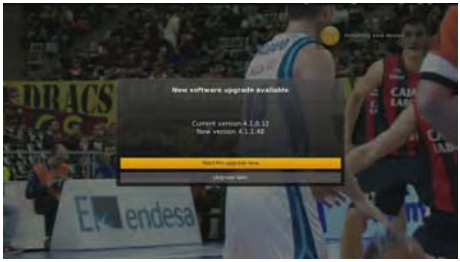
# 16. Software Ugrade

## 16.1 Through USB

To upgrade the adapter, copy the new software version on a USB key (formatted in FAT32, NTFS or ext3) and plug it in one USB slot of the adapter.

A notification pop-up is displayed after a few seconds, so that you can start the upgrade.

Select "Upgrade now" to start the upgrade.



If you do not want to do the upgrade now, select "Upgrade later" or wait for the pop-up to close automatically after a few seconds.

In this case, an icon is displayed in the notification area of the main menu, indicating that a new version is available for installation. This icon remains displayed as long as the upgrade is not done and the USB key remains plugged.

The upgrade can be started at any time through the advanced settings (see "*Upgrade*" section).

**Note**: *If several upgrades are available, only the most recent one will be proposed.*

## 16.2 Through IP

An upgrade can also be available on a remote IP server.

The adapter checks the availability of such an upgrade 5 minutes after power on or when going out of low power consumption, and then every 12 hours.

When an upgrade is available (corresponding to the hardware model and the firmware version), as in the USB key case, a popup is displayed so that you can chose to start the upgrade now or later.

When you start an upgrade through IP, first the loader is downloaded with HTTP and flashed in the adapter. Then the firmware is downloaded and installed.

**Note**: *HTTP download can take several minutes depending on the bandwidth available on your internet access.*

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# Appendix A. Operating instructions for Remote Control Unit

## A. General Description

The remote has a RC5 STB level with a set of punch-through key using a TV database.

- **TV Database**

The TV Database contains the following functions:

- Standby (TV- POWER)
- AV
- Volume +/-
- Mute
- Cursor navigation + OK (only in AV menu)

After pressing key, the navigation keys ▲ / ▼ / ◀ and ▶ (cursor) and **OK** are activated and will send also TV commands. The "AV mode" is signalized by LED flashes. This mode will be exit after 3 sec. of inactivity, after pressing **OK** (to confirm the item chosen with the cursor keys) or any other key.

- **Programming Mode**

To enter programming mode, press together and keys for 5 sec., until the TV LED lights twice.

The programmed code is retained during batteries change.

## B. Easy programming for the control of your TV SET

1. Insert 2 new 3 V batteries of type "AAA".
2. Switch ON your TV SET.
3. In the enclosed code list, find your TV brand or manufacturer (e.g. Sony).
4. Beside the manufacturer's name, you will find one or more 3-digit codes. These codes must be entered into the remote to enable it to work with your particular TV SET.
5. Enter the programming mode.
6. After seeing the 2 flashes and within 5 seconds, enter the 3-digit numerical code from the list.
7. After entering the code, the TV LED will flash twice indicating that the code has been accepted, or will light for 2 sec. in the case of a typing error.
8. Point the remote control towards your TV and press the key. If your TV does not respond by going into Stand-By mode then repeat steps 3 to 8 and enter the next code in the list.
9. If your TV goes into Stand-By mode when the key is pressed, then your remote control has found a compatible code. Next test all of the other function buttons. If certain functions are not working correctly then restart the process moving on to the next code number as this may well improve the situation.
10. If the codes in the list fail to operate your TV then next move on to the automatic brand search function (see below).

## C. Brand search

If programming using the codes in the enclosed list failed to work, then you can try the brand code scan.

1. Ensure that the remote control is equipped with 2 new batteries (see step one of easy programming procedure).
2. Switch ON your TV SET.
3. Enter the programming mode.
4. After the 2 flashes enter the 3-digit code of the brand/ manufacturer. After entering the code the LED will flash twice indicating that the code has been accepted.
5. Press and hold the key until your TV switches off.

   During the brand code scanning you can release the key and test other functions. If no key is pressed within 10 sec. then the brand search will be quitted and the remote returns to the normal mode, signalising it by a 2 sec. long lighting of the red LED.

   If your TV switches into Stand-By mode during the automatic process, then immediately remove your finger from the key and press the **OK** key to memorize the found table. The TV LED will flash twice to signalise that the code has been stored.
6. In some cases, during the brand search, the remote control might find several codes that appear to operate your TV etc; however, some of the buttons will fail to work properly. In this case the remote has found only a partially compatible code and you will need to restart the brand search process (steps 2. to 6.) until a better code is found.

   Please note that once the brand search is restarted, the remote continues from the last saved code.

After all saved codes have been scanned, the LED flashes 5 times and the brand search quits.

### D. 0 0 1 - All Code scan

If programming using the codes in the enclosed list and the brand search failed to work then you must next try the automatic all code scan.

1. Ensure that the remote control is equipped with 2 new batteries (see step one of easy programming procedure).
2. Switch ON your TV SET.
3. Enter the programming mode.
4. After seeing the 2 flashes and within 5 seconds, enter the code **0 0 1**. After entering the code the LED will flash twice indicating that the code has been accepted.
5. Press and hold the ⏻ key until your TV switches off.

   Please note that this process might take up to 10 minutes. During the automatic scanning you can release the ⏻ key and test other functions. If no key is pressed within 10 sec. then the automatic code scan will be quitted and the remote returns to the normal mode, signalising it by a 2 sec. long lighting of the red LED.

   If your TV switches into Stand-By mode during the automatic process, then immediately remove your finger from the ⏻ key and press the **OK** key to memorize the found table. The red LED will flash twice to signalise that the code has been stored.
6. In some cases, during the automatic scanning search, the remote control might find several codes that appear to operate your TV etc, however, some of the buttons will fail to work properly. In this case the remote has found only a partially compatible code and you will need to restart the automatic scanning process (steps 2. to 5.) until a better code is found.

   Please note that once the automatic process is restarted, the remote continues from the last saved code and not at the beginning of code database.

After all saved codes have been scanned, the LED flashes 5 times and the automatic code scan quits.

**Note**: *In Step 5: During the whole code scan procedure you can press the ▼ key up to 5 times in order to select previous codes. This can be helpful if you have pressed the ⏻ key by mistake or too long. Press the ▲ key to search forwards again.*

### E. 0 0 2 - Querying the stored 3-digit code

1. Enter the programming mode.
2. Using the number keys enter the 3-digit query code **0 0 2**. The TV LED will flash twice to confirm the entered code.
3. To query the currently saved code, press "**1**" for first digit, "**2**" for second digit and "**3**" for third digit.

   After each digit key has been pressed, count the number of times the LED flashes. You can repeat the reading by pressing "**1**", "**2**", or "**3**" until you are sure that you have the correct code written down.

