

Safety Instructions

This product has been manufactured to satisfy the international safety standards. Please read all of safety and operating instructions before operating the product and keep this manual for future reference.

MAINS SUPPLY

AC 90-250V~, 50/60Hz

Operate your product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company. Disconnect the STB from the mains before you start any maintenance or installation procedures.

OVERLOADING

Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

LIQUIDS

The product should not be exposed to any liquids such as dripping or splashing. No objects filled with liquids, such as vases, should be placed on the apparatus,

CLEANING

Before cleaning, disconnect the product from the wall outlet, Use a cloth lightly dampened with water (no solvents) to clean the exterior.

VENTILATION

The slots on top of the product must be left uncovered to allow proper airflow to the unit. Do not stand the product on soft furnishings or carpets. Do not expose the product to direct sunlight, place it near a heater. Do not stack electronic equipment on top of the product.

ATTACHMENTS

Do not use any attachment that is recommended by the manufacturer it may cause a hazard or damage the product.

CONNECTION TO THE SATELLITE DISH LNB

Disconnect the product from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the LNB.

CONNECTION TO THE TV

Disconnect the product from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the TV.

LOCATION

Place the product indoors in order not to expose to lightning, rain or sunlight. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifier) that product heat.

LIGHTNING, or NOT IN USE

Unplug the product from the wall outlet and disconnect the cable during a lightning storm or when unused for a long time.

SERVICING

Do not attempt service that this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazard. Refer all servicing to qualified service personnel.

※ Don't pull out a plug during operation. It will cause a damage in HDD.

Please press "Power" button on your Remote control or unit to turn it off.

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Before You Begin

General Features

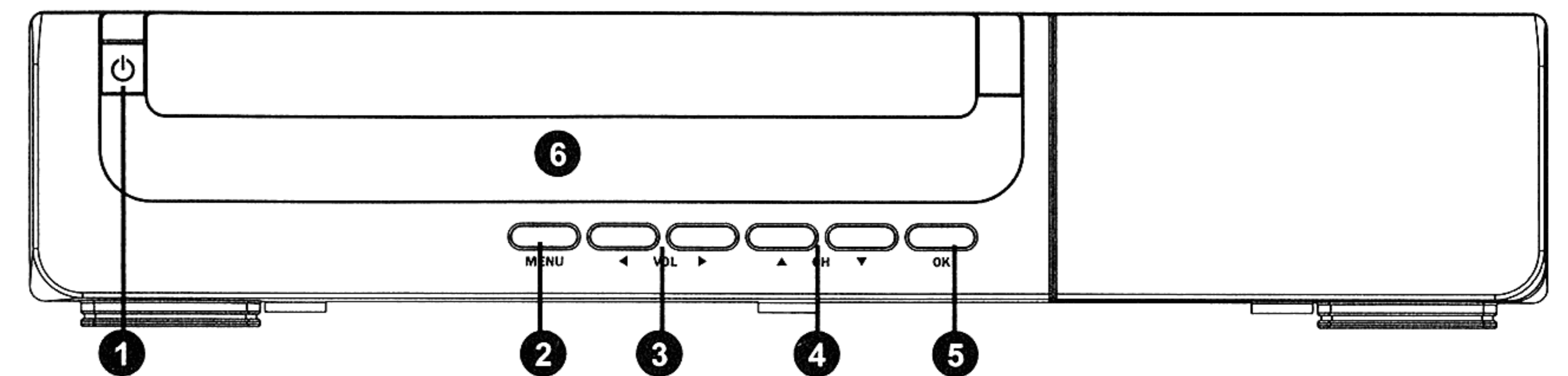
- Accurate, Brilliant Friendly OSD with Full Function
- MPEG-2 (MP@ML), MPEG-2 (MP@HL), MPEG4 AVC/H.264, HP@L4
- 2 SCARTS for TV, VCR (optional)
- 16 Bit Colors Graphic User Interface
- Multi-language Menu
- 13-digit VFD (Time clock in Stand-by mode)
- OSD Teletext Supported
- EPG (Electronic Program Guide) for On-screen Channel Information
- Installation by Easy Setup Guide
- 20,000 Channels
- User-friendly Data Editing Function
- Favorite Channel and Parental Lock Function
- RS232C Port for Additional Information Service and Upgrading System Software
- S/PDIF OUT Optical and Coaxial
- HDMI
- S-VIDEO OUT
- PVR Ready
- Time-Shift
- USB Port
- 2 Common Interface
- Blind scanning function

Accessories

- User's Manual
- Remote Control Unit
- Batteries
- HDMI Cable (Optional)

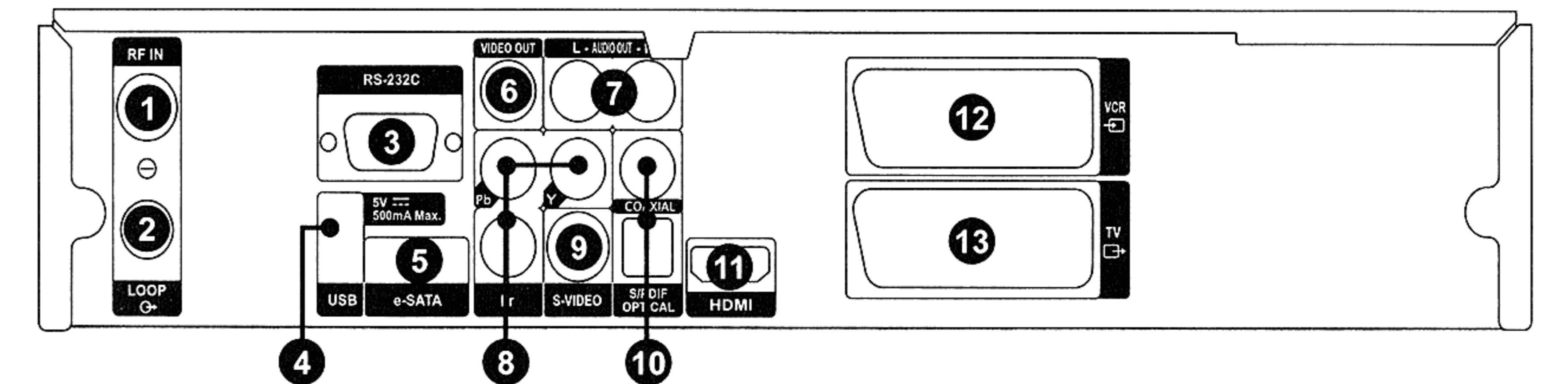
Controls and Functions

Front Panel



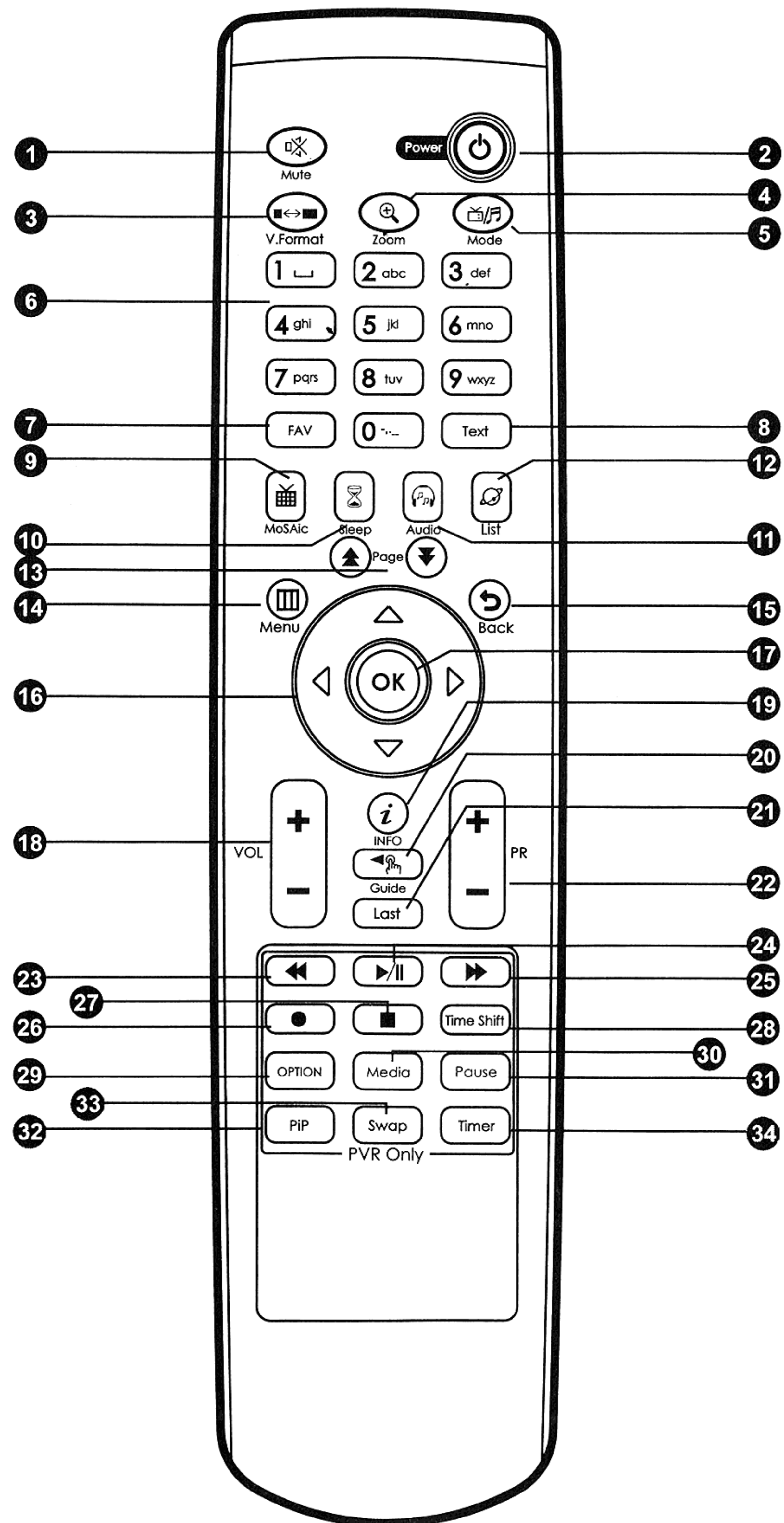
- 1 Power (⏻) button**
Turns your receiver On/Off.
- 2 MENU button**
Displays the menu
Exits from the current menu or goes to the previous menu
- 3 VOL (◀/▶) buttons**
Adjusts the volume and moves the cursor left/right on the menu
- 4 CH (▲/▼) buttons**
Changes channels or moves the cursor up/down on the menu.
- 5 OK button**
Confirms selection
- 6 DISPLAY**
Displays channel information
Displays local time in Standby mode

Rear Panel



- 1 RF IN**
It Connects to the Cable antenna for DTV signal.
- 2 LOOP**
Loop out is an output port of the DISH INPUT signal.
- 3 RS-232C**
Connect to a PC.
RS232 transfers data to the external
- 4 USB**
Connects to the External HDD or USB storage with USB cable.
- 5 e-SATA**
Connects to the External HDD with SATA cable.
- 6 VIDEO OUT**
Connects to video input jack on TV or any external Video system.
- 7 AUDIO OUT, LEFT / RIGHT**
Connects to audio input jacks on TV or any external audio system.
- 8 Y Pb Pr OUT**
Connects to video input jack on TV or any external Video system.
- 9 S-VIDEO OUT**
Connects to the TV with S-Video cable
- 10 S/PDIF OUT Optical & Coaxial**
Connects to a digital audio component with optical cable.
- 11 HDMI**
Connects to the TV with HDMI cable
- 12 SCART for VCR**
Connects to the VCR(AUX) with SCART cables.
- 13 SCART for TV**
Connects to the TV with SCART cables.

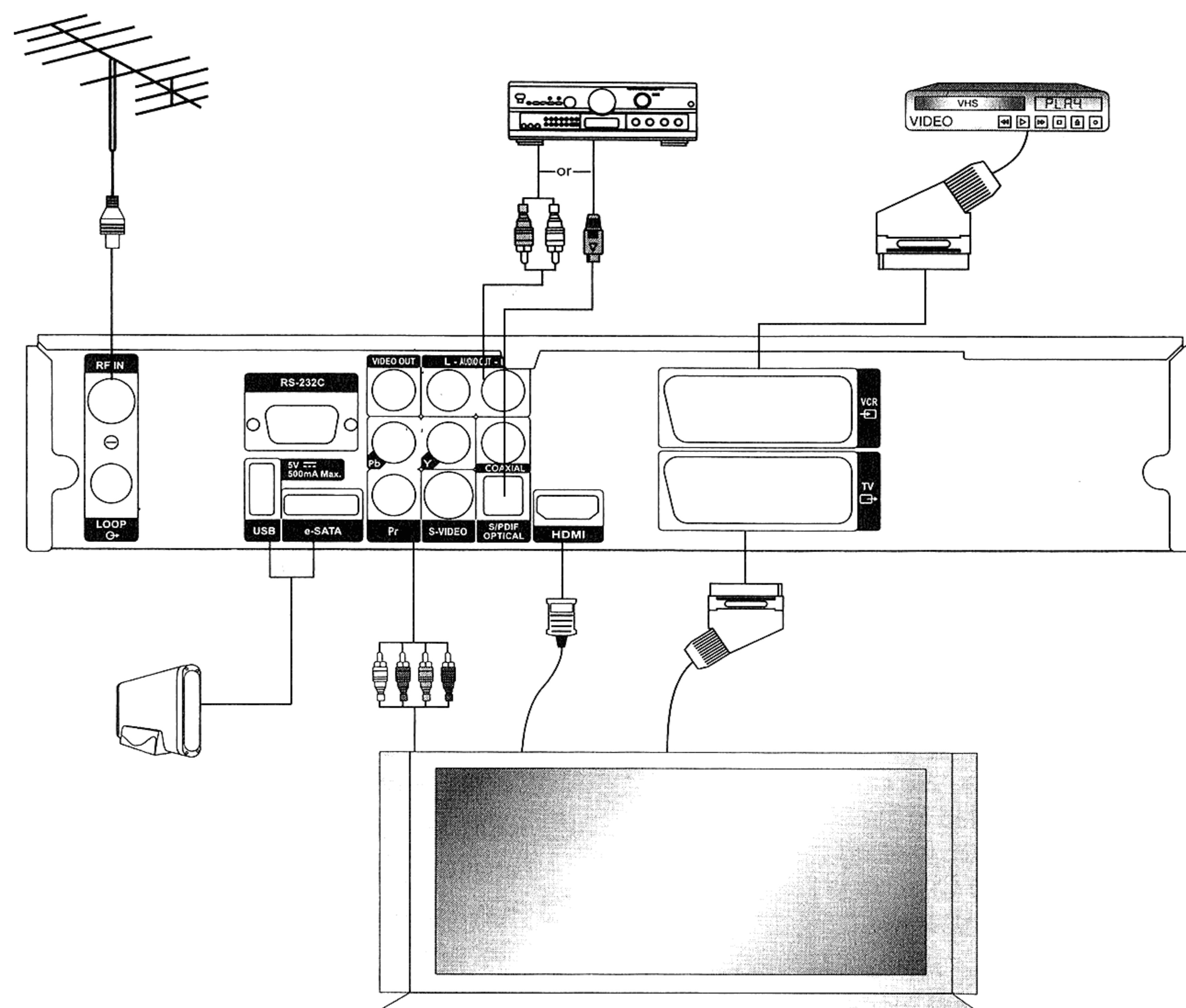
Remote Control Unit



Remote Control Unit

- 1 Mute** (🔇) button
Mutes audio output.
- 2 Power** (🔌) button for TV & STB
Turns your receiver & TV On/Off.
- 3 V.Format** (📺↔️) button
Set the Video format.
- 4 Zoom** (🔍) button
Zooms in the selected screen.
The Zooming location changes by pressing direction buttons. (x2 → normal)
- 5 Mode** (📺/📻) button
Switches between TV and Radio channel list
- 6 Numeric (0~9)** buttons
Controls the number entry and changes program channel directly.
- 7 FAV** (♥) button
Go to the last channel you've watched in the Favorite Channel List 1.
And if pressed again, you can see the last channel you've watched in the next Favorite Channel List 2. Repeat pressing the button until no more Favorite Channel is found. Then it returns to the current channel.
- 8 TEXT** button
Changes to the teletext mode.
- 9 MoSAic** (📺) button
Displays multi picture section.
- 10 Sleep** (🕒) button
Shows the time setting for the sleep-timer.
- 11 Audio** (🔊) button
Shows the Input Audio information.
- 12 List** (📺) button
Shows satellite channel list.
- 13 Page** (⬆️/⬆️) buttons
Moves up or down pages on the menu and TV/Radio List.
- 14 Menu** (☰) button
Displays the menu
Exits from the current menu or goes to the previous menu.
- 15 Back** (⬅️) button
Goes to previous menu. The changed values are to be saved.
- 16 Arrow** (⬅️/➡️) or **OK** buttons
Adjusts the volume level or moves the cursor left or right on the menu.
Arrow (⬆️/⬆️) or **OK** buttons
Changes channels or moves the cursor up or down on the menu.
- 17 OK** button
Shows Channel list while watching TV or listening to the Radio.
- 18 VOL +/-** buttons
Adjusts the volume level.
- 19 INFO** (i) button
Displays program information in the screen.
- 20 Guide** (📺) button
Shows the TV program guide.
- 21 Last** button
Shows **Viewed Channel List**.
- 22 PR +/-** buttons
Changes channel up or down.
- 23 REW** (⏮) button
Rewinds the recorded programs to x8.
- 24 Play/Pause** (▶️/⏸) button
Play or Pause the recorded program in the media player.
- 25 FF** (⏭) button
Fast forward the recorded program to x16.
- 26 REC** (●) button
Starts to record programs.
- 27 Stop** (■) button
Stops to record the program and to play the program.
- 28 Time shift** button
Starts Time shift function.
- 29 Option** button
- 30 Media** button
Shows Media Player.
- 31 Pause** button
Pause the video.
- 32 PiP** button (Picture in Picture)
Starts PiP Feature.
- 33 Swap** button
Switch from PiP to full screen.
- 34 Timer** button
Opens Reservation Menu.