**Note**: *If the LED does not flash, the respective code digit is* **0**.

Example:

- Press key for hundreds. The LED flashes three times. The first digit of your 3-digit code is thus 3.
- Press key for tens. The LED flashes once. The second digit of your 3-digit code is thus 1.
- Press key for units. The LED flashes six times. The last digit of your 3-digit code is thus 6.

In this example, the code is thus 316.

The programmed code will be retained during batteries change.

### F. 0 0 0 - Reset the RC

1. Enter the programming mode.
4. Using the number keys enter the 3-digit code **0 0 0**. The LED will flash twice to confirm the entered code.

The RC returns to the default settings (TV not programmed).

# Appendix B. TV brand codes

| Brand | Code |
|---|---|
| A.R.Systems | 264, 270, 426, 430, 505, 523, 917 |
| Acer | 467, 871 |
| Action | 137, 265, 426, 765 |
| Ad notam | 936, 937 |
| Admiral | 137, 180, 270, 426, 903 |
| Advent | 331, 860 |
| Adyson | 277, 426 |
| Aeg | 395, 438, 482, 484, 485, 486, 502, 503, 516, 526, 531, 533, 887 |
| Agath | 654 |
| AgfaPhoto | 638, 723 |
| Airis | 616, 733, 779, 788, 831 |
| Aiwa | 152, 425, 426, 554, 562, 877 |
| Akai | 137, 370, 372, 383, 409, 418, 423, 424, 425, 426, 430, 438, 466, 467, 468, 482, 484, 489, 494, 596, 700, 717, 721, 763, 801, 927 |
| Akira | 425, 809, 810, 879 |
| Akura | 137, 270, 426, 466, 482 |
| Alba | 142, 270, 318, 320, 397, 418, 423, 424, 426, 431, 759, 824, 858, 890, 903 |
| Albiral | 426, 906 |
| Allstar | 426, 505 |
| Alphatronics | 601 |
| Alphatronik | 681 |
| Altek | 810 |
| Altus | 401, 438, 482, 483, 484, 518, 896 |
| Amoi | 845 |
| Amstrad | 137, 365, 628, 912 |
| Andersson | 468 |
| Anitech | 137, 270, 277, 426, 430, 505 |
| Aoc | 426, 798 |
| Apro | 786 |
| Arc En Ciel | 922, 926 |
| Arcelik | 401, 438, 482, 484, 488, 501, 896 |
| Arctic | 438, 482, 484 |
| Arena | 418, 438, 466, 482, 484 |
| Aristona | 395, 422, 426, 430, 456 |
| Arthur-Martin | 502, 503, 526, 531 |
| Astra | 137, 426, 438, 482, 484 |
| Atec | 329 |
| Audiosonic | 137, 270, 401, 425, 426, 438, 482, 483, 484 |
| Aver Media | 812 |
| Bang & Olufsen | 425, 426, 565 |
| Basic Line | 140, 418, 423, 424, 426, 466, 482, 484, 485, 486, 689, 887, 890 |
| Bauer | 180, 272, 426, 929 |
| Baur | 137, 365, 425, 426, 430, 439, 487, 550, 561, 562, 695, 709 |
| Baysonic | 270 |
| Beaulieu | 426 |
| Beko | 398, 401, 418, 438, 442, 482, 483, 484, 486, 488, 489, 501, 502, 508, 512, 518, 725, 767, 768, 890, 893, 896, 927 |
| Belson | 396, 432, 466, 567, 599, 611, 644, 658, 721, 729, 772, 784, 810, 844, 862, 887 |
| Benq | 771 |
| Bestar | 137, 426 |
| Blaupunkt | 142, 426, 430, 459, 502, 503, 526, 531, 775, 922, 926, 929 |
| Blue Sky | 142, 357, 397, 418, 423, 424, 426, 432, 438, 444, 466, 468, 482, 484, 485, 486, 488, 516, 533, 779, 847, 887, 890, 896 |
| Blusens | 603, 604, 631, 633, 635, 636, 637, 666, 667, 668, 672, 680, 783, 854 |
| Bosch | 426, 503, 526, 531 |
| Boxford | 495, 500, 836 |
| Brandt | 180, 357, 397, 425, 439, 466, 482, 518, 800, 922, 926, 927, 931, 932 |
| Brandt Electronique | 922, 926, 931, 932 |
| Braun | 439, 493, 930 |
| Brionvega | 425, 426, 525, 909 |
| Brother | 270 |
| Bruder | 530 |
| Bush | 142, 261, 266, 270, 320, 395, 398, 401, 418, 423, 424, 426, 431, 437, 438, 482, 484, 488, 824, 890, 896 |
| Campomatic | 706 |
| Canon | 426 |
| Caratec | 725 |
| Casio | 448, 505, 660 |
| Centrum | 401 |
| Cge | 137, 903 |
| Changhong | 699, 710, 779 |