Connections



Location of your receiver

- Install your receiver in horizontal position
- Do not put any heavy stuff such as a TV on your receiver
- Do not install your receiver in the places as follows: Vibrating place, direct sunrays, Humid place, too high or low temperature, and no ventilated place.

Connecting your analog receiver

To facilitate the user using analog receiver to view analog channels, this product has been provided with a loop through terminal marked as "LOOP". Connect the coaxial cable from this terminal to the IF input terminal of your analog receiver. Now by keeping your receiver in standby, you will be able to tune and view analog channels from your analog receiver.

Connecting your receiver to TV

To connect your receiver with your television, you can use 4 different methods; via RCA cable, SCART cable, HDMI cable or YUV.

Connect the RF cable to the terminal marked "RF OUT" on the rear panel of your receiver and its other end to the TV RF input socket.

Connect the Video/Audio RCA cables from the VIDEO OUT/AUDIO OUT (LEFT, RIGHT) on the rear of your receiver to the VIDEO INPUT/AUDIO INPUT (LEFT, RIGHT) jacks on the TV. In the case of connecting your TV through SCART cable, connect the SCART connector marked TV to the respective SCART port on the TV. (depend on model)

Connect the HDMI cable to the terminal marked "HDMI" on the rear panel of your receiver and its other end to the TV HDMI input.

Connecting your receiver to VCR (depending on model)

To connect a VCR, your receiver has been provided with SCART at the rear marked "VCR". Using a SCART connector, the VCR can be connected to your receiver.

Connecting external audio/Hi-Fi system

To connect any external Audio Hi-Fi system, your receiver has been provided with two RCA connectors at the rear panel of your receiver, marked with AUDIO L and R respectively to connect the left and right Audio on the external audio/Hi-Fi system.

Connecting digital audio system

Connect a cable between S/PDIF OUT at the rear panel of your receiver and S/PDIF INPUT COAXIAL or OPTICAL on the Digital Audio System.

Initial Settings and Operations

Menu Information

A menu is a field of text shown on the TV screen. Selectable lines are generally activated (highlighted). No-activated lines cannot be selected. Most of menus show short information at the bottom of the screen.

This menu consists of 7 main menus:

- Installation
- System Setup
- Channel Setup
- Parental Lock
- Game
- Multimedia
- Conditional Access

- 1 Using the **Arrow** (▲/▼) buttons you can move upwards and downwards on the menus. On the menus, you can search channels using this button.
- 2 When you have reached the required subject menu, press the **OK** button to confirm your choice.
- 3 On the menus, you can select menu items using the **Arrow** (◀/▶) buttons.
- 4 When you want to return to the previous menu with saving the change, press the **Back** (↶) button.
- 5 When you want to exit from the current menu, press the **Menu** (⏏) button.

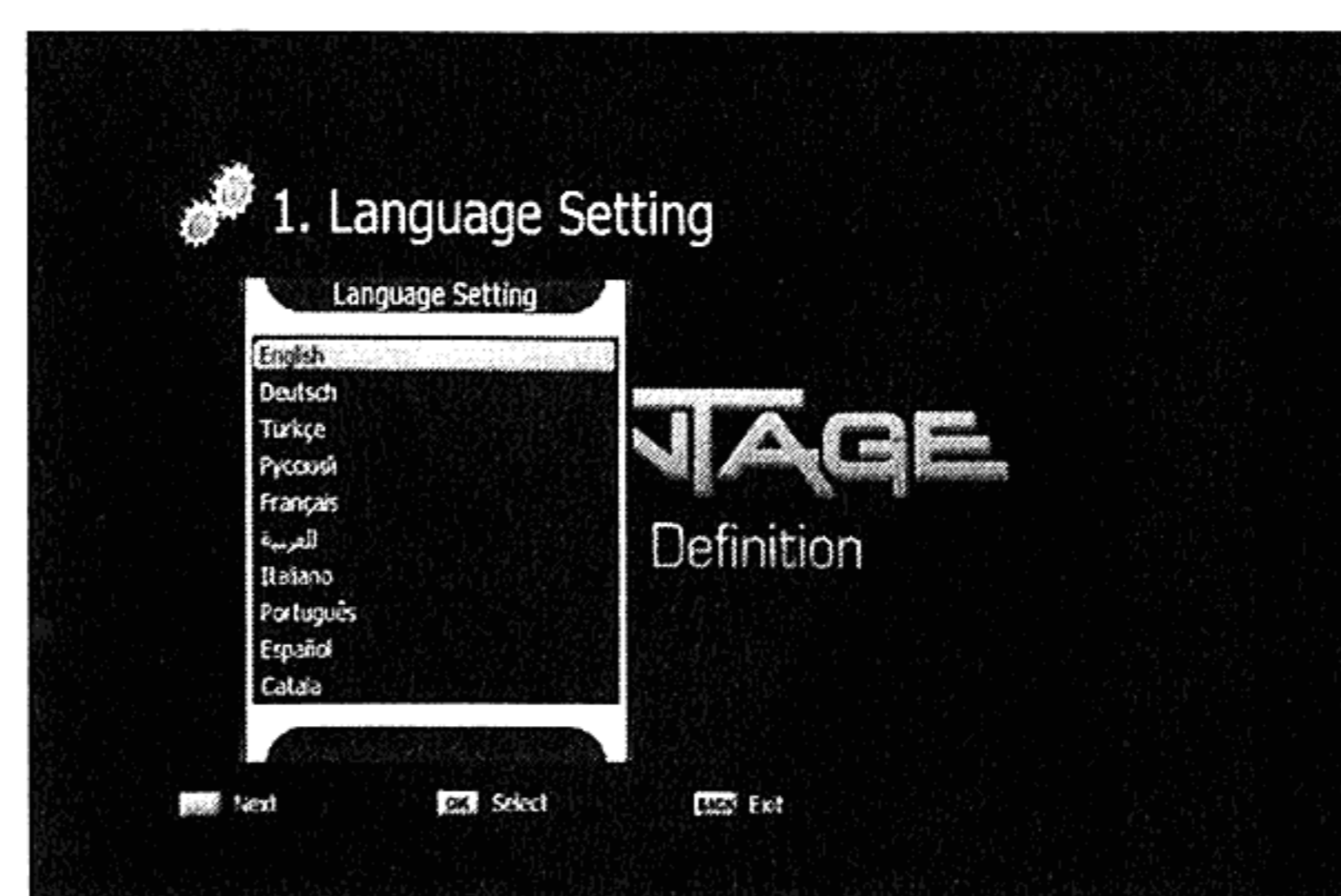
Getting Started

To start your receiver for the first time, you must select the language for displaying menus and you should set parameters for system configuration and scan channels. Perform the following setup procedure for scanning the channels. Follow the instructions below to scan channels. You can enjoy watching TV or listening to the Radio after the procedure completes.

- 1 Turn on your TV and receiver.
Language Setting menu will appear automatically.
OSD Language is highlighted.

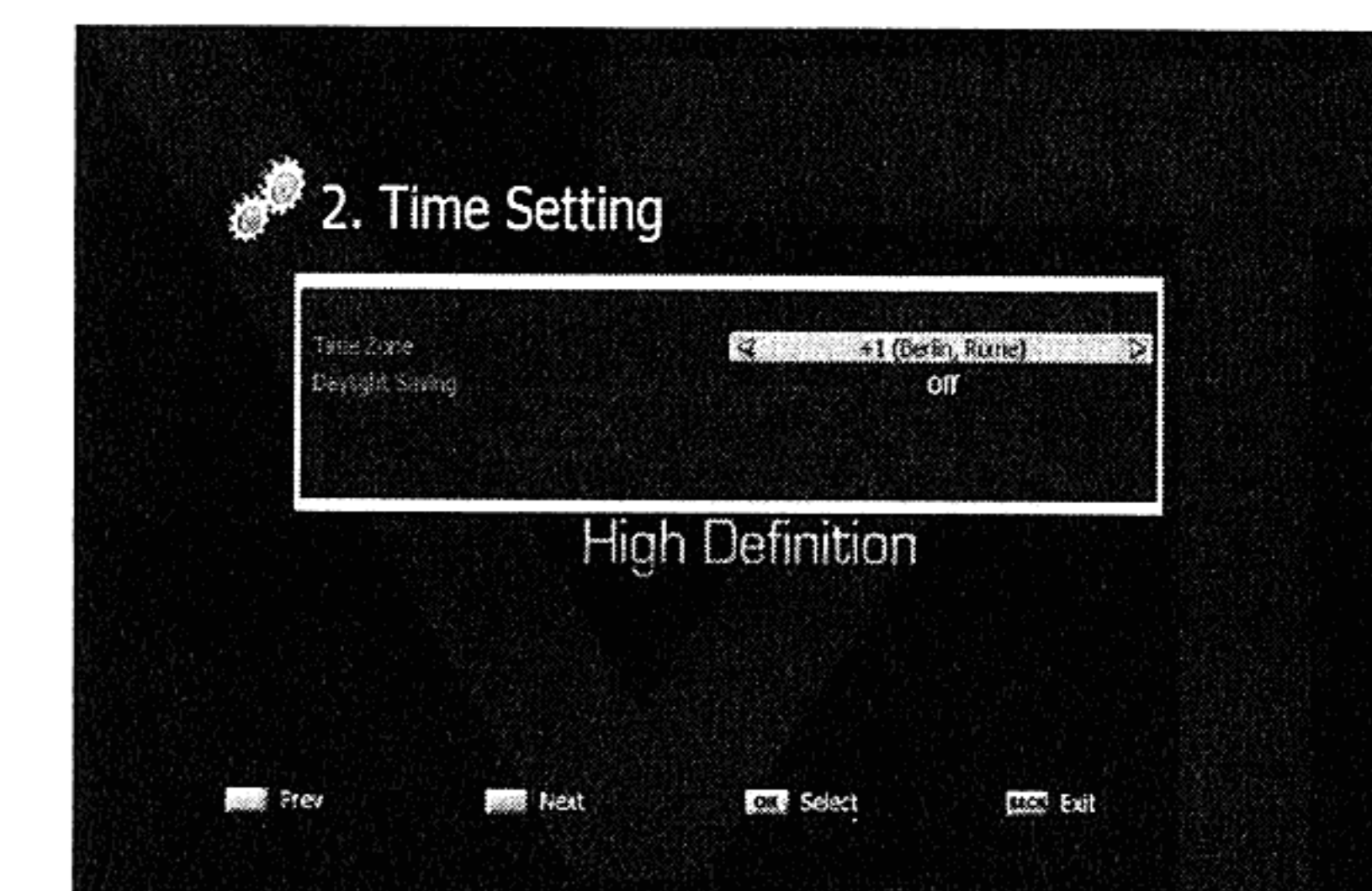
Selecting the On Screen Display (OSD) Language

- 2 Select the OSD language of your choice using the **Arrow** (◀/▶) buttons or **Blue** (Ⓢ) button. You will see the selected language on the OSD menu.



Setting the Time

- 3 Select the desired time zone using the **Arrow** (▲/▼) buttons.
- 4 Select if you want to use daylight saving time using the **Arrow** (▲/▼) buttons. Select between **On** and **Off**.
- 5 Press the **OK** or **Blue** (Ⓢ) button to continue.



Basic Operation

This section explains various functions while watching TV or listening to the Radio.

Switching Channel

You can switch the current channel by three different methods.

- **Method 1:** Press the **Arrow** (▲/▼) buttons or **PR+/-** buttons.
- **Method 2:** To select a channel directly, select a channel using the **Numeric (0~9)** button.
- **Method 3:**
 - 1 To display the channel list, press the **OK** button.
 - 2 Select a channel you want to watch using the **Arrow** (▲/▼) buttons and then press the **OK** button.
 - If there are multiple channels, use the **Page (+/-)** or the **Arrow** (◀/▶) buttons to move to channels by page.
 - Press the **Mode** (Ⓢ) button to switch between the TV and Radio channel.
 - 3 You can follow the method 3 instruction for channel selection.
- **Method 4:** In case of more than two scanned cable
 - 1 Press the **SAT** (Ⓢ) button to show satellite list.
 - 2 Move the cursor to the satellite of a channel to watch with the **Arrow** (◀/▶) buttons and then press **OK** button.
 - 3 You can follow the method 3 instruction for channel selection.
- **Method 5:** How to move to the watched channel.
 - 1 Press the last button with RCU.
 - 2 Press **OK** button after a channel selection by using the **Arrow** (▲/▼) with RCU.
 - 3 Press **OK** button to exit.

Volume Control

To control the volume:

- Press the **VOL+/-** or the **Arrow** (◀/▶) buttons.
- Press the **Mute** (Ⓢ) button to turn the sound off.
- Press the **Mute** (Ⓢ) button again or the **VOL+/-** or **Arrow** (◀/▶) buttons to cancel muting.

Info Bar

Channel information always appears for a specific period of time whenever you switch channels.

General Information

Press the **INFO** (i) button; you can see general information of the current channel.

- 1 Channel number and name
- 2 Current Time
- 3 Signal Level
- 4 Signal Quality
- 5 Icons: HD Channel, Locked Channel, Radio Channel, Scrambled Channel, Subtitle, Teletext information
- 6 EPG information.
- 7 Conditional Access

Detailed Channel Information

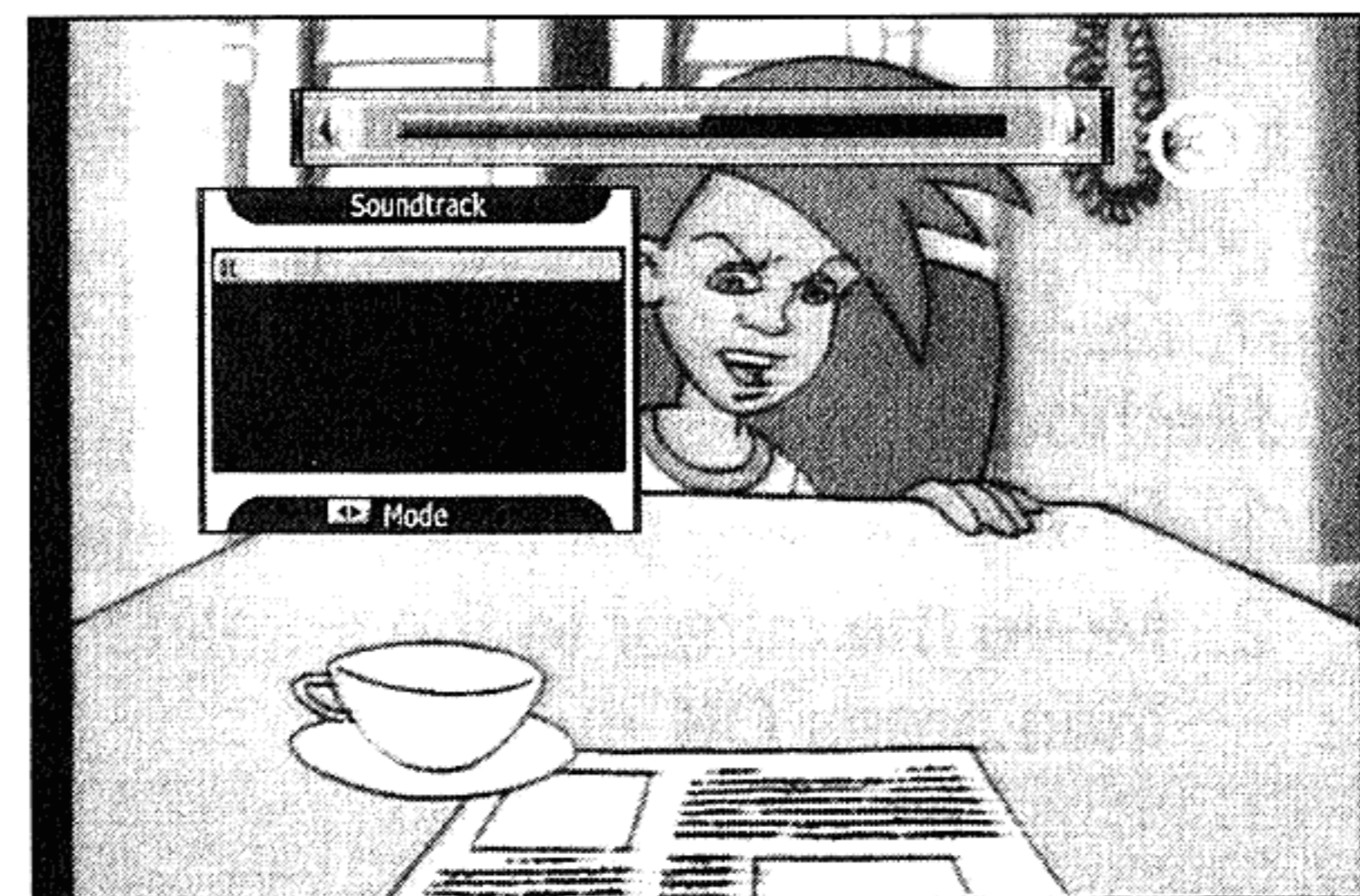
You can see detailed channel information pressing the **INFO** (i) button again.

- 8 You can see detailed channel information pressing the INFO button again.
- 9 Satellite, Frequency, Symbol Rate, FEC, Polarity, Video PED, Audio PID, PCR PID, Transponder
- 10 Display the stream information.

Selecting the soundtrack

You can select the audio language, soundtrack, or sound mode.

- 1 Press the **Audio** (P) button.
- 2 Press the **Arrow** (▲/▼) buttons to select the audio language or soundtrack and press the **OK** button.
- 3 Press the **Arrow** (◀/▶) buttons to select the sound mode from **Stereo**, **Mono left**, or **Mono Right**.
- 4 Stream information.



Selecting the OSD teletext, VBI teletext, Subtitle and DVB subtitle

You can choose the **OSD teletext**, **VBI teletext**, **subtitle** and **DVB subtitle** for the current live TV program if provided from the broadcasting station.

- **OSD teletext:** Press the **Text** (T) button
- **VBI teletext:** Press the **Text** (T) button **twice**.
- **Subtitle:** Press the **Text** (T) button **three times**.
- **DVB subtitle:** Press the **Text** (T) button **four times**.

MoSAic

You can see multi picture by pressing the **MoSAic** (M) button.

Sleep Timer Function

Press the **Sleep** (S) button, you will see the time set for the sleep timer if already set from the Time Setting menu.

Zoom Function

You can make the picture appear larger on the screen pressing the **Zoom** (Z) button.

- 1 Press the **Zoom** (Z) button.
- 2 Select the area you want to zoom using the **Arrow** (▲/▼/◀/▶) buttons and then press the **OK** button. Picture is enlarged two times.
- 3 Each time you press the **Page** (▲/▼) buttons, the picture is enlarged two or four times. Press the **Arrow** (▲/▼/◀/▶) buttons to change the location at the lower right of display.
- 4 To cancel the Zoom function, press the **Zoom** (Z) button twice or **Back** (←) button.



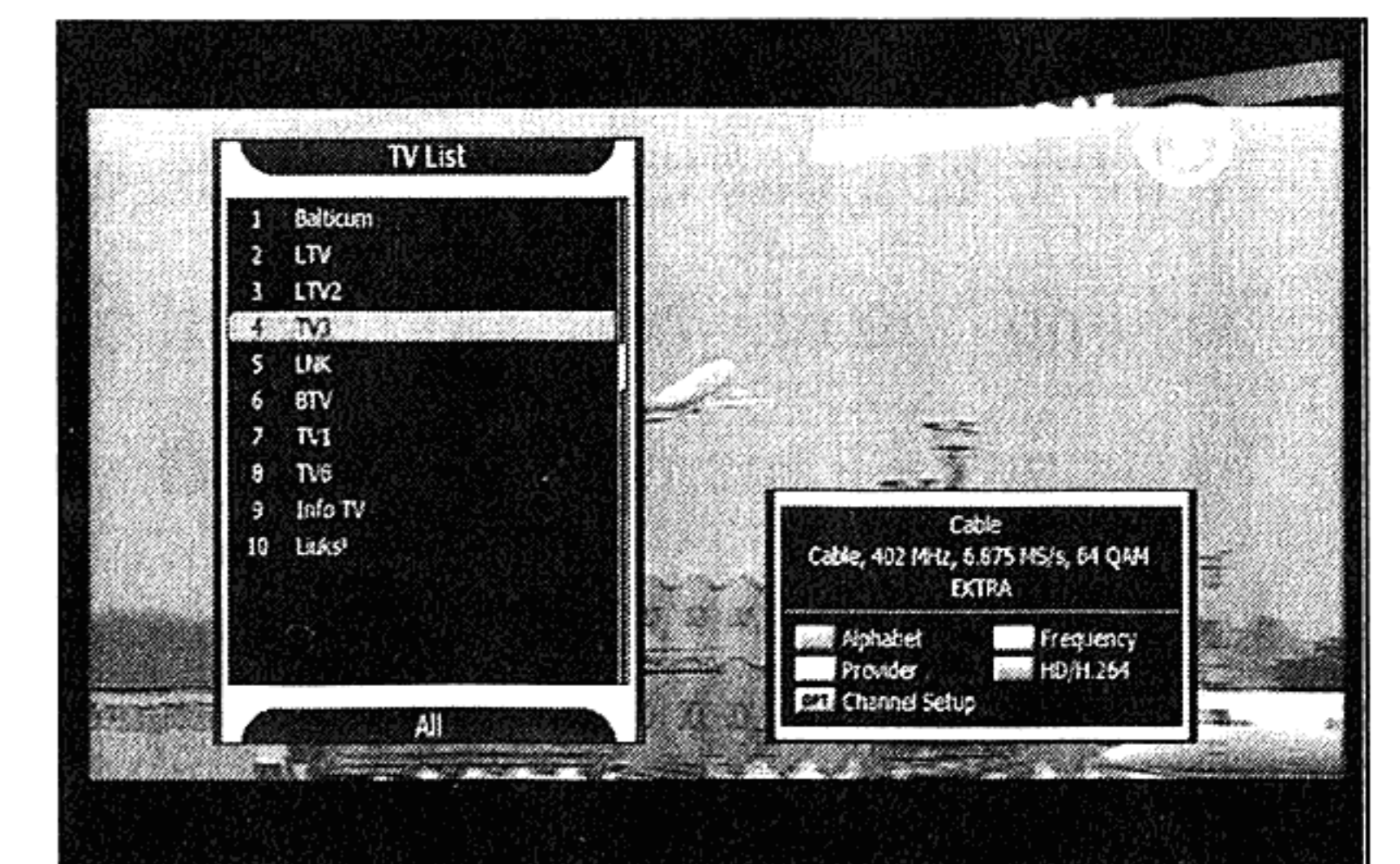
Channel List

You can see the TV or Radio channel list pressing the **OK** button while watching TV or listening to the Radio. Switch the channel list pressing the **Mode** (M) button. The icon (€) behind the channel name symbolizes scrambled channel, and the icon (L) behind the channel name symbolizes indicates a locked channel.

Select channel using the **Arrow** (▲/▼/◀/▶), **PR+/-**, or **Page** (▲/▼) buttons and press the **OK** button to watch.

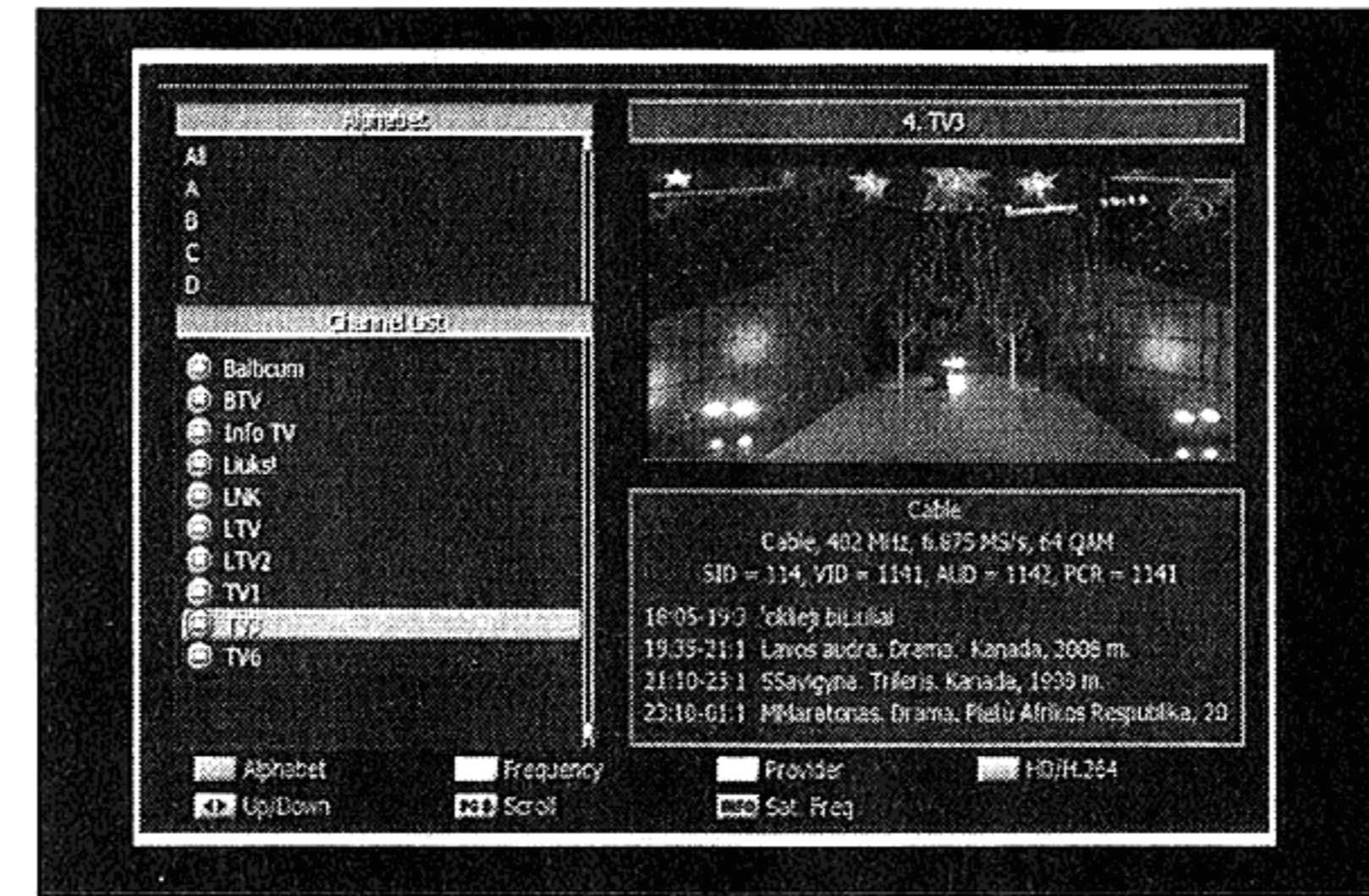
The colored buttons show the channel lists as follows:

- **Red** button: sort channel alphabetically
- **Green** button: by frequency
- **Yellow** button: by provider
- **Blue** button: by HD channels
- **Option** : Show Channels Setup menu to rename, delete, move, Lock channels, or to make the favorite channels.



To view channel list in specific order (Alphabet/Satellite/Provider/HD)

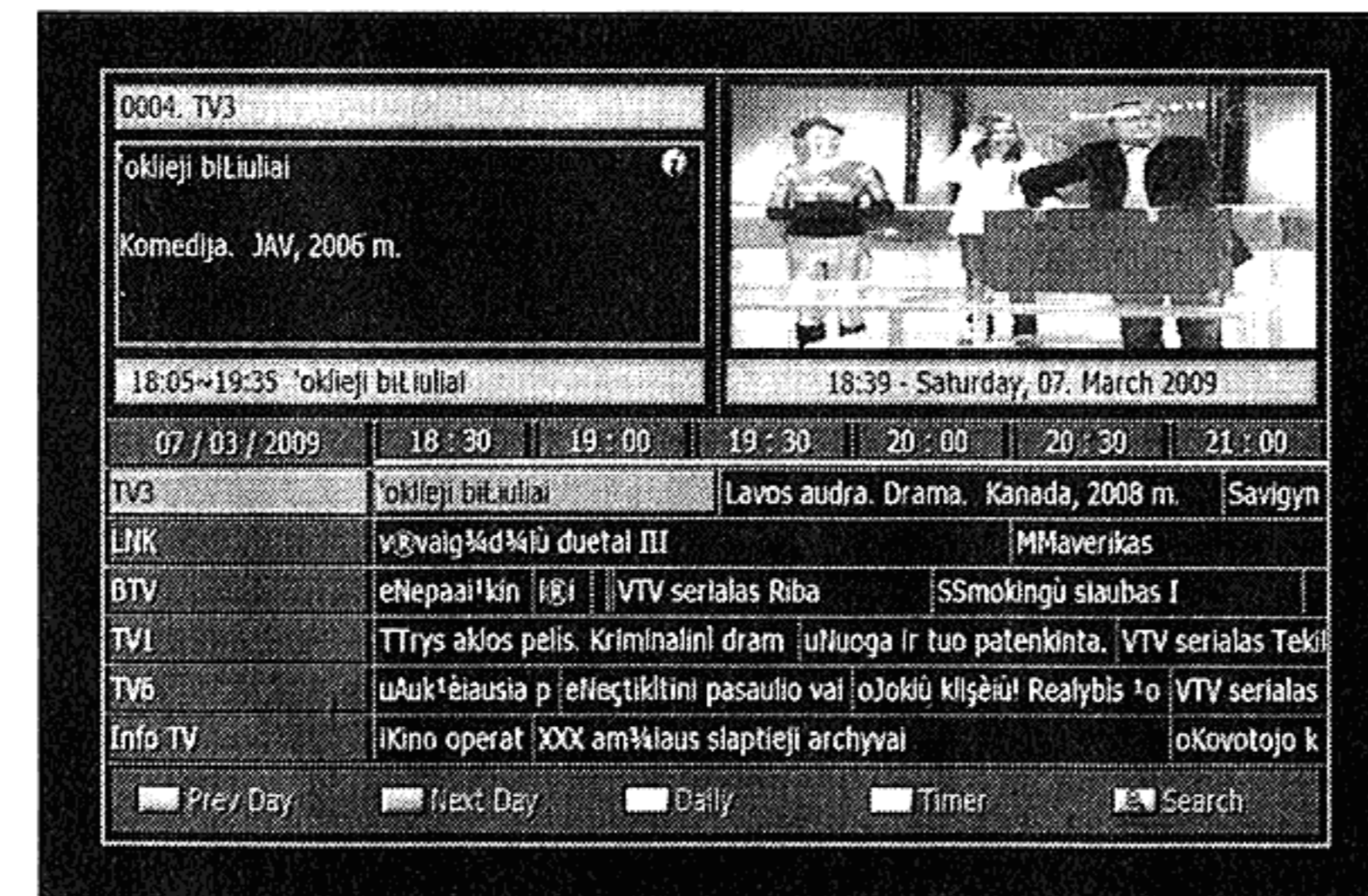
- 1 Press the **Colored (Red/ Green/Yellow/Blue)** button.
Channel list is highlighted.
- 2 Select **Alphabet, Frequency, Provider, or HD/H.264** using the **Arrow (▲/▼)** buttons.
The channel list is sorted automatically by your selection.
- 3 Select the channel pressing the **Arrow (▲/▼)** or **Page (▲/▼)** buttons and press the **OK** button to watch it.