| Charisma | 575 |
| Charpy | 739 |
| Cie | 137, 140, 628 |
| Cinex | 485, 486, 516, 533 |
| Clarivox | 426, 894, 899, 919 |
| Clatronic | 137, 426, 438, 482, 483, 484, 903 |
| Claud | 425 |
| CMX/ Commax | 608, 656, 777, 780, 781, 807 |
| Combi | 616 |
| Computec | 509 |
| Condor | 137, 426, 505, 903 |
| Conia | 482 |
| Conic | 426, 765 |
| Conrac | 896, 897 |
| Constructa | 430 |
| Contec | 137 |
| Continental | 142, 438, 482, 484 |
| Continental Edison | 142, 922, 926, 931 |
| Crosley | 426, 765 |
| Crosswood | 418, 423, 424, 438, 482, 484, 518 |
| Crown | 137, 180, 401, 425, 426, 438, 444, 482, 484, 488, 508, 739, 779, 896, 906 |
| Curtis | 265, 426, 524, 690, 709, 903 |
| Cybercom | 401 |
| Cyberpix | 466 |
| Daewoo | 137, 140, 146, 147, 148, 150, 151, 152, 153, 395, 401, 426, 431, 434, 448, 482, 484, 501, 505, 786, 863, 940 |
| Dalco | 879, 880 |
| Dangaard | 629, 630, 638, 672, 673, 721, 810, 816 |
| Dantax | 397, 401, 438, 454, 482, 484 |
| Davis | 425 |
| Daytek | 865 |
| Dce | 418, 423, 424, 426, 438, 482, 484 |
| Decca | 426, 452, 516, 533, 911 |
| Dell | 883 |
| Denon | 158, 562, 743, 753, 872 |
| Denver | 137, 614, 630, 669, 674, 801 |
| Diboss | 504, 509 |
| Digihome | 397, 466 |
| Digiline | 430, 890 |
| Digiloc | 609, 710 |
| Digital | 401, 482 |
| Digital+ | 401 |
| Digitech | 365, 418 |
| DLD | 738 |
| Dmtech | 397, 418, 423, 424, 466, 467, 470, 529, 624, 821 |
| DQT | 643, 885 |
| Dual | 137, 365, 401, 425, 426, 431, 438, 440, 442, 444, 445, 455, 466, 482, 488, 824 |
| Dumont | 903, 905 |
| Durabrand | 401, 418, 438, 466, 482, 484 ,488 |
| Dynatron | 832 |
| DYNEX | 838, 839 |
| Easy touch | 788 |
| Ecron | 418, 423, 424, 444, 482 |
| Elbe | 397, 401, 418, 423, 424, 426 ,430, 438, 466, 482, 485, 486, 501, 509, 516, 605, 618, 779, 835, 840, 865, 907 |
| Elbit | 426, 447, 450 |
| Electric Mirror | 859 |
| Electrohome | 466, 690, 765 |
| Elekta | 137, 270, 401 |
| Elektronika | 426, 442 |
| Elemis | 418, 466, 516, 533 |
| Elfunk | 397, 418 |
| Elin | 137, 426, 505 |
| Elite | 265, 426, 690, 709 |
| Elmak | 442, 454, 464, 887 |
| Elman | 905, 927 |
| Elta | 137, 426, 438, 482, 484 |
| E-Max | 788, 865 |
| Emerson | 418, 423, 424, 426, 438, 482 ,484, 485, 486, 832, 890, 919 |
| E-motion | 774, 775, 779, 787 |
| Enox | 721 |
| Erres | 395, 422, 426, 430, 547, 931 |
| Esc | 137, 426 |
| Essentiel b | 397, 405, 444, 466, 700, 721 ,802, 864, 887 |
| Eternity | 774, 775, 865 |
| Etron | 137, 426 |
| Euroline | 401, 418, 438, 448, 466, 482 ,484, 816 |
| Europa | 438, 482, 484 |
| Europhon | 426, 745, 905, 907 |
| Excelsior | 395 |
| Fenner | 137, 401, 426, 438, 482, 484 ,890 |
| Ferguson | 163, 357, 361, 391, 393, 425, 426, 430, 433, 521, 550, 561 ,562, 695, 709, 715, 759, 760 ,765, 767, 768, 774, 820, 910 ,911, 926, 927, 929, 931, 932 ,935 |
| Finlandia | 689, 932 |
| Finlux | 137, 370, 371, 372, 373, 375, 377, 379, 383, 385, 397, 418, 425, 426, 430, 438, 452, 466, 467, 482, 483, 484, 485, 516, 533, 868, 895, 903, 909 |
| First Line | 137, 140, 401, 418, 423, 424, 425, 426, 430, 438, 466, 482, 484, 505, 550, 689, 807, 890, 896 |
| Fisher | 144, 562, 689, 690, 695, 900, 901 |
| Force | 865 |
| Formenti | 425, 426 |
| Frontech | 137, 270, 932 |
| Fujitsu | 217, 560, 896, 897 |
| Fujitsu Siemens | 675 |
| Funai | 137, 270, 399, 401, 409, 418, 438, 466, 482, 484, 560, 639, 832, 833, 886 |
| Galaxis | 426, 903 |
| Galeria | 137 |
| Gbc | 137, 426 |
| Gec | 426, 430, 562, 765 |
| Geloso | 137 |

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|---|---|
| General | 137, 502, 503, 526, 531, 879 |
| Gericom | 328, 851, 896 |
| Goldhand | 137 |
| Goldstar | 135, 137, 142, 265, 270, 292, 425, 426, 427, 458, 482, 484, 491, 505, 507, 627, 675, 678, 679, 765, 908 |
| Goldy | 879 |
| Goodmans | 137, 140, 150, 152, 157, 261, 298, 316, 320, 357, 397, 401, 407, 418, 423, 424, 425, 426, 428, 430, 434, 438, 455, 466, 482, 484, 505, 517, 613, 625, 659, 717, 722, 790, 817, 865, 890, 896 |
| Gpm | 137 |
| Graetz | 397, 401, 418, 423, 424, 432, 438, 466, 467, 482, 483, 695 |
| Gran Prix | 516, 533, 803, 804, 805, 806 |
| Granada | 163, 180, 211, 375, 376, 383, 395, 425, 426, 430, 452, 456, 689, 690, 709, 753, 755, 759, 760, 763, 911, 932 |
| Grandin | 397, 401, 418, 423, 424, 438, 444, 466, 482, 484, 627, 835, 890, 896 |
| Grundig | 138, 142, 218, 219, 220, 221, 222, 223, 224, 318, 396, 401, 426, 430, 442, 444, 456, 469, 472, 482, 488, 501, 502, 503, 508, 513, 526, 531, 532, 564, 659, 662, 675, 824, 865, 887, 889, 929 |
| Grunkel | 418, 423, 424, 466, 779 |
| H&B | 418, 423, 424, 896 |
| Haier | 170, 267, 271, 276, 456, 664, 689, 782, 798, 809 |
| Hannspree | 685, 842 |
| Hanseatic | 137, 150, 152, 153, 425, 426, 431, 438, 442, 446, 482, 483, 505, 512, 908, 909 |
| Hantarex | 137, 425, 426, 720 |
| Hb | 401, 418, 482 |
| Hb Ingelen | 418, 423, 424, 484 |
| Hcm | 137, 270 |
| Hinari | 137, 426, 505 |
| Hisawa | 482 |
| Hisense | 807, 808 |
| Hitachi | 150, 152, 180, 370, 375, 397, 418, 423, 424, 426, 427, 431, 434, 441, 448, 452, 456, 459, 466, 467, 468, 695, 709, 742, 743, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 799, 870, 922, 931 |
| Hitachi Fujian | 743 |
| Höher | 401, 418, 423, 424, 444, 466, 468, 482, 484 |
| Home Electronics | 836, 887 |
| Horizont | 426, 438, 482, 484 |
| Hq | 426 |
| Humax | 145, 792, 793, 794, 795, 796, 850 |
| Hyper | 137, 448 |
| Hypson | 137, 270, 426, 432, 438, 466, 482 |
| Hyundai | 149, 169, 267, 268, 397, 401, 438, 482, 484, 513, 810, 860, 866, 867, 879, 884, 887 |
| Ice | 137, 270, 426 |
| Iekei | 657 |
| Ikusi | 496 |
| Imperial | 425, 426, 513, 653, 702, 704, 903 |
| Indesit | 929 |
| Infratex | 269, 321, 426, 431, 873, 878, 887, 890, 898, 913, 917, 918 |
| Ingelen | 438, 482, 484, 835, 893 |
| Ingersoll | 137 |
| Inno Hit | 137, 425, 426, 432, 466 |
| Insignia | 566, 839 |
| InterACTV | 478 |
| Interbay | 137 |
| Interbuy | 270, 277 |
| Interfunk | 425, 426, 430, 695, 903, 926 |
| Intertronic | 442 |
| Intervision | 137, 270, 277, 430, 869, 908 |
| Ipure | 600, 700, 725, 865 |
| Irradio | 137, 401, 425, 426, 482, 484, 505 |
| Iskra | 438, 482, 484 |
| Isp | 395 |
| Its | 137 |
| Itt | 137, 180, 358, 370, 375, 383, 426, 438, 466, 467, 482, 484, 503, 526, 531, 689, 690, 695, 824, 895, 922 |
| Itv | 270, 505 |
| Jdb | 836 |
| Jetpoint | 265, 425, 426 |
| John Lewis | 649 |
| Jvc | 168, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 425, 426, 675, 689, 690, 895 |
| Karcher | 137, 401, 425, 426, 505, 516, 533, 907 |
| Kendo | 137, 357, 358, 397, 409, 418, 423, 424, 426, 462, 466, 467, 482, 483, 484, 505, 824, 835, 909, 923 |
| Kenmark | 407, 789 |
| Kenstar | 650, 730 |
| Kenwood | 662, 670 |
| Keymat | 330, 652, 713, 740, 741 |
| Kishu | 810 |
| Kneissel | 140, 426, 434, 618, 835, 890, 899 |
| Konka | 156, 274, 874 |
| KOPERNIKUS | 443, 706 |
| Kortek | 853 |
| Kotron | 609 |
| Kriminal Forsorgen | 490 |
| KTC | 862 |
| Latona | 850 |
| Lavis | 140, 426, 442, 444, 899 |
| Lcd | 626 |
| Lenco | 137, 138, 140, 155, 270, 426, 431, 482 |
| Lenuss | 296, 308 |
| Level | 814 |
| Lg | 444, 466, 482, 484, 491, 505, 506, 507, 627, 660, 662, 663, 670, 675, 676, 677, 678, 679, 683, 730, 916 |
| Lifetec | 137, 140, 270, 418, 423, 424, 426, 431, 438, 482, 505, 561, 890 |
| Listo | 397, 418, 466 |
| Lodos | 424 |
| Loewe | 211, 400, 415, 421, 425, 426, 439, 452, 453, 462, 481, 493, 890 |
| Logik | 426, 659, 665, 730, 820 |
| Logix | 775 |
| Luma | 137, 426 |
| Lumatron | 409, 418, 423, 424, 624, 809, 810, 890 |
| Luxor | 137, 370, 372, 375, 377, 379, 380, 385, 397, 418, 423, 424, 426, 432, 452, 466, 467, 499, 519, 895 |
| M Electronics | 137, 375, 377, 379, 383, 385, 426, 927 |
| Magasin | 466, 675, 676 |
| Magnadyne | 137, 425, 426, 448, 505, 903, 905 |
| Magnafon | 448, 905, 907 |
| Magnasonic | 180, 426, 505, 690 |
| Magnavox | 426, 430, 451, 765 |
| Magnum | 401, 438, 444, 482, 484, 485, 486, 528 |
| Manhattan | 397, 418, 423, 424, 466 |
| Marantz | 395, 420, 422, 426, 743 |
| Mark | 140, 418, 423, 424, 425, 426, 438, 482, 484, 896 |
| Mascom | 516, 533 |
| Matsui | 137, 142, 152, 261, 320, 322, 324, 326, 397, 418, 423, 424, 505, 560, 628, 659, 689, 715, 820, 824, 826, 828 |
| Maxwell | 896 |
| Mcperson | 517 |
| Media Station | 716 |
| Media Tv | 431 |
| Medialine | 938 |
| Medion | 370, 371, 401, 418, 423, 424, 426, 431, 438, 466, 482, 484, 485, 486, 505, 516, 518, 527, 621, 659, 717, 890, 896, 897 |
| Melbox | 894 |
| Melectronic | 375, 377, 378, 383, 438, 482, 484 |
| Memorex | 270, 520, 690 |
| Memory | 466 |
| Metz | 214, 336, 386, 387, 388, 389, 390, 418, 423, 424, 426, 467, 505, 593, 594, 595, 890, 896, 929 |
| Micromaxx | 418, 423, 424, 482, 887 |
| Microspot | 397, 714 |
| Minerva | 142, 220, 718 |
| Minsonic | 138 |
| Mirage | 482, 484 |
| Mirai | 553, 560, 620, 841 |
| Mitsai | 787 |
| Mitsubishi | 137, 160, 161, 162, 163, 164, 165, 418, 423, 424, 425, 426, 434, 456 |
| Mivar | 813, 891 |
| Mtc | 265, 425 |
| Multichoice | 472, 834, 882, 934 |
| Multitech | 137, 425, 426, 516 |
| Mustek | 733 |
| Mx Onda | 260, 490, 509, 616, 734 |
| Naim | 473 |
| National | 206, 426 |
| Nec | 137, 265, 328, 647, 648, 848, 849, 850 |
| Neckermann | 137, 184, 425, 426, 430, 431, 448, 454, 482, 484, 505, 547, 550, 561, 562, 824, 825 |
| Nei | 425, 426, 919 |
| NEO | 138, 141, 401, 438, 482, 484, 875, 876, 879, 888 |
| Neovia | 312, 515, 851 |
| Nevir | 656 |
| Nikkai | 270, 401, 426, 438, 482, 709 |
| Nikkei | 438, 482, 484, 650, 810 |
| Nikko | 505, 920 |
| Nissan | 265 |
| Nobliko | 905 |
| Nokia | 137, 261, 265, 270, 370, 372, 374, 375, 376, 377, 378, 379, 380, 382, 383, 384, 385, 426, 448, 689, 690, 695, 824, 895, 903 |
| Nordmende | 180, 326, 357, 401, 425, 427, 438, 482, 484, 652, 658, 730, 856, 922, 926, 927, 928, 931, 932 |
| Northern Star | 850, 852 |
| Nova | 426 |
| Novox | 623, 727 |
| Oceanic | 180, 375, 377, 379, 383, 385, 689, 690 |
| ODYS | 610, 612, 619, 656, 682, 723, 724, 725, 726, 736, 815, 837, 846, 938, 939 |
| Okano | 137, 902 |
| Oki | 397, 401, 418, 431, 466, 501, 508 |
| Olympic | 137 |
| Olympus | 426 |
| Onkyo | 314 |
| Onn | 401, 786 |
| Onwa | 825 |