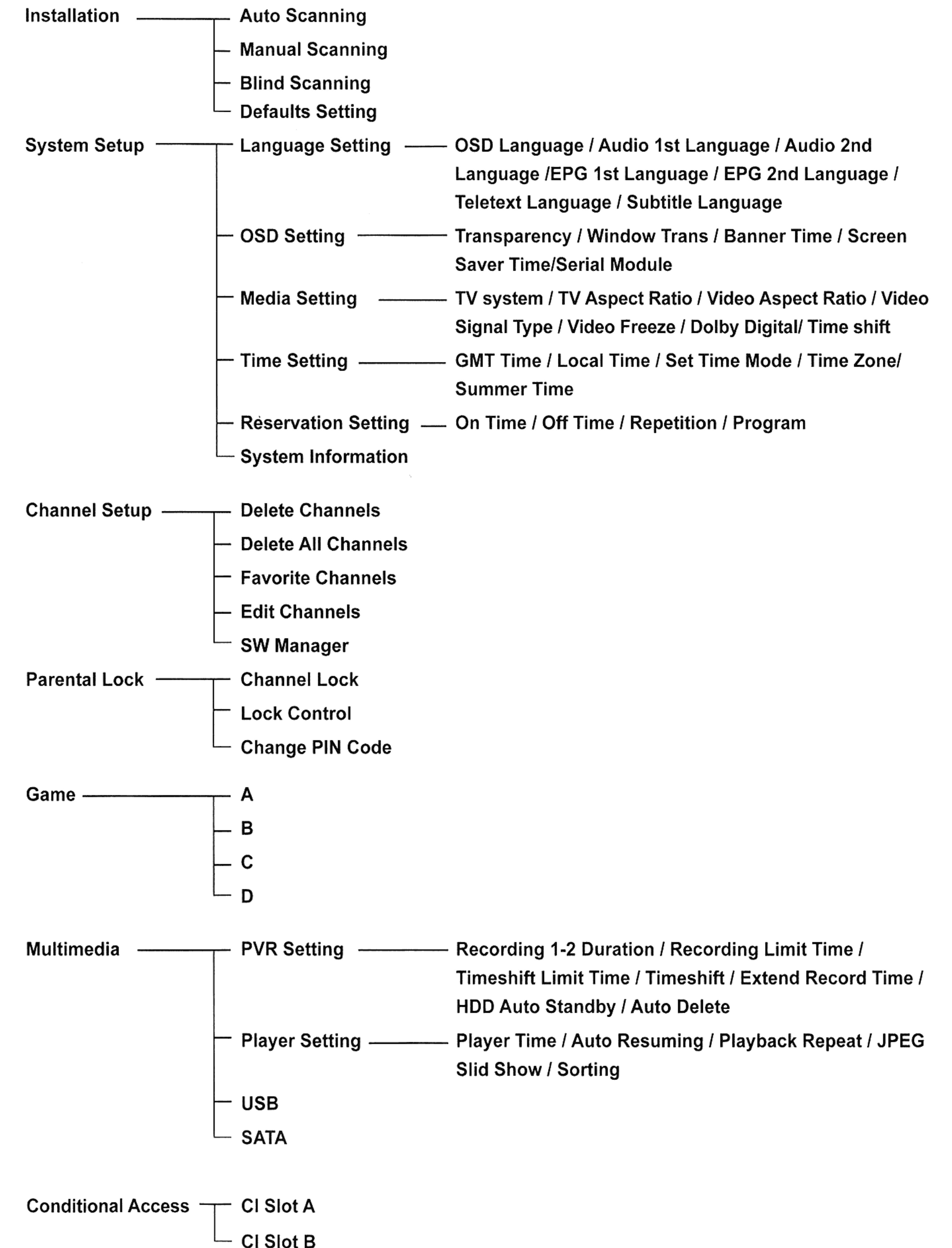
Electronic Program Guide (EPG)

EPG displays program information such as program titles, broadcasting schedule, Program synopsis and such EPG service differ depending on the service provider.

- 1 Press the **Guide (◀/Ⓜ)** button while watching TV or listening to the Radio EPG information appears.
- 2 Select a program for further more information.
 - **Arrow (▲/▼)** buttons: Selects a program by channel
 - **Arrow (◀/▶)** buttons: Selects a program by time & date within the same channel.
It displays the program list at 30 minutes intervals.
 - You can see the detailed information by pressing **Page (▲/▼)** buttons.
- 3 Press **Yellow** button to switch View modes in EPG (Multi vs. Single Channel).
- 4 To jump one day ahead press **Blue** button.
- 5 To jump one day back press **Red** button.
- 6 To record a transmission press **Green** button.
Read more in the PVR Chapter to use this function.
- 7 To exit from the EPG mode, press the **Back** or **Guide** button.



Menu Map



Main Menu

The menu has been carefully designed from user-friendly point of view to assure easy operation to your receiver. The main menu is classified into 7 sub menus that will carry out the various operations individually.

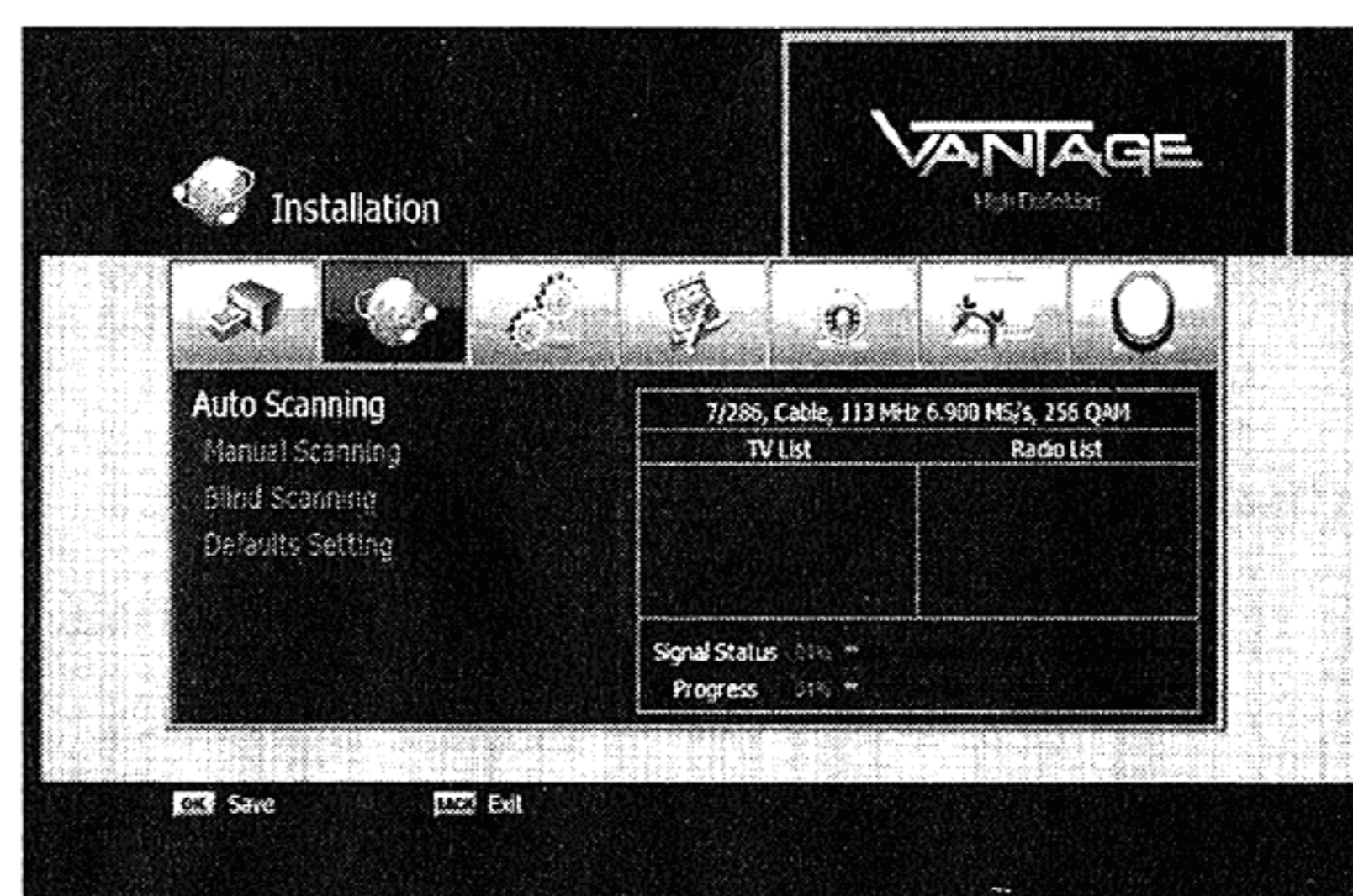
Installation

In the **Installation** menu, you can customize antenna setting and do channel scanning. Press the **Menu** (≡) button. Select **Installation** using the **Arrow** (◀/▶) buttons on the main menu.

Installation >> Auto Scanning

Auto Scanning

- 1 Select **Auto Scanning** using the **Arrow** (▲/▼) buttons on the **Installation** menu and press the **OK** button.
- 2 Press the **OK** button, and then it starts scanning. After Auto Scanning is completed, you can see TV and Radio channels in the list.



Installation >> Manual Scanning

Manual Scanning

You can scan channels of the selected satellites by transponders if you know the transponder information.

- 1 Select **Manual Scanning** using the **Arrow** (▲/▼) buttons on the **Installation** menu and press the **OK** button.
- 2 Set the following options to complete **Manual Scanning**.

◆ Transponder

Set the transponder for the selected satellite. Select a transponder using the **Arrow** (◀/▶) buttons.

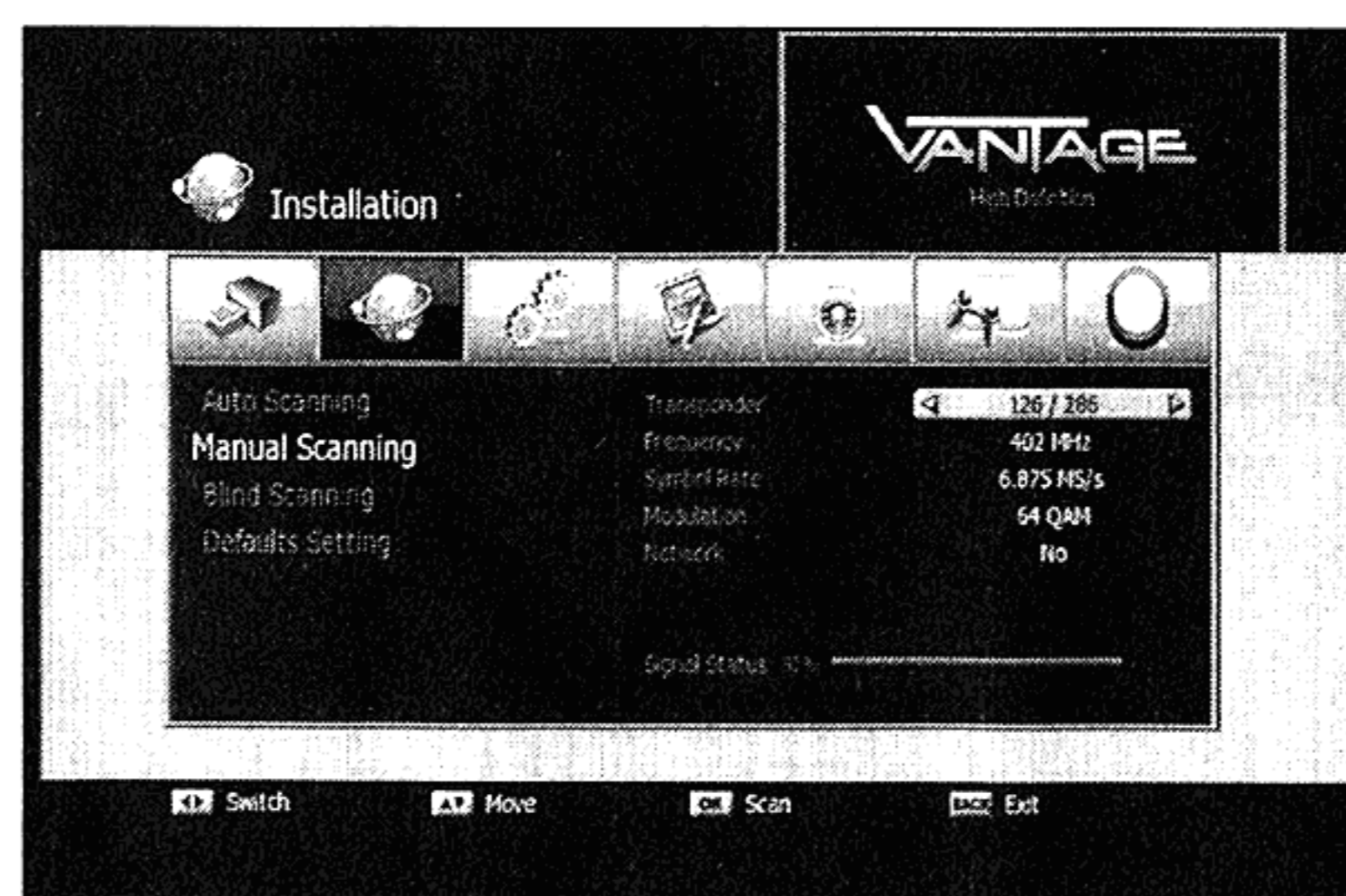
◆ Frequency/Symbol Rate

Input the desired value by pressing **Numeric** (0~9) buttons.

◆ Modulation

Select a modulation type using the **Arrow** (◀/▶) buttons.

- 3 Press the **OK** button, then starts scanning. After Manual Scanning is completed, you can see TV and Radio channels found from Manual Scanning.



Installation >> Blind Scanning

Blind Scanning

When you don't have any transponder information, you can use this function to have all channels from selected cable.

- 1 Press **OK** button to open **Blind Scanning** menu.
- 2 Input Start and End Frequency from the area that would you like to search.
- 3 Input Symbol Rate.
- 4 Select the stepping for searching for frequency.
- 5 Start blind scanning with **OK** button.

Installation >> Defaults Setting

Defaults Setting

You can restore the default setting in case you have encountered some problems after saving changes to channel data and others that may be in error.

- 1 Select **Defaults Setting** using the **Arrow** (▲/▼) buttons on the **Installation** menu and press the **OK** button.
- 2 Select a defaults option using the **Arrow** (▲/▼) buttons and press the **OK** button.
 - **System Defaults:** Resets system settings.
 - **Factory Defaults:** Resets back to the factory-default settings.
 - **Installation Guide:** Resets back to the factory-default settings and start installation guide.
 - **STB Reboot:** The Set-top box (STB) reboots.

System Setup

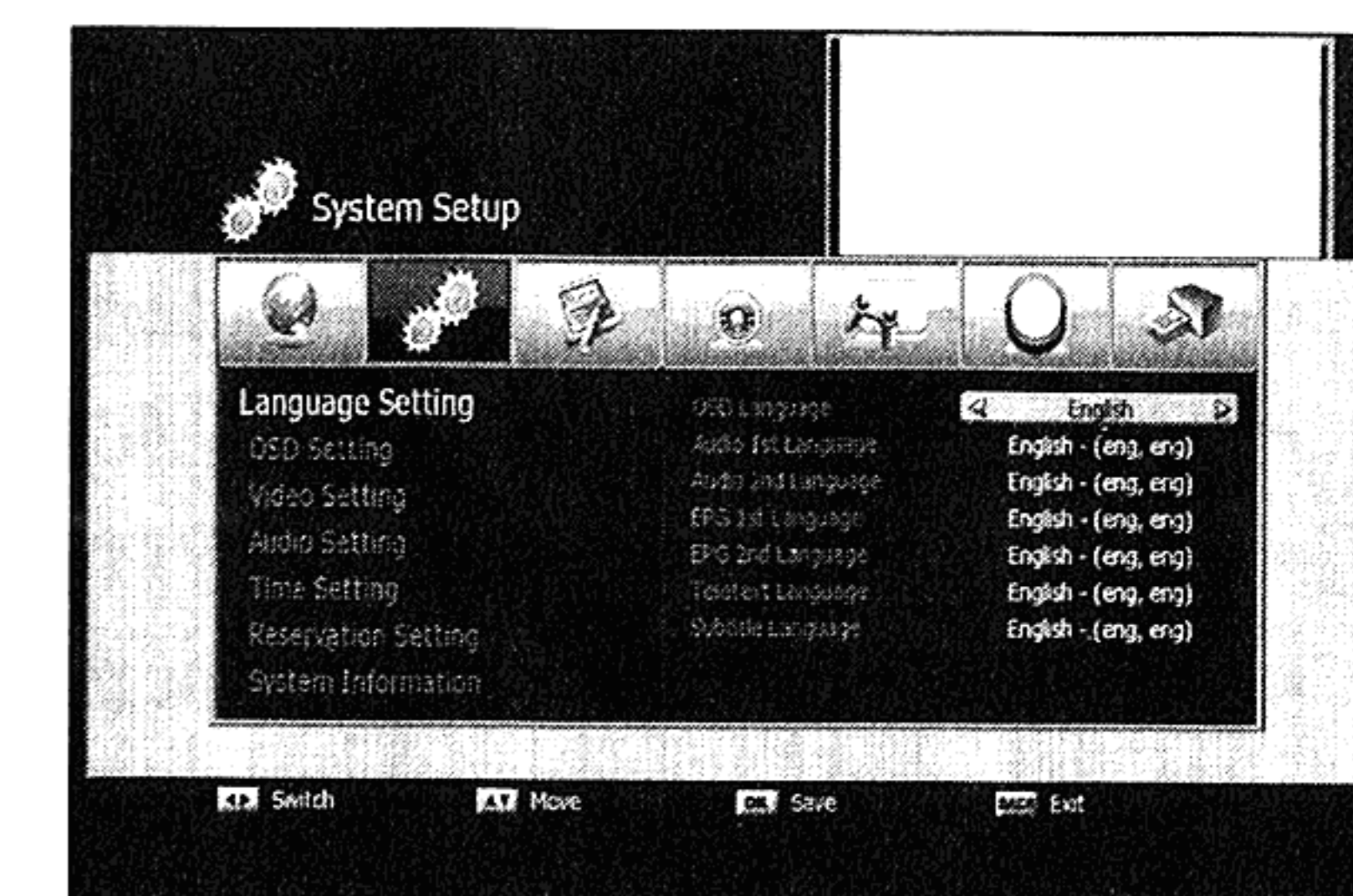
You can set the system configuration in this menu. Press the **Menu** (≡) button. Select **System Setup** using the **Arrow** (◀/▶) buttons on the menu.