| | |
|---|---|
| Opera | 426, 436, 810 |
| Orbit | 426 |
| Orbitech | 427 |
| Orian | 880 |
| Orion | 137, 158, 166, 169, 270, 275, 289, 317, 320, 321, 323, 324, 325, 326, 337, 401, 418, 423, 424, 425, 426, 430, 432, 448, 450, 454, 466, 482, 484, 485, 486, 561, 628, 659, 824, 825, 828, 865, 896, 921 |
| Otake | 325, 824, 825 |
| Otava | 457, 505, 522, 523 |
| Others | 418, 426, 788 |
| Otrum | 425 |
| Otto Versand | 137, 180, 211, 365, 425, 426, 430, 431, 439, 448, 454, 505, 547, 550, 561, 562, 695, 709, 824, 825, 908, 921, 927, 932 |
| Ovp | 497, 498 |
| Pacific | 326, 482, 484 |
| Palladium | 401, 409, 418, 423, 424, 425, 426, 438, 482, 516 |
| Panasonic | 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 397, 425, 426, 430, 562, 929 |
| Panavision | 438, 482, 484, 881 |
| Pathe Marconi | 922, 926 |
| Peacock | 329, 624, 771 |
| Philco | 137, 426, 765, 899, 903 |
| Philex | 425 |
| Philips | 150, 180, 395, 399, 402, 403, 404, 407, 408, 412, 414, 417, 419, 420, 422, 425, 426, 427, 429, 430, 433, 442, 444, 456, 462, 463, 505, 510, 521, 539, 540, 541, 542, 543, 544, 545, 546, 547, 562, 709, 765, 798, 922, 927, 929, 931 |
| Phocus | 220, 401, 438, 482, 484, 488, 518, 896 |
| Phonola | 426, 430, 482, 484 |
| Pioneer | 211, 332, 333, 334, 335, 336, 338, 339, 425, 426, 430, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 709, 931 |
| PKS | 442 |
| Platinium | 818 |
| Playsonic | 401, 418, 423, 424, 438, 482, 484, 488, 508 |
| Powerpoint | 426, 482, 809 |
| Prandoni Prince | 505 |
| Prima | 137, 265, 270, 426, 690, 709 |
| Princess | 137, 401, 482, 484, 489 |
| Pro Basic | 827 |
| Profectis | 466 |
| Profex | 137 |
| Profilo | 474, 475, 485, 486, 516, 530, 533, 710 |
| Profitronic | 426, 505 |
| Proline | 152, 395, 397, 418, 423, 424, 432, 434, 438, 452, 466, 482, 484, 490, 534, 613, 642, 786, 789, 909 |
| Promethean | 686 |
| Prosonic | 397, 401, 418, 438, 466, 467, 482, 484, 488, 501, 502, 523, 630, 632, 638, 672, 673, 776, 778, 782, 810 |
| Protek | 466, 779 |
| Proview | 722 |
| Provision | 430, 482, 484, 505 |
| Pye | 422, 425, 426, 430, 456 |
| Quadro | 167, 397, 409, 418, 423, 424, 426, 442, 460, 466, 468, 788, 822, 892 |
| Quelle | 137, 184, 211, 365, 375, 377, 379, 383, 385, 409, 418, 422, 423, 424, 425, 426, 430, 439, 442, 448, 453, 454, 505, 547, 550, 561, 562, 628, 695, 709, 824, 825, 890, 901, 902, 932935 |
| Radiola | 395, 422, 425, 426, 430, 433, 456, 540 |
| Radiomarelli | 426 |
| Radiotone | 137, 270, 418, 423, 424, 426, 505, 890 |
| Radix | 695 |
| Rca | 265, 425, 570, 571 |
| Record | 134, 426, 444, 448 |
| Red Star | 516, 533 |
| Reflexion | 725 |
| Regal | 482, 484 |
| Relisys | 722 |
| Rft | 406, 416, 427, 431, 900 |
| Roadstar | 137, 270, 320, 401, 409, 418, 423, 424, 426, 430, 438, 444, 454, 482, 484, 488, 522, 896 |
| Saba | 154, 357, 358, 361, 393, 397, 418, 466, 482, 484, 518, 800, 905, 922, 926, 927, 931, 932, 933 |
| Sagem | 819, 829, 835 |
| Saisho | 425, 426, 628, 824 |
| Sakio | 137, 270 |
| Salora | 370, 371, 375, 377, 378, 379, 381, 383, 385, 426, 439, 444, 466, 467, 485, 486, 501, 516, 689, 690, 700, 725, 779, 887, 889, 895 |
| Sambers | 505, 905, 907 |
| Samsung | 137, 138, 143, 144, 174, 265, 270, 273, 291, 292, 293, 294, 295, 299, 300, 301, 302, 303, 304, 305, 306, 307, 309, 310, 311, 312, 313, 314, 315, 395, 413, 425, 426, 428, 465, 467, 487, 492, 505, 514, 521, 526, 535, 536, 537, 538, 548, 709, 779, 902 |
| Sansui | 137, 265, 270, 425, 426 |
| Sanyo | 137, 397, 418, 423, 424, 466, 468, 482, 484, 516, 533, 684, 687, 688, 689, 690, 691, 692, 693, 694, 695, 715, 900, 901 |
| Scansonic | 482, 567, 568 |
| Schaub Lorenz | 401, 418, 423, 424, 438, 466, 467, 482, 483, 484, 501, 502, 508, 645, 700, 732, 809, 810, 896 |
| Schneider | 137, 261, 270, 365, 394, 395, 397, 418, 422, 423, 424, 425, 426, 430, 431, 433, 435, 436, 438, 441, 442, 443, 444, 448, 449, 451, 456, 466, 477, 482, 484, 485, 486, 504, 505, 509, 514, 515, 516, 528, 533, 540, 890 |
| Scientific Labs | 426, 485 |
| Scott | 466, 602, 655, 674, 864 |
| Sea | 466 |
| Sec | 261 |
| Seg | 137, 270, 397, 409, 418, 423, 424, 426, 431, 432, 437, 466, 476, 482, 501, 561, 725, 813, 890, 900 |
| Seleco | 426, 430, 478, 909, 914, 922, 923, 932, 934 |
| Sencor | 401, 502, 700, 810 |
| Sentra | 709 |
| Sharp | 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 426, 430, 466, 583, 697, 709, 758, 768, 798, 799, 927, 932 |
| Shintom | 505 |
| Shintoshi | 505 |
| Shivaki | 134, 401, 425, 426, 505 |
| Siarem | 905 |
| Siemens | 426, 447, 455, 456, 516, 533, 547, 760, 919, 922, 926 |
| Siera | 426, 444 |
| Sierra | 426, 430, 444 |
| Silva Schneider | 137, 418, 426, 431, 444, 451, 466, 474, 475, 485, 486, 501, 504, 505, 509, 516, 530, 533, 607, 615, 700, 701, 710, 725, 732, 782, 803, 805, 806, 887, 889 |
| SilverCrest | 397, 418, 432, 466 |
| Singer | 137, 425, 426, 905 |
| Sinudyne | 326, 401, 425, 426, 427, 448, 450, 452, 454, 482, 484, 518, 562, 628, 824, 887, 905, 907, 921 |
| Sky | 272, 331, 617, 641, 659, 843, 865 |
| Sky Media | 272, 328, 331, 597, 598, 617, 622, 641, 651, 659, 714, 725, 730, 773, 774, 775, 783, 785, 787, 791, 823, 865 |
| Skyworth | 180 |
| Smaragd | 142 |
| Sogo | 438, 482, 484, 485, 486 |
| Sole | 139 |
| SONiX | 712, 865 |
| Sonolor | 689, 690 |
| Sontec | 426 |
| Sony | 158, 159, 180, 211, 332, 426, 430, 466, 547, 548, 549, 550, 551, 552, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 708, 709, 931 |
| Soundcolor | 401, 418, 438, 482, 484, 516, 518, 533, 896 |
| Spectra | 140 |
| Splash Vision | 797 |
| Star | 267, 401, 426, 521, 822, 879 |
| Star General | 880 |
| Starlite | 137, 505 |
| Starlux | 137 |
| Strato | 270, 401, 810 |
| Sungoo | 718 |
| Sunkai | 438, 482, 484, 628, 824 |
| Sunny | 779 |
| Sunstar | 137 |
| Sunstech | 638 |
| Supertech | 137, 426, 448 |
| Supratech | 606, 725, 731, 735, 737, 738, 826, 855 |
| Sweex | 596, 621, 725 |
| Swisstec | 272, 328, 331, 482, 617, 622, 634, 640, 641, 651, 659, 705, 714, 730, 783, 785, 787, 791, 823, 842, 843, 851, 861, 865 |
| Sylvania | 426, 832 |
| Symphonic | 832 |
| Tadistar | 505 |
| Tandberg | 418, 728, 926 |
| Targa | 314 |
| Tatung | 142, 297, 395, 425, 426, 452, 454, 493, 500, 516, 519, 523, 533, 768, 911 |
| Tauras | 701 |
| TCL | 360, 466, 572 |
| Tcm | 401, 483 |
| Teac | 432, 598 |
| Tec | 137, 140, 919 |
| Techline | 397, 409, 418, 466, 501 |
| Technica | 265, 418, 423, 424, 466, 485, 486, 887 |
| Technical | 397, 418, 432, 466 |
| Technics | 206, 211, 425, 426, 550 |
| Technika | 397, 418, 466, 597, 598, 634, 773, 774, 775, 785, 787, 940 |
| Technisat | 406, 410, 416, 426, 427, 430, 887, 915 |
| Technisson | 438, 482, 484, 488 |
| Technosonic | 426 |
| Technotrend | 426, 861 |