System Setup >> Language Setting

Language Setting

You can set languages for OSD, Audio 1-2, EPG 1-2, Teletext, and Subtitle.

- 1 Select **Language Setting** using the **Arrow** (▲/▼) buttons on the **System Setup** menu and press the **OK** button.
- 2 Select any of **OSD, Audio1- 2, EPG1-2, Teletext, and Subtitle languages** using the **Arrow** (▲/▼) buttons and use the **Arrow** (◀/▶) buttons to select its language.

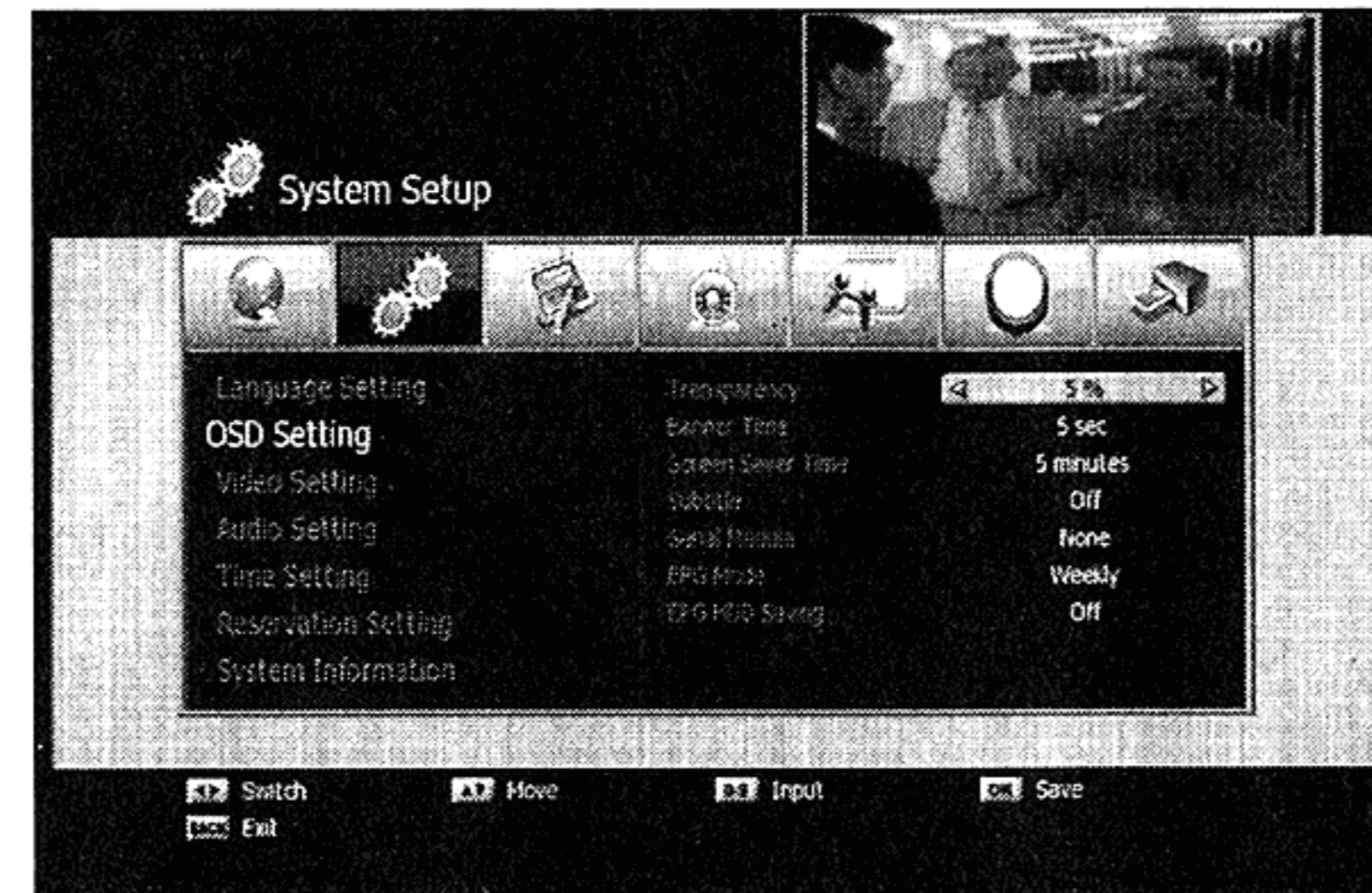


System Setup >> OSD Setting

OSD Setting

Transparency, Banner Time, Screen Saver Time, Subtitle, Serial Module, EPG Mode, and EPG HDD Saving.

- 1 Select **OSD Setting** using the **Arrow (▲/▼)** buttons on the **System Setup** menu and press the **OK** button.
- 2 Select any of **Transparency, Banner Time, Screen Saver Time, Subtitle, Serial Module, EPG Mode, and EPG HDD Saving** using the **Arrow (▲/▼)** buttons and use the **Arrow (◀/▶)** buttons to make changes.
 - **Transparency:** 0 (opaque) to 100%
 - **Banner Time:** 1 to 60 seconds
 - **Screen saver Time:** 1 to 60 minutes
 - **Subtitle :** On or Off
 - **Serial Module:** X-crypt or None
 - **EPG Mode :** Weekly or Daily
 - **EPG HDD Saving :** On or Off

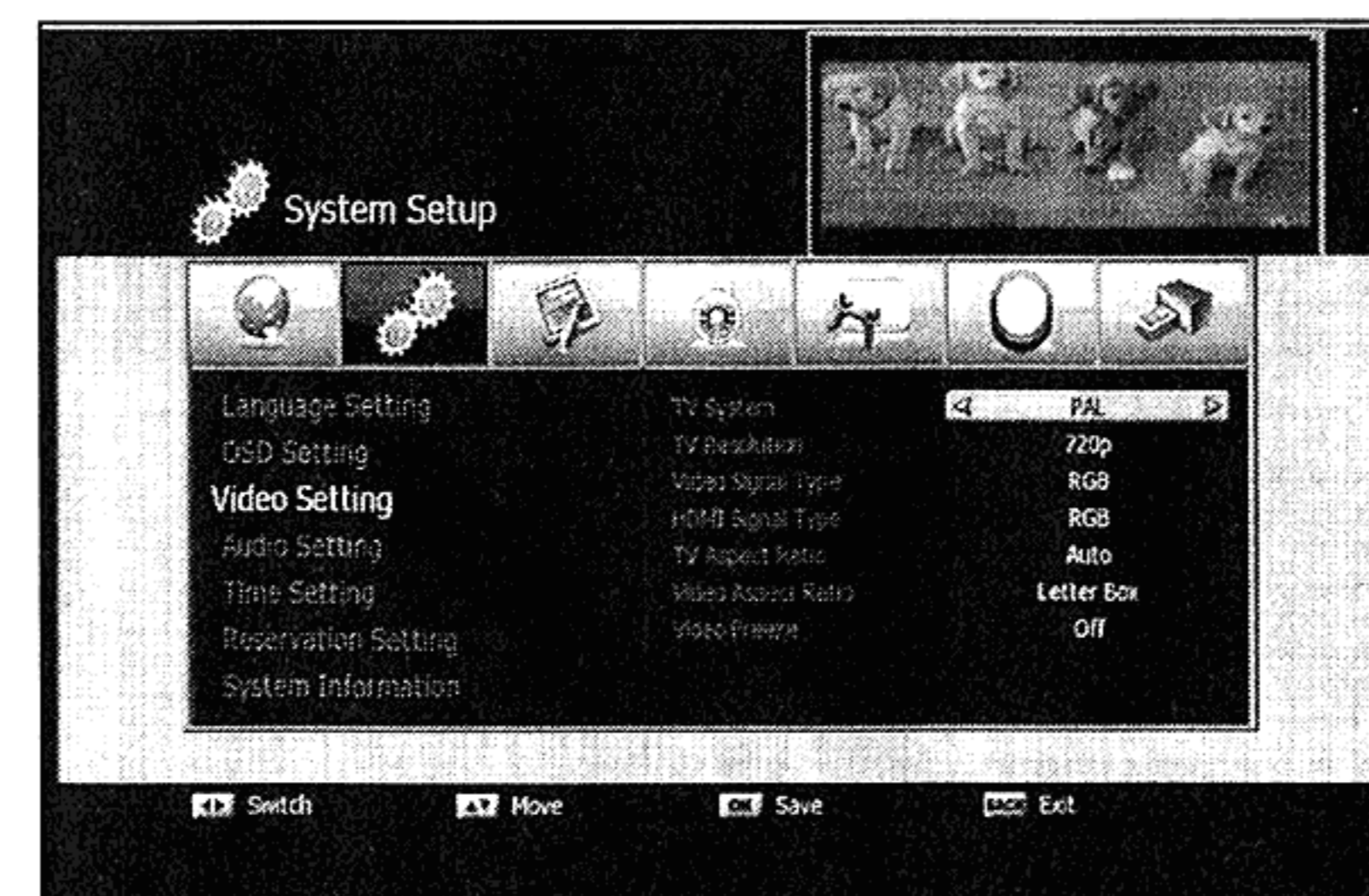


System Setup >> Video Setting

Video Setting

You can enter the various media setting for TV Resolution, Video Signal Type, HDMI Signal Type, TV Aspect Ratio, and Video Freeze.

- 1 Select **Video Setting** using the **Arrow (▲/▼)** buttons on the **System Setup** menu and press the **OK** button.
- 2 Select **Media Setting** using the **Arrow (▲/▼)** buttons and press the **Arrow (◀/▶)** buttons to make changes.
 - **TV System:** PAL or NTSC
 - **TV Resolution:** 576p, 720p and 1080i
 - **Video Signal Type:** RGB, S-Video and YPbPr
 - **HDMI Signal Type:** RGB or YPbPr
 - **TV Aspect Ratio:** You can set the aspect ratio of your TV. (4:3,16:9 or Auto)
 - **Video Aspect Ration:** You can select the display format according to TV screen ratio. (Letter Box, Pan & Scan, Mixed, or Full)
 - **Video Freeze:** On or Off



System Setup >> Audio Setting

Audio Setting

In this menu you can select different audio settings match your audio hardware:

- 1 Select **Audio Setting** using the **Arrow(▲/▼)** buttons on the **System Setup** menu and press the **OK** button.
- 2 Select **Dolby Digital, SPDIF Output, HDMI Dolby Digital, and Audio Sync Offset** using the **Arrow(▲/▼)** buttons and use the **Arrow(◀/▶)** buttons to make changes.
 - **Dolby Digital:** On or Off
 - **SPDIF Output:** Dolby Digital or PCM
 - **HDMI Dolby Digital:** On or Off
 - **Audio Sync Offset:** On or Off

System Setup >> Time Setting

Time Setting

You can set the time zone.

- 1 Select **Time Setting** using the **Arrow (▲/▼)** buttons on the **System Setup** menu and press the **OK** button.

◆ **Time Zone:**

Press the **Arrow (◀/▶)** buttons to set the Time Zone.

◆ **Daylight Saving :**

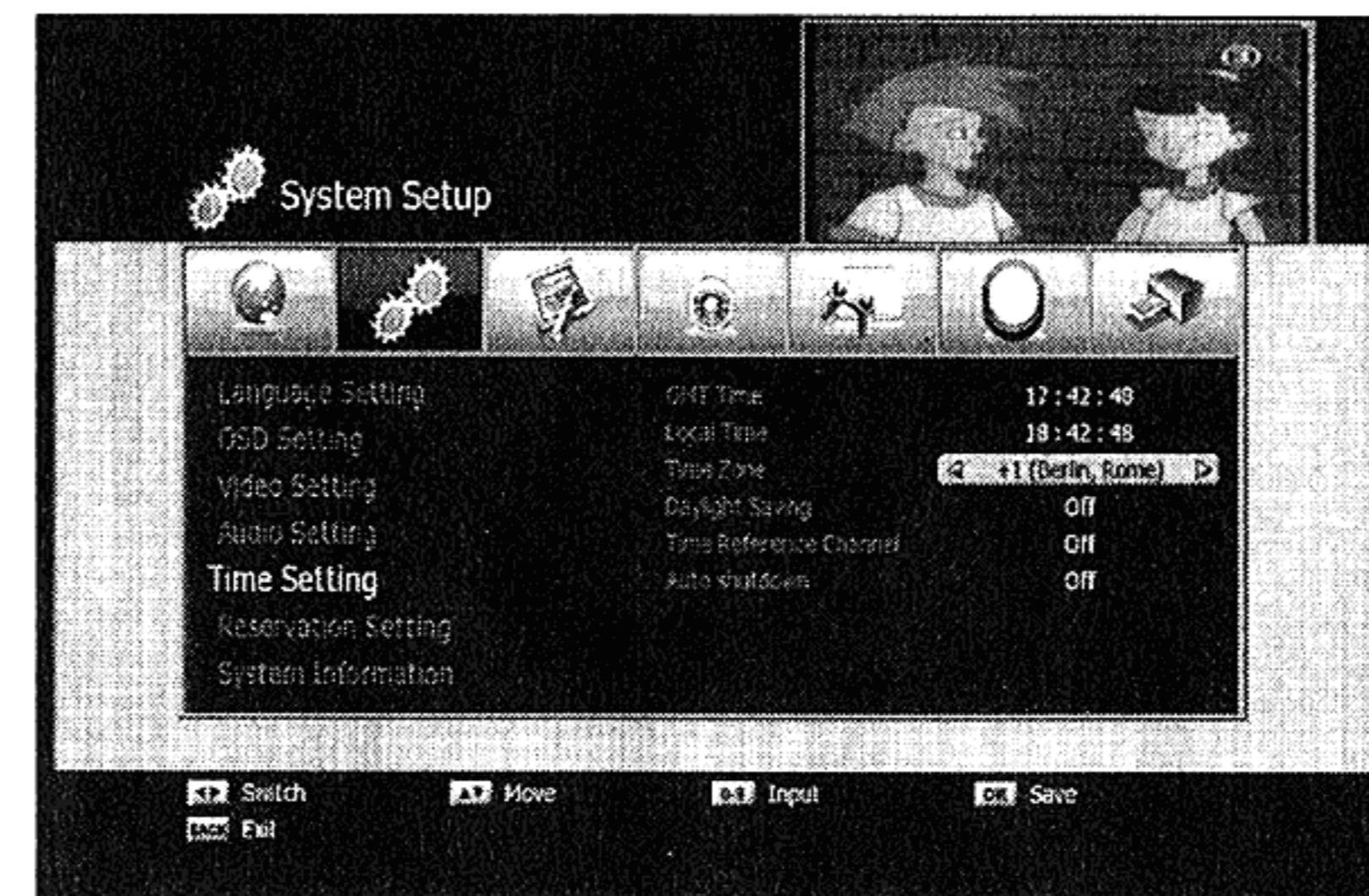
Select the daylight function On or Off.

◆ **Time Reference Channel:**

Select Channel name or Off. If you select channel name, STB will boot selected channel name.

◆ **Auto shutdown:**

Select On or Off. STB has an automatic standby feature that ensures that the STB automatically switches itself into the lowest standby mode after 3 hours.

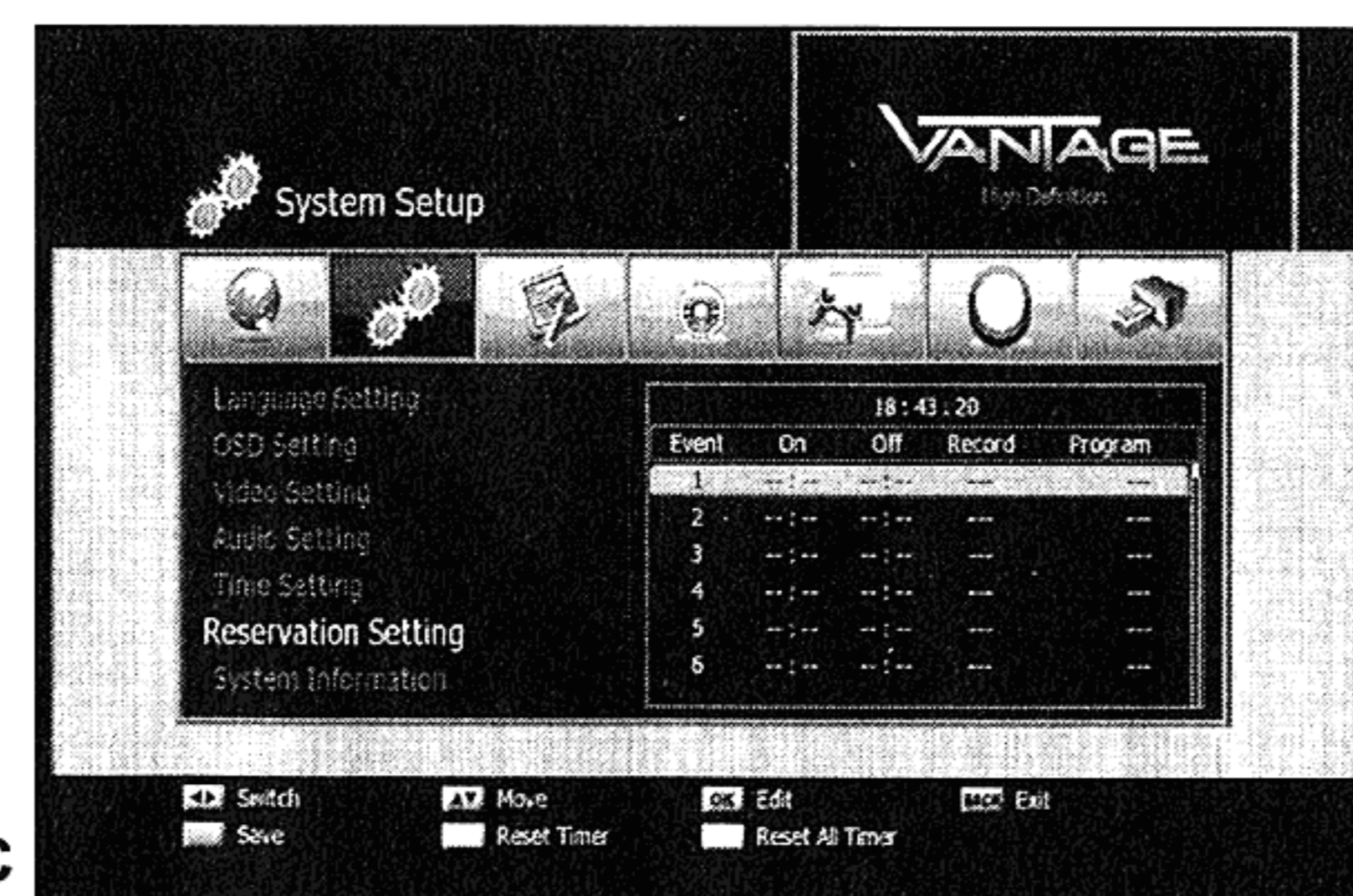


System Setup >> Reservation Setting

Reservation Setting

You can set timer of reservation for TV program such as switch on, off and TV program. Select the Event NO. for the reservation.

- **Record:** Select the Recording activation time option (Off, Once, Daily, Weekly) with the **Arrow(◀/▶)** buttons.
- **On Time:** Input the Switch-ON time with **Numeric (0-9)** buttons.
- **Off Time:** Input the Switch-OFF time with **Numeric (0-9)** buttons.
- **Channel :** Select the TV or Radio Program with **Arrow(◀/▶)** buttons.
- **Program:** Select the channel with **Arrow (◀/▶)** button and press **OK** button to save.



System Setup >> System information

System Information

You can check system information like Model Name, hardware version, Loader version, Main Software version, Database Version, and Main Software Build Date.

Channel Setup

You can edit TV and Radio channels and the favorite channel group in this menu. Press the **Menu (III)** button. Select **Channel Setup** using the **Arrow (◀/▶)** buttons on the main menu.

Channel Setup >> Delete Channels

Delete Channels

You can delete TV and Radio channels you want.

- 1 Select **Delete Channel** using the **Arrow (▲/▼)** buttons on the **Channel Setup** menu and press the **OK** button.
- 2 Select the channel you want to delete using the **Arrow (▲/▼)** buttons and press the **OK** button. Press the **Arrow (◀/▶)** buttons to switch between TV and Radio List. You can select multiple channels. Bulleted list indicates selected channels. Press the **Green** button for Delete mode by Channel, TP or Satellite.
- 3 Press the **Red** button to delete selected channels.
- 4 Press the **Yellow** button to All Channels delete.



Note

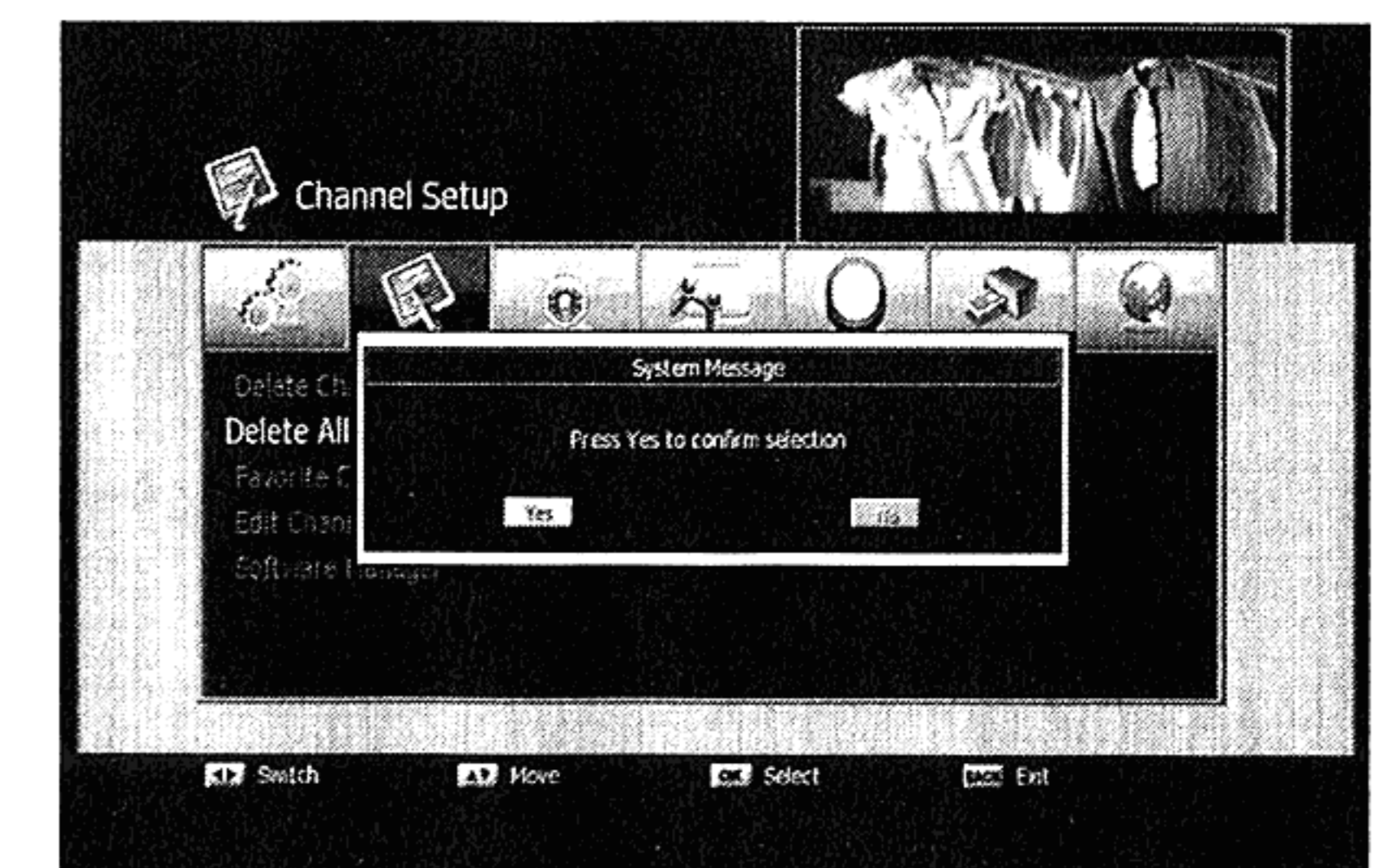
- If you press the **Blue** button on your remote you will get a preview of that channel on the upper right side.

Channel Setup >> Delete All Channels

Delete All Channels

You can delete all channels.

- 1 Select **Delete All Channels** using the **Arrow (▲/▼)** buttons on the **Channel Setup** menu and press the **OK** button. System message dialog box appears asking you to confirm it.
- 2 Select **Yes** using the **Arrow (◀/▶)** buttons and press the **OK** button to delete all channels.

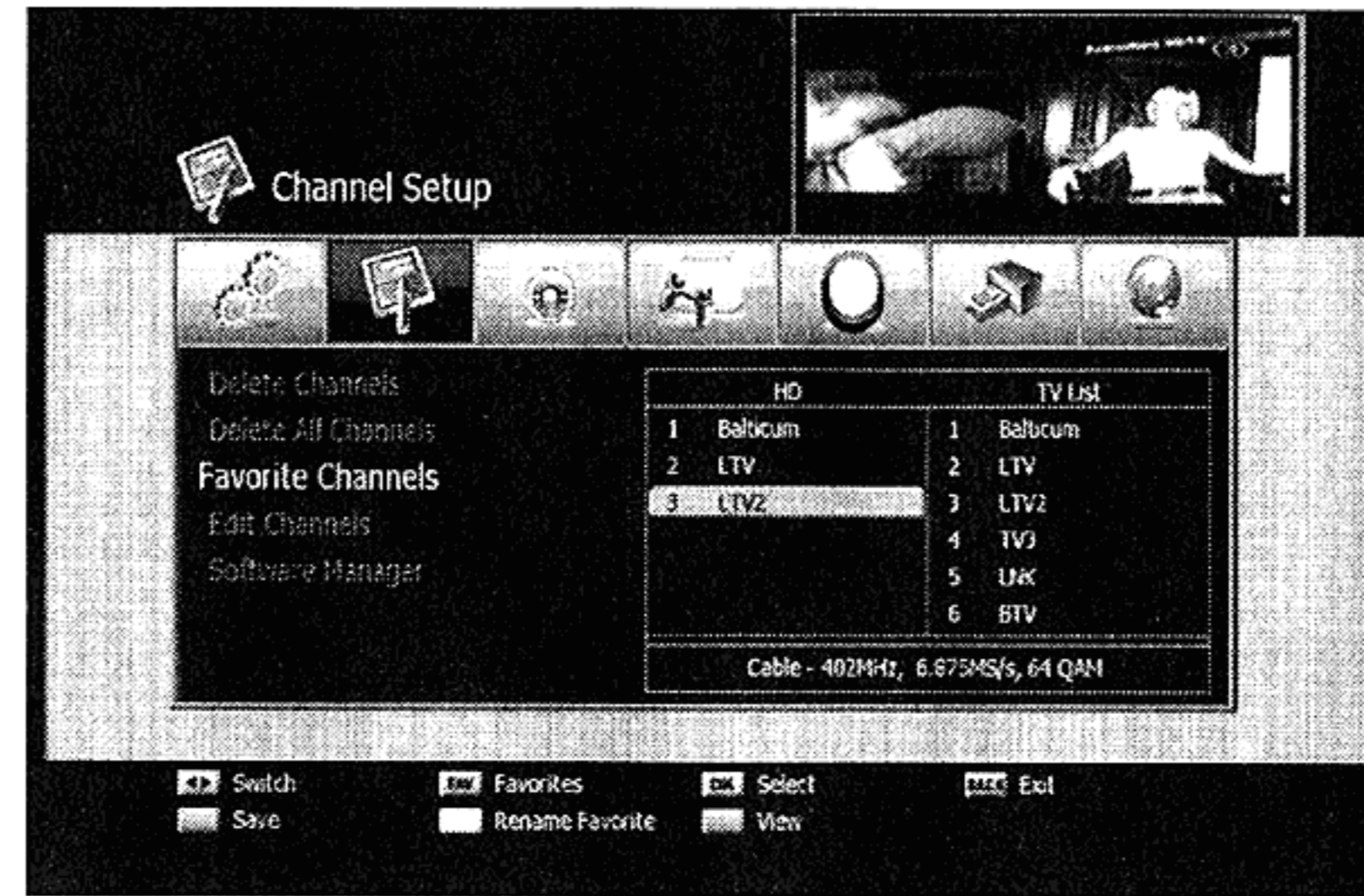


Channel Setup >> Favorite Channels

Favorite Channels

You can edit favorite channels. There are 9 favorite channel groups (**News, Sports, Movie, Music, Shopping, Kids, Adults, Drama, and Education**).

- 1 Select **Favorite Channels** using the **Arrow (▲/▼)** buttons on the Channel setup menu and press the **OK** button.
- 2 Select channels that you want to edit using the **Arrow (▲/▼)** or **Page (▲/▼)** buttons in the **TV/Radio List** and press the **OK** button. Selected channels are listed in the favorite group. Pressing the **TV/Radio (TV/R)** button switches between TV and Radio List.
- 3 Press the **FAV (♥)** button to select another favorite group.
- 4 Select channels that you want to edit using the **Arrow (▲/▼)** buttons in the **TV/Radio List** and press the **OK** button. Repeat steps from 2 to 3.
- 5 Press the **Red** button to confirm.



To rename the Favorite Group

- 1 Select the Favorite Group you want to rename using the **FAV** button and press the **Yellow** button. Keyboard will appear.
- 2 Press **Enter** key on keyboard after rename.