| | |
|---|---|
| Techwood | 177, 265, 396, 397, 418, 423, 424, 432, 466, 467 |
| Tecnimagen | 422, 426, 444, 482 |
| Tecnison | 137, 505 |
| Teco | 725 |
| Tekon | 137, 265 |
| Teleavia | 922, 926, 927, 929, 931 |
| Teleco | 479 |
| Telefunken | 357, 383, 392, 393, 397, 399, 411, 418, 426, 466, 467, 474, 475, 482, 484, 518, 800, 896, 922, 924, 925, 926, 927, 928, 929, 931, 932, 935 |
| Teleopta | 137 |
| Telerent | 425 |
| Telestar | 137, 427, 485, 516, 533, 926 |
| Telesystem | 401 |
| Teletech | 137, 397, 418, 423, 424, 466, 467, 534, 890 |
| Teleview | 485, 486, 516, 533 |
| Telra | 516, 533 |
| Tensai | 137, 425, 426, 482, 484, 489, 505, 518, 896, 908 |
| TERRA | 399, 664, 770 |
| Tesco | 774 |
| Tesla | 401, 426, 438, 480, 482, 484, 488, 505, 518, 887 |
| Tevion | 397, 401, 418, 423, 424, 431, 438, 482, 484, 488, 516, 533, 651, 717, 774, 775, 810, 847, 850, 890 |
| Thomson | 150, 152, 153, 154, 180, 356, 357, 358, 359, 360, 361, 362, 363, 364, 393, 435, 436, 482, 515, 518, 572, 652, 658, 730, 785, 800, 910, 922, 925, 926, 927, 929, 931, 932, 935 |
| Thorn | 163, 262, 425, 426, 433, 521, 562, 694, 695, 709, 715, 760, 765, 910, 926, 927, 929, 931, 932, 933 |
| Time | 401 |
| Tokai | 397, 422, 426 |
| Tokyo | 143, 265 |
| Toshiba | 137, 152, 211, 220, 265, 292, 318, 319, 320, 401, 418, 423, 424, 425, 426, 430, 466, 482, 484, 690, 695, 696, 697, 698, 703, 707, 708, 709, 711, 715, 719, 743 |
| Triax | 359, 516 |
| Trilux | 395, 426, 434, 700, 890 |
| TWF | 810, 847 |
| Uher | 425, 426, 561 |
| Ultravox | 426 |
| UMC | 328, 597, 598, 617, 622, 634, 659, 714, 725, 730, 773, 774, 775, 783, 785, 787 |
| United | 320, 397, 401, 418, 438, 442, 466, 482, 483, 484, 488, 621, 629, 630, 638, 672, 673, 721, 810, 896 |
| UnityDigitalTV | 312 |
| Universum | 137, 270, 371, 373, 383, 409, 418, 423, 424, 425, 426, 430, 437, 442, 466, 505, 560, 561, 562, 890, 903, 926 |
| Vanguard | 137, 466 |
| Veseg | 397, 466 |
| Vestel | 395, 397, 409, 418, 423, 424, 426, 432, 437, 466, 467, 468, 476, 709, 890 |
| Videoseven | 560, 865 |
| Videoton | 466, 903, 924, 931 |
| Viewpia | 860 |
| ViewSonic | 327, 425, 830 |
| Vision | 137, 482, 484 |
| Vision Plus | 774, 787 |
| Visual Innovations | 787 |
| VIVAX | 401, 511, 513, 518, 706, 710, 732, 739, 811 |
| Vizio | 661, 671, 857 |
| Vogells | 657 |
| Vortec | 426 |
| VOX | 461, 466 |
| Voxson | 401, 426, 438, 482, 484, 505 |
| Waltham | 397, 418, 423, 424, 466 |
| Watson | 137, 409, 418, 423, 424, 426, 438, 448, 466, 482, 484, 641, 717, 890 |
| Wattradio | 505, 903, 905, 907 |
| Welltech | 482, 484 |
| Wharfedale | 397, 401 |
| White Westinghouse | 415, 418, 423, 424, 425, 426, 447, 690, 903 |
| Wilson | 779 |
| Windsor | 397, 418, 423, 424, 466, 890, 927 |
| World Of Vision | 290, 328, 482 |
| Yalos | 847 |
| Yamaha | 709, 744, 753, 757 |
| Yoko | 137, 140, 270, 426, 448, 466, 689, 690, 926 |
| Zanussi | 466, 660 |
| Zenith | 426, 569 |