Channel Setup >>Edit Channels

Edit Channels

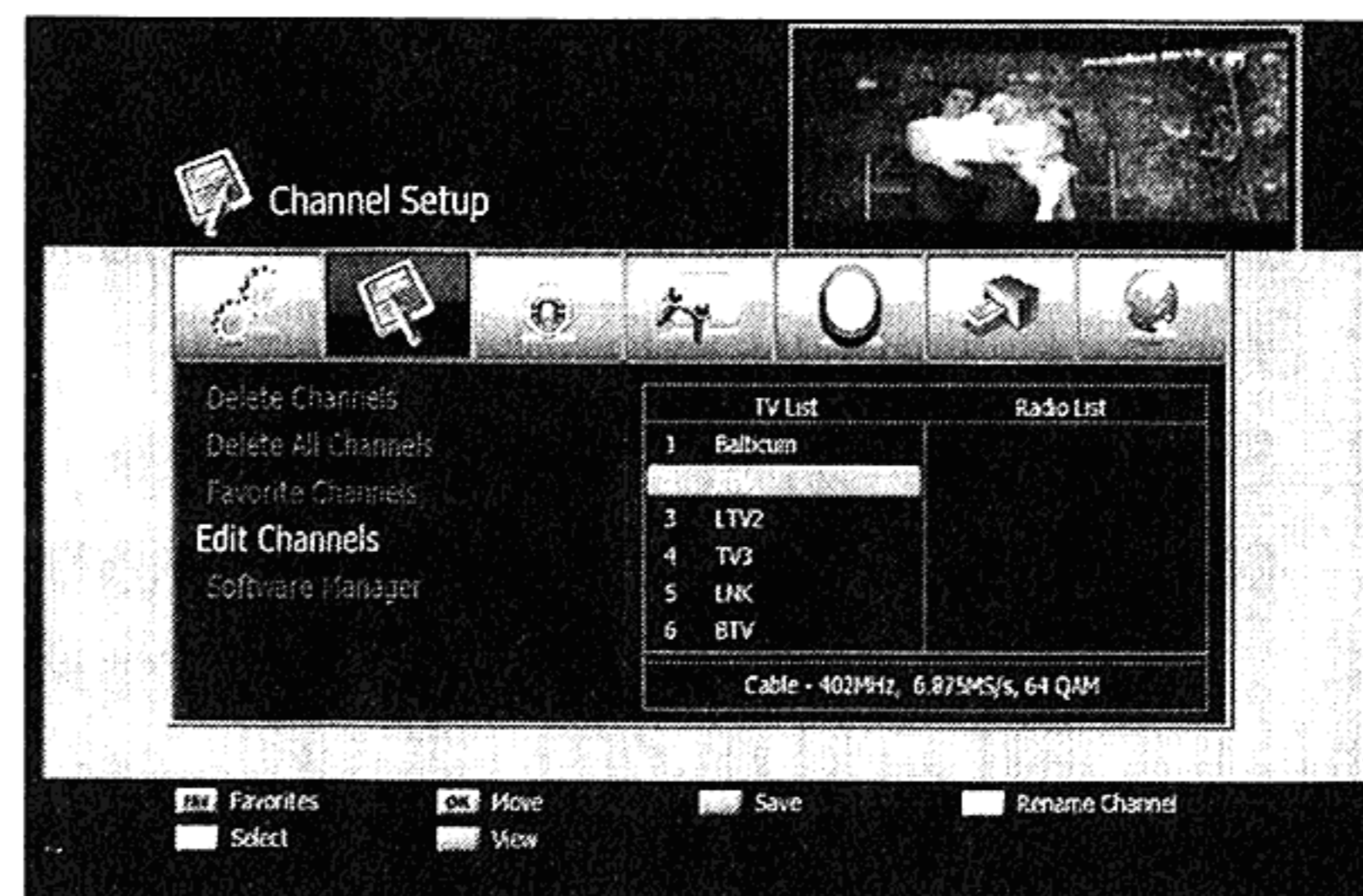
You can rename the channel list.

Select **Edit Channels** using the **Arrow (▲/▼)** buttons on the Channel Setup menu and press the **OK** button.

- **FAV (♥)** button: Shows Favorite channel lists
- **Arrow (◀/▶)** buttons: Switches between TV and Radio channel lists

To rename the Channel

- 1 Select the channel you want to rename using the **Arrow(▲/▼)** button and press the **Green** button. Keyboard will appear.
- 2 Press **Enter** key on keyboard after rename.



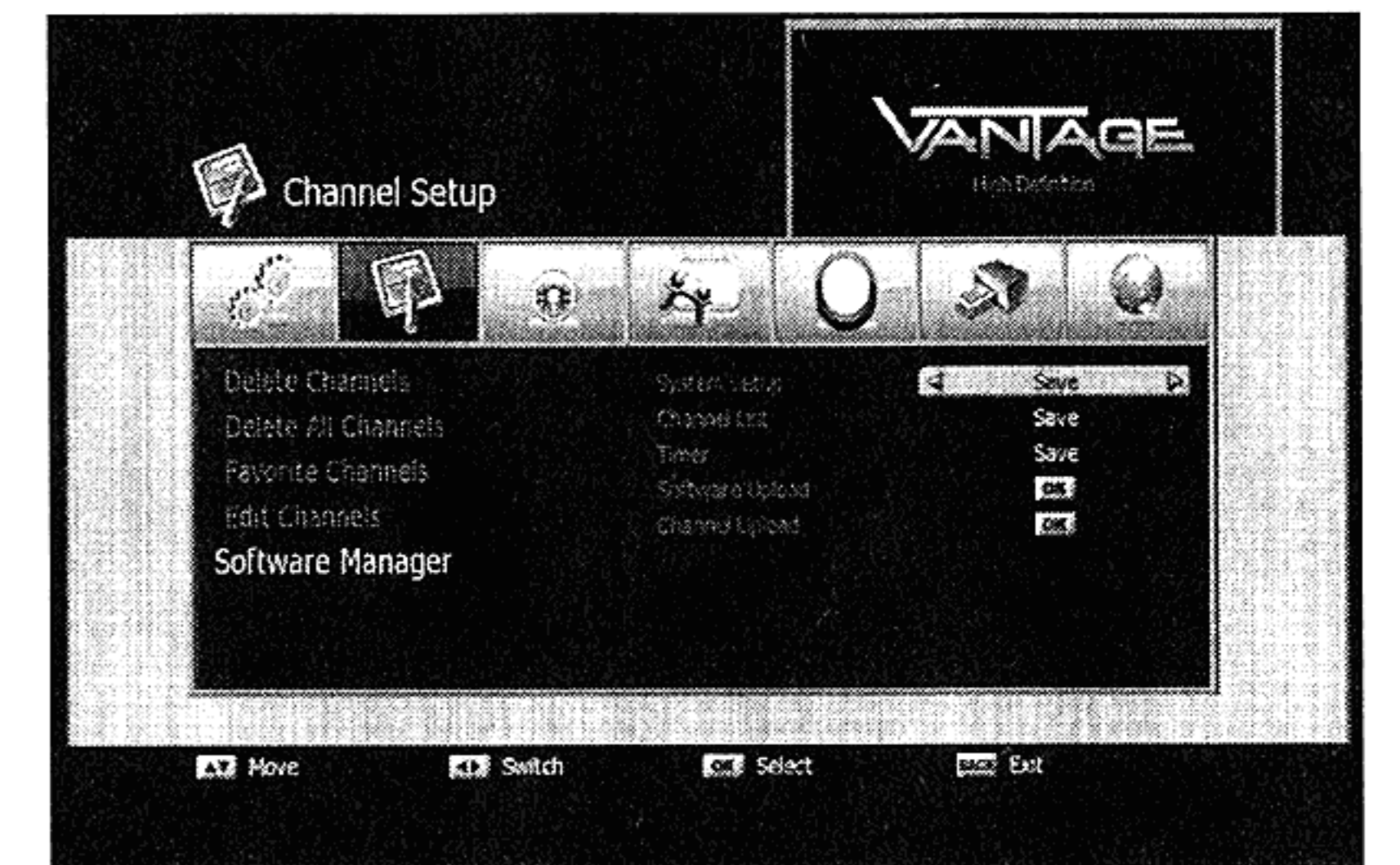
Channel Setup >> Software Manager

Software Manager

You can download the software of your receiver when the new software is available for your system. During download, don't turn off your receiver. In case of the power is turned off, turned on your receiver again to complete the download.

- 1 Select **Software Manager** using the **Arrow (▲/▼)** buttons on the **Installation** menu and press the **OK** button.

- **System Setup:** Save or Recover
- **Channel List:** Save or Recover
- **Timer:** Save or Recover
- **Software Upload:** Copies all the data from Master STB to Slave STB.
- **Channel Upload(Optional):** Copies only the channel data from master STB to Slave STB. Connects both Master and Slave STB using RS232C Cable and then press the **OK** button on the Software Upload menu for the Master STB.



Parental Lock

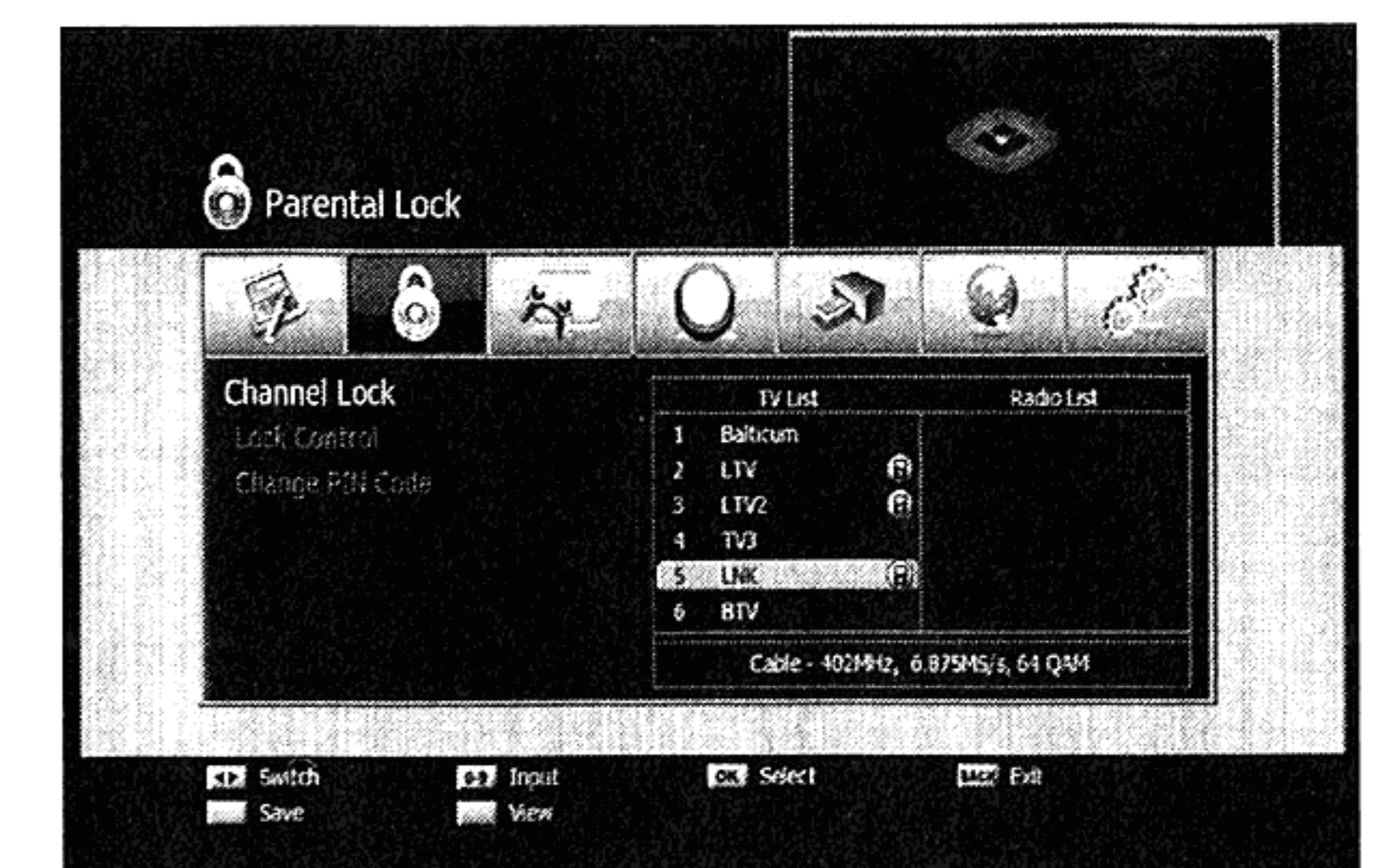
You can lock the channels to prohibit unauthorized users from watching specific channels. Press the **Menu (III)** button. Select **Parental Lock** using the **Arrow (◀/▶)** buttons on the main menu

Parental Lock >> Channel Lock

Channel Lock

Whenever you want to see the locked channel you will be prompted to enter the PIN Code in the dialog box.

- 1 Select **Channel Lock** using the **Arrow (▲/▼)** buttons on the Parental Lock menu and press the **OK** button.
- 2 Select the channel that you want to use the **Arrow (▲/▼)**, **PR+/-**, **Page (▲/▼)**, or **Numeric (0~9)** buttons and press the **OK** button. Selected channel will be displayed with locking-marked. Press it again to clear. **Arrow (◀/▶)** buttons: Switches between TV and Radio List.
- 3 Press the **Red** button to confirm.



Parental Lock >> Lock Control

Lock Control

Whenever you want to use the locked system you will be prompted to enter the PIN Code in the request dialog box. Using **Arrow (▲/▼)** buttons and press **OK** button to select a lock status.

◆ **System Lock:**

Select "Lock" using the **Arrow (▲/▼)** buttons if you wish to check the password to enter the main system after rebooting.

◆ **Menu Lock:**

Select "Lock" using the **Arrow (▲/▼)** buttons if you wish to check the password to enter the all the menu for the settings.

◆ **Lock mode:**

Select Once or Every time mode by using **Arrow (▲/▼)** button.

- **Once:** Input the pin code once on the channel change with Parental Lock.
- **Every time:** Input the pin code every time on the channel change with Parental Lock. Save the changes with **OK** button.

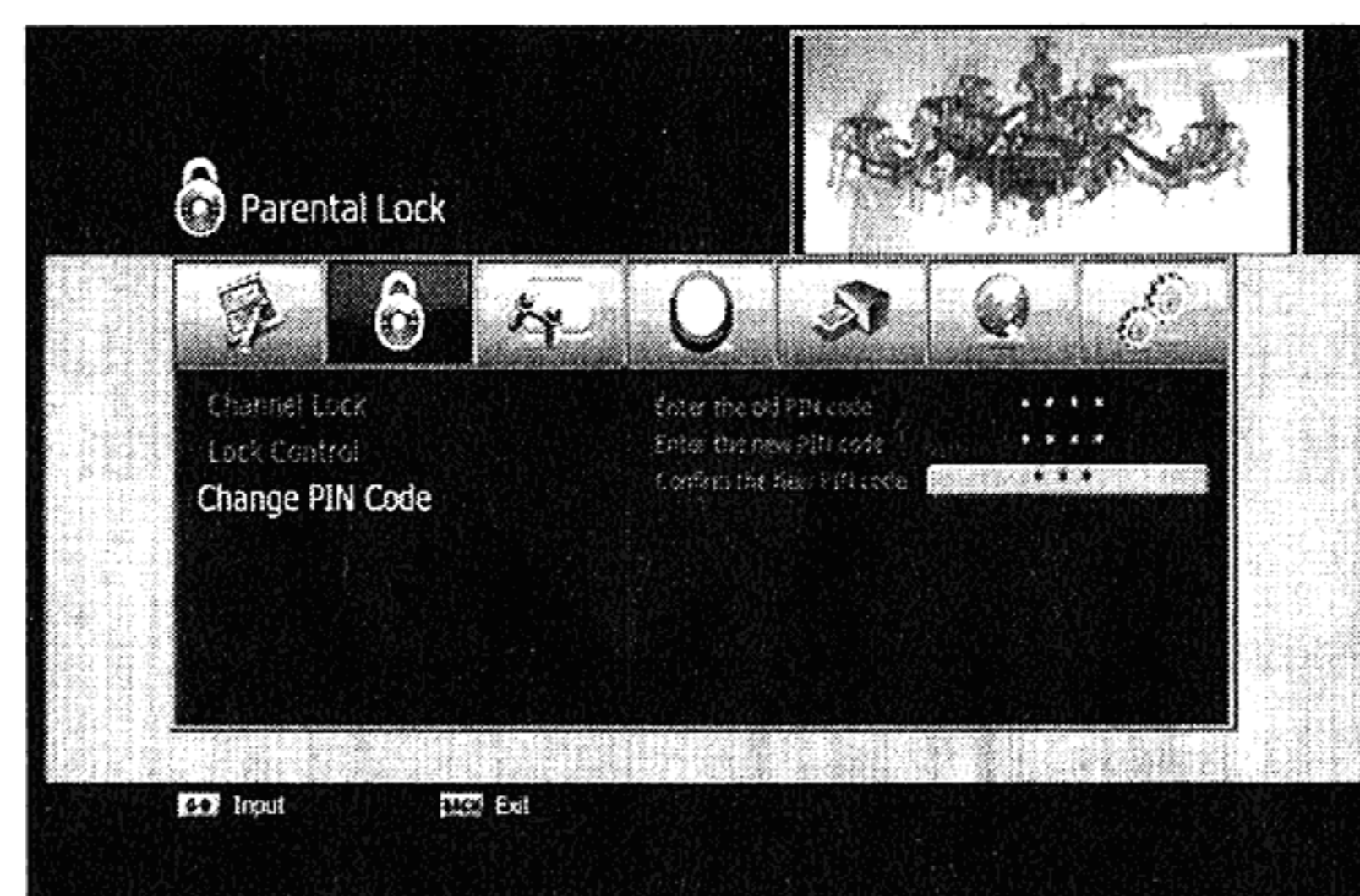


Parental Lock >> Change PIN Code

Change PIN Code

You can create a new PIN code in this menu. "0000" is the default password.

- 1 Select **Change PIN Code** using the **Arrow (▲/▼)** buttons on the **Parental Lock** and press the **OK** button.
- 2 Enter the old PIN code.
- 3 Enter the new PIN code.
- 4 Enter the new PIN code again to confirm.



Game

This product provides lots of games for your entertaining environment.

Select Game using the **Arrow (◀/▶)** buttons on the main menu.