## Appendix C. Brand Codes

| Brand | Brand Nr. |
|---|---|
| Akai | 066 |
| Beko-Grundig | 080 |
| Belson | 053 |
| Blaupunkt | 050 |
| Daewoo | 060 |
| Ferguson | 070 |
| Finlux-Vestel | 075 |
| First Line | 067 |
| Goodmans | 074 |
| Hitachi | 081 |
| Hyundai | 054 |
| Jvc | 055 |
| Lg | 058 |
| Loewe | 051 |
| Medion | 063 |
| Metz | 057 |
| Mitsubishi | 067 |
| Nokia-Salora | 076 |
| Orion | 077 |
| Panasonic | 056 |
| Philips | 078 |
| Pioneer | 061 |
| Proline | 072 |
| Prosonic | 059 |
| Samsung | 079 |
| Sanyo | 064 |
| Schneider | 082 |
| Seg | 072 |
| Sharp | 062 |
| Sony | 068 |
| Swisstec | 065 |
| Tatung | 052 |
| Telefunken | 069 |
| Thomson | 073 |
| Toshiba | 071 |

## Troubleshooting

Before contacting your local technical service, make sure you follow the following instructions.
If your adapter stops working correctly after reading the list of possible solutions, please contact your local distributor or technical service.

| Problem | Possible causes | What to do |
|---|---|---|
| The LED front panel does not light up. | (I) Power cable not connected. | (I) Check that the current adapter is plugged in and connected to the adapter. |
| The LED is red. | (I) The adapter is in stand-by mode. | (I) Press the (⏻) key on the remote control to switch on the adapter. |
| The remote control does not work. | (I) Battery exhausted.<br>(II) The remote control is not pointing towards the adapter | (I) Check the battery status<br>(II) Aim the remote control towards the adapter.<br>(III) Check there are no obstacles between the adapter and the remote control. |
| When the adapter is installed for the fir st time, the message "No channels found" appear or some of the channels do not appear on the list of channels. | (I) Your antenna is not connected correctly.<br>(II) Your antenna installation may not be adequate for receiving digital channels.<br>(III) Check with your installer that digital channels are being transmitted in your area.<br>(IV) The antenna is not receiving power from the mains. | (I) Ensure that your antenna is connected to the antenna correctly.<br>(II) Consult with your installer about the possibility of receiving digital channels.<br>(III) Digital channels are not transmitted in your area.<br>(IV) Connect a power supply between the external antenna or amplifier and the adapter. |
| There is no picture. | (I) The adapter is switched off.<br>(II) The HDMI and/or SCART cables are not connected securely.<br>(III) The antenna is not connected to the adapter. | (I) Press the ⏻ button on the remote control to switch on the adapter.<br>(II) Ensure the correct and secure connection of all cables of equipment connected.<br>(III) Check if the adapter is connected to the adapter. |
| You have moved your adapter to a different house and you cannot view the digital channels. | (I) The antenna at the new location is aimed at another booster station.<br>(II) The antenna in the new house may not be suitable for receiving digital channels. | (I) Carry out a new search (see section *11.5. - Channel search)*<br>(II) Consult with your installer about the type of antenna necessary. |
| The image is interrupted and appears in blocks (pixels) | (I) If your installation is too complex, there is a chance the signal power is insufficient.<br>(II) Some objects such as trees, buildings or traffic can affect the quality of the signal.<br>(III) Damaged connectors and cables can affect the quality of the signal.<br>(IV) If the interruption is temporary but repeats often, there could be interference caused by other appliances in the house. | (I) Try to connect your adapter as simply as possible (adapter + TV) connecting the antenna directly to your adapter. If the image is not interrupted then your signal does not have sufficient power to use such a complex installation. Consult with your installer.<br>(II) You need to adequate you're your antenna. Consult with your installer.<br>(III) Change the cable connectors.<br>(IV) Consult with a qualified electrician. |

| Problem | Possible causes | What to do |
|---|---|---|
| There is no sound or the sound is very low. | (I) The volume of your TV and/or adapter is very low or on minimum.<br>(II) Your TV and/or adapter is on Mute mode.<br>(III) Ensure you connect the cables of all connected equipment correctly and securely. | (I) Check the volume of your TV and/or adapter.<br>(II) Press the Mute button on your TV and/or adapter<br>(III) The SCART connector is not connected securely. |
| The image sometimes appears distorted or appears blurred towards the sides. | (I) Screen format configured as 4.3. If it is transmitting a programme in 16.9 some televisions lose synchronisation. | (I) Change the screen format to Letterbox or Pan & Scan with the the output menu. |
| The image appears in pixels (as in blocks) every few seconds. | (I) You have the amplifier antenna connected to the power supply when it is not necessary and it saturates the signal. | (I) Connect the antenna directly to the adapter. |

## Technical Characteristics

| | |
|---|---|
| **Synchronization and channel** | |
| Input connector | 1 x CEI (female) |
| Output connector | 1 x CEI (male) |
| Input frequency | 174 MHz to 862 MHz |
| Frequency input link | 147 MHz to 862 MHz |
| Signal level | 45 to 90 dBµV |
| Input impedance | 75 Ohm |
| RF channel bandwidth | 7/8 MHz |
| Demodulation | COFDM |
| Transmission mode | 2K FFT, 8K FFT |
| Constellations | 16QAM, 64QAM |
| FEC | 1/2, 2/3, 3/4, 5/6, 7/8 |
| Stand-by interval | 1/4, 1/8, 1/16, 1/32 |
| **Digital video** | |
| Compatible with | MPEG-2 and MPEG-4/H.264 |
| Profile and level | MPEG-2 MP@HL, MPEG-4.2 ASP@L5, MPEG-4.10 (H.264) BP@L3, MP@L4.0 and HP@L4.0 |
| Video bit Rate | 40 Mbit/s Max. |
| Image format | 4:3, 16:9 |
| Video resolution | 1080p, 1080i, 720p, 576p, 576i |
| **Audio** | |
| Audio decoder | MPEG-1 Layers I, II and III, AAC, HE-AAC, Dolby Digital, Dolby Digital+ |
| **Teletext** | Compatible with DVB |
| **Memory** | |
| Flash Memory | 4Gbit NAND Flash |
| RAM | 2 x 2Gbit DDR2 SDRAM |
| **Input/output A/V** | |
| Scart TV x 1: | |
| - Video output RGB | 1 x socket Scart TV |
| - Video output CVBS | 1 x socket Scart TV |
| - Analogical audio output | 1 x socket Scart TV |
| Optical | Optical (TOSLINK) |
| HDMI | Digital Video/Audio output |
| LAN | 1 Gbit Ethernet - RJ45 |
| **Multimedia format** | |
| Video | MP4, MKV, AVI, MPEG, TS |
| Audio | MP3 |
| Photo | JPEG |
| **Power supply** | |
| Input voltage | 12 V. DC |
| Type | AC adapter (230 V, 50/60 Hz.) |
| Max electrical consumption | 480 mA |
| Max Stand-by consumption | 80 mA |
| **Physical specifications** | |
| Dimensions (L x H x D) | 180 mm x 29 mm x 130 mm |
| Approx weight | 300 gms |
| **Environmental specifications** | |
| Operating temperature range | From -5ºC to 45ºC |

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This symbol on the equipment or packaging indicates that this product may not be treated as conventional household waste, but may be delivered to the corresponding collection point for electrical and electronic equipment. Please ensure that this product is disposed of correctly. This way you will be helping to protect the environment and avoid the negative effects on human health and safety that could derive from inappropriate handling of this product. Recycling materials helps preserve natural resources. To receive detailed information on recycling this product, please contact your local authorities, your nearest collection point or the distributor where you purchased this product.

## Guarantee

Televés S.A. offers a two year guarantee from the date of purchase for EU countries. In non EU member countries legal guarantee is currently in force at the time of purchase. Please keep the receipt to determine this date.
Televés S.A. under the terms of this guarantee undertakes to repair or substitute any defective equipment.
Damage caused by incorrect use, wear and tear, third party handling, catastrophes or any other cause out of the control of Televés S.A.

Televes

# DECLARATION OF CONFORMITY Nº 121211125943

*DECLARACIÓN DE CONFORMIDAD*
*DECLARAÇÃO DE CONFORMIDADE*
*DECLARATION DE CONFORMITE*
*DICHIARAZIONE DI CONFORMITÀ*
*DEKLARACJA ZGODNOŚCI*
*DECLARATIE DE CONFORMITATE*
*KONFORMITETSERKLÆRING*
*CONFORMITEITSVERKLARING*
*VASTAVUSE SERTIFIKAAT*
*ATBILSTĪBAS DEKLARĀCIJA*

*KONFORMITÄTSERKLÄRUNG*
*ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΣΥΜΜΟΡΦΩΣΗΣ*
*FÖRSÄKRAN OM ÖVERENSSTÄMMELSE*
*VAATIMUSTENMUKAISUUSVAKUUTUS*
*ATITIKTIES DEKLARACIJA*
*ДЕКЛАРАЦИЯ СООТВЕТСТВИЯ*
*MEGFELELŐSÉGI NYILATKOZAT*
*BEKRÆFTELSE*
*ДЕКЛАРАЦІЯ ВІДПОВІДНОСТІ*
*PROHLÁŠENÍ O SHODĚ*

**Manufacturer** / *Fabricante / Fabricante / Fabricant / Fabbricante / Fabrikant / Κατασκευαστής / Tillverkare / Valmistaja / Producent / Gamintojas / Изготовитель / Producator / Gyártó / Fabrikant / Produsent / Fabrikant / Виробник / Valmistaja / Ražotājs / Výrobce:*

**Televes S.A.**

**Rua Benéfica de Conxo, 17 - 15706 - Santiago de Compostela - Spain**

**Declare under our own responsibility the conformity of the product** */ Declara bajo su exclusiva responsabilidad la conformidad del producto / Declara sob sua exclusiva responsabilidade a conformidade do produto / Déclare sous notre propre responsabilité la conformité de ce produit / Dichiara sotto la sua esclusiva responsabilità la conformità del prodotto / Wir übernehmen die Verantwortung für die Konformität des Produktes / Πιστοποιούμε με δικά μας ευθύνη την συμμόρφωση του προϊόντος / Försäkrar om överstämmelse enligt tillverkarens eget ansvar för produkten / Vakuutamme yskinomaan omalla vastuullamme tuotteen yhdenmukaisuus / Oświadczamy na własną odpowiedzialność zgodność wyrobu / Deklaruojame savo atsakomybe, kad produktas yra atitinkamas / Заявляем с полной своей ответственностью о соответствии продукта / Declaram pe propria raspundere ca produsul este in conformitate cu cerintele esentiale si celalalte prevederi aplicabile / Saját felelősségünkre kijelentjük, hogy a termék megfelel / Erklærer under vores eget ansvar overensstemmelse for produktet / Erklærer under vårt eget ansvaroverenstemmelsen for produktet / Wij nemen de verantwoording voor de conformiteit van het product / Заявляє з повною своєю відповідальністю що до відповідності продукта / Kinnitame toote vastavust / Deklarē ar pilnu savu atbildību par produkta atbilstību / Prohlašuje na vlastní odpovědnost shodu výrobku:*

**Reference** */ Referencia / Referência / Référence / Articolo / Artikelnummer / Δήλωση / Referens / Referenssi / Numer Katalogowy / Produkto numeris / Артикул / Referinta / Termékszám / Varenummer / Varenummer / Artikelnummer / Артикул / Viide / Atsauce / Reference:*

**511501**

**Description** */ Descripción / Descrição / Description / Descrizione / Beschreibung / Περιγραφή / Beskrivning / Kuvaus / Opis / Produkto aprašas / Описание / Descriere / Leírás / Beskrivelse / Beskrivelse / Beschrijving / Onuc / Kirjeldus / Apraksts / Popis:*

**STB TV on demand ZAS Hbb**

**Trademark** */ Marca / Marca / Marque / Marchio / Handelsmarke / Μάρκα / Varumärke / Tavaramerkki / Marka / Prekės ženklas / Торговая марка / Marca / Márkanév / Varemærke / Varemerke / Handelsmerk / Торговельна марка / Kaubamärk / Preču zīme / Značka:*

**Televes**

**With the requirements of** */ Con los requerimientos de / Com as especificações de / Avec les conditions de / Con i requisiti di / Die Voraussetzungen erfüllen / Με τις απαιτήσεις του / Enligt följande bestämmelser / Seuraavien määrityksien / Zgodność z wymogami / Atitinka reikalavimus / Требованиям / In conformitate cu / Az alábbi követelményeknek / Med bestemmelserne / Med bestemmelsene / In overeenstemming met / відповідно до вимог / tingimustel / prasībām / S požadavky na:*

- **Low Voltage Directive 2006 / 95 / EC**
- **EMC Directive 2004 / 108 / EC**

**Following standards**/ *Con las normas / Com as normas / Selon les normes / Con le norme / Folgende Anforderung / Ακόλουθα πρότυπα / Följande standard / Seuraavien standardien / Zastosowanie następujących norm / Pagal standartus / Следующих стандартов / Respecta urmatoarele standarde / A Következő szabványoknak / Følgende standarder / Følgende standarder / Volgende richtlijnen en normen / Наступних стандартів / Järgmistele standarditele / sekojošiem standartiem / Následující normy:*

**EN 60065:2002 + A1:2006 + A11:2008 + A12:2011 + A2:2010, EN 55013:2001 + A1:2003 + A2:2006, EN 55020:2007**

**Santiago de Compostela, 11/12/2012**

CE

**José L. Fernández Carnero**
*Technical Director*

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