- 1 Select a game using the **Arrow (▲/▼)** buttons on the Game menu and press the **OK** button.
- 2 According to the instruction displayed on screen, you can enjoy games using the **Arrow**, **Numeric (0~9)**, and **OK** buttons.

Multimedia

This menu offers you to access your multimedia devices USB, Internal harddisk and ethernet.

Multimedia >>PVR Setting

PVR Setting

Recording Limit Time: You can setup the max. recording time for instant recording.

Timeshift Limit Time: Timeshift buffer. when timeshift reaches the max time it starts overwriting from the beginning.

Timeshift: Choose between these options:

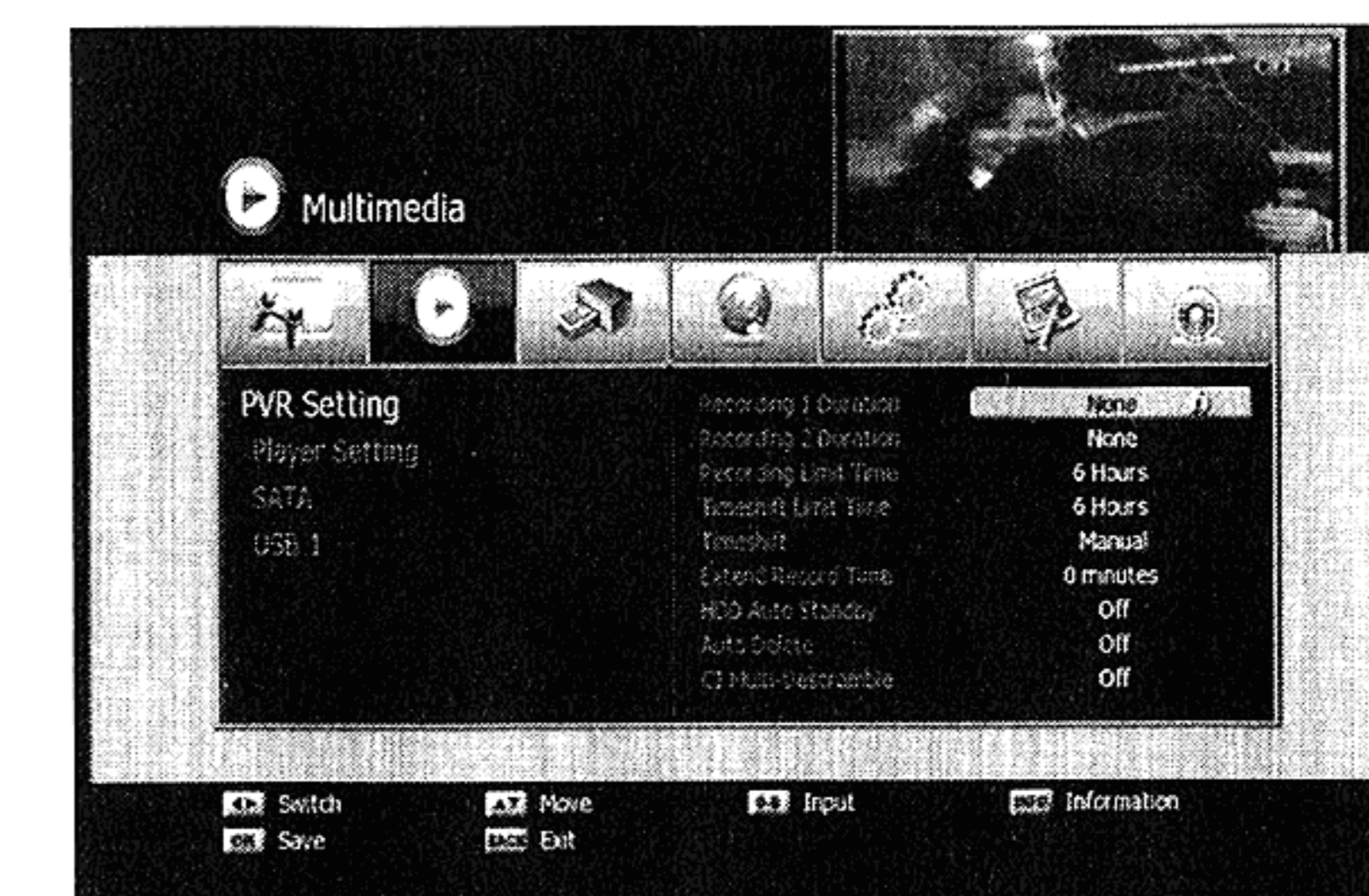
- **Auto:** Timeshift start automatically in the background.
- **Manual:** You have to start timeshift manually by pressing **the Timeshift button**.

Extended Recordtime: Adds a extra time to Timer duration. This extra time will added at the end of your timer.

Store and close by pressing the **OK** button.

HDD Auto Standby: HDD will be in Standby mode if there is no operation with HDD for 5 minutes.

Auto Delete: If there is less than 5GB space in HDD, the oldest file will be deleted automatically.



Note

- You can press Info at every menu entry to get helpful information related to the function on your screen.

Multimedia >> Player Setting

Player Setting

Player Time: Select the Player Banner time from 1 to 60 seconds.

Auto Resuming: Select "On" if you wish to play the recorded files consecutively.

Playback Repeat: Select "On" if you wish to pop up the Playback option menu.

JPEG slide show: Select one 1 to 10 seconds for the display time of JPEG slide.

Sorting: Select Date or Alphabet for the recorded file sorting.



Multimedia

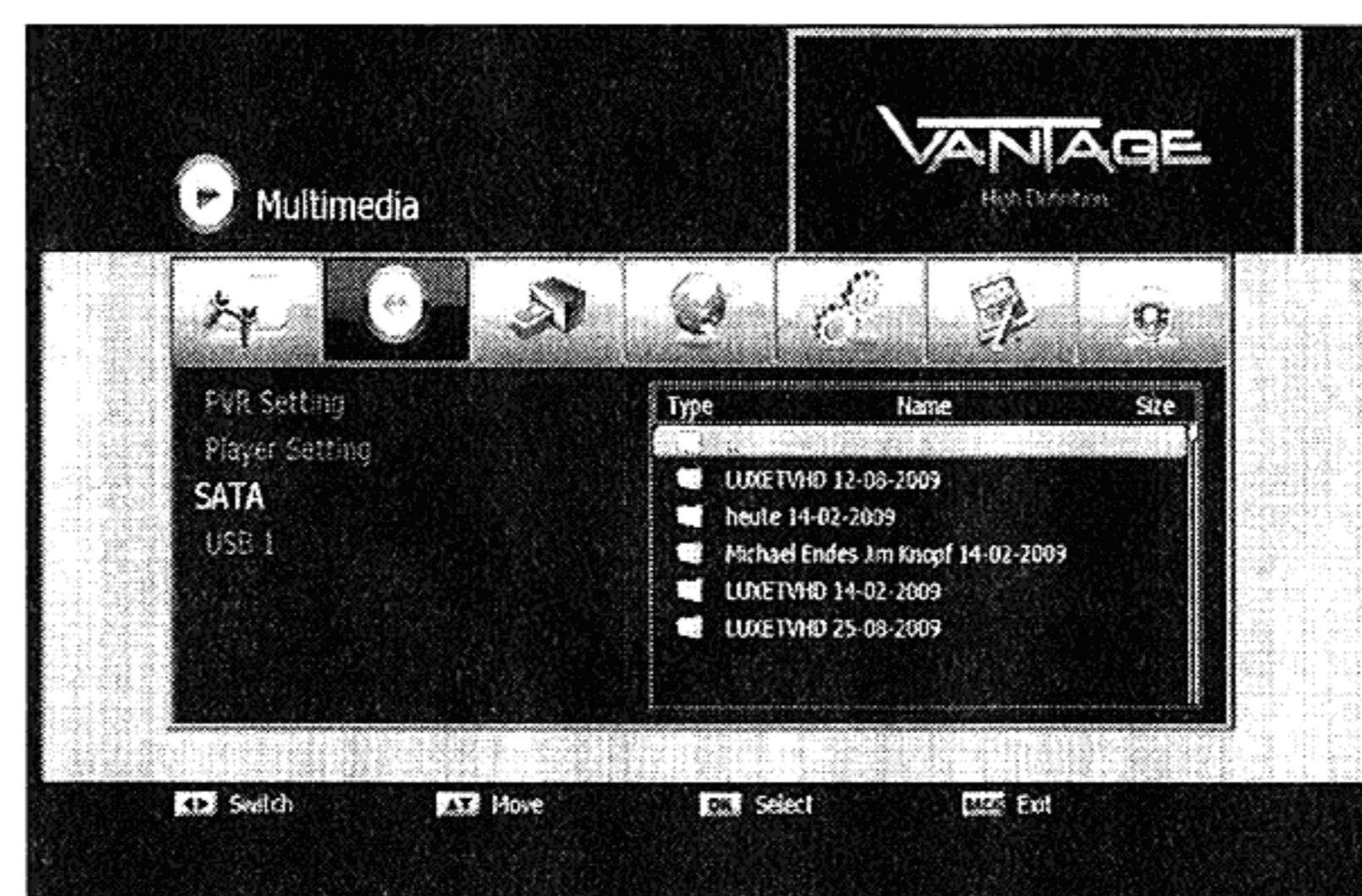
Multimedia >> SATA / USB

SATA / USB

You can use external HDD or USB storage devices (USB Stick) as data storage. HDD or USB must be compatible with FAT 32 file system. If HDD or USB is not compatible with FAT 32 File system, you need to change the file system. By using personal computer with the format function.

1 Playing the media files

Select the media files you want to playback by navigating with **Arrow (▲/▼)** and activate with **OK** button. You can playback the following file formats: Xvid, JPEG, MP3



MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson

2 Software Update

Select S/W files with **Arrow(▲/▼)** buttons and press **OK** button.

3 Locking files

Select the files with **Arrow(▲/▼)** buttons and press **Red** button.

4 Deleting files

Select the files with **Arrow(▲/▼)** buttons and press **Green** button.

5 Format

Press **Yellow** button to delete all the files in the storage device.

6 Editing folder/files

Select the folder/files with **Arrow(▲/▼)** buttons and press **Blue** button.

Conditional Access

You can enjoy not only scrambled services using the Conditional Access Modules (CAM), but also free-to air services, Types of common interface module and smart card differ depending on the service provider. If you want to use conditional access modules, contact your service provider or distributor.

CI A Common Interface Slot 1

CI B Common Interface Slot 2

Your receiver is equipped with 2 Common Interface Slots. In this Slots you can use every standard Common

interface module : Irdeto, Viaccess, Cryptoworks, Conax and Mediaguard.

To watch scrambled channels you will need a common interface module and a descrambling card that must match system wise.

Your card (provided by TV provider) must be slide in your common interface module. The Common Interface module must be positioned in on of the 2 CI slots.

You can access internal menus of your CIs via menu **Conditional Access**. Documentations about your card or module will be provided by your pay tv provider.

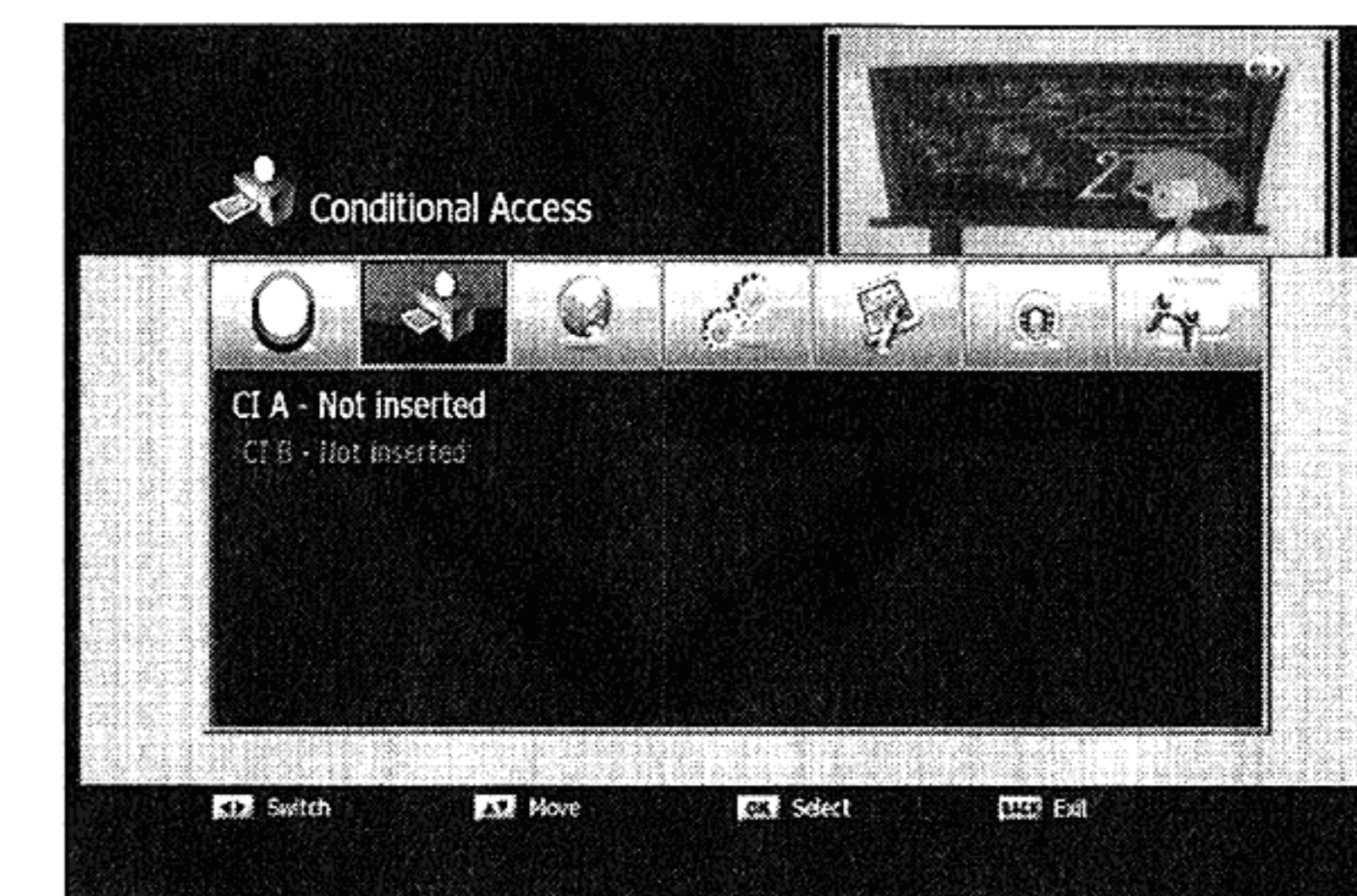
Beside CI slots your receiver is equipped with two card readers for smart cards.

The card readers support the following encryption systems:

dgcrypt,
conax,
firecrypt,
xcrypt,
crypton

You can access internal menus of your smart cards via menu **Conditional Access**. Documentations about your cards will be provided by your pay tv provider.

Note: Informations about Common Interface Modules and smart cards will be provides by the provider who offers those only.



PVR Functions

※ Don't pull out a plug during recording. It will cause a damage in HDD. Please press "Power" button on your Remote control or unit to turn it off.

Recordmodes

Timeshift: There are two timeshift modes available:

1. Auto : Timeshift start automatically in the background.
2. Manual : You can start timeshift manually by pressing the **TimeShift** button.

*Note: You can set the max Timeshift buffer in menu **Multimedia >>PVR Setting**.*

*You can stop timeshift by pressing the TimeShift button followed by pressing the **Stop** button.*

Instant Record:

You can start a record everytime by pressing the **record** button. A popup allow you to use EPG data to record until the end of the current event. Otherwise you record the max. record time. You can stop recording by pressing **Stop** button or wait until the end of the event or the max. recordtime has reached.

Intant stop can be accomplished by pressing **Stop** button twice.

*Note: The Recording Limit Time can be set in menu **Multimedia >>PVR Setting**.*

You are able to record two events at the same time and use timeshift for a third programm on one of those two carriers you are already recording from.

Note: In Channelist , channels that will be recorded or a timer was set on will be marked with a "R" and a color filling.

What is timeshift? Timeshift allows you to watch programm timeshifted. You can stop the live programm and start Watching it to a more convinient time or you can watch programm that still be recorded even befor the record is actually not finished yet.

In practice, when you get a call hust press Pause, answer your call and if you are finshed press Pause again and you can follow the programm just from that point youve pressed pause.

PVR Functions

Timer records:

A Timer let your box start , switch to the chosen channel and start recording automatically. After ending this task the Receiver will fall back in his original mode (Standby).

You can open the Timer menu by pressing the **Timer** button or choose Reservation Setting menu on the System Setup menu.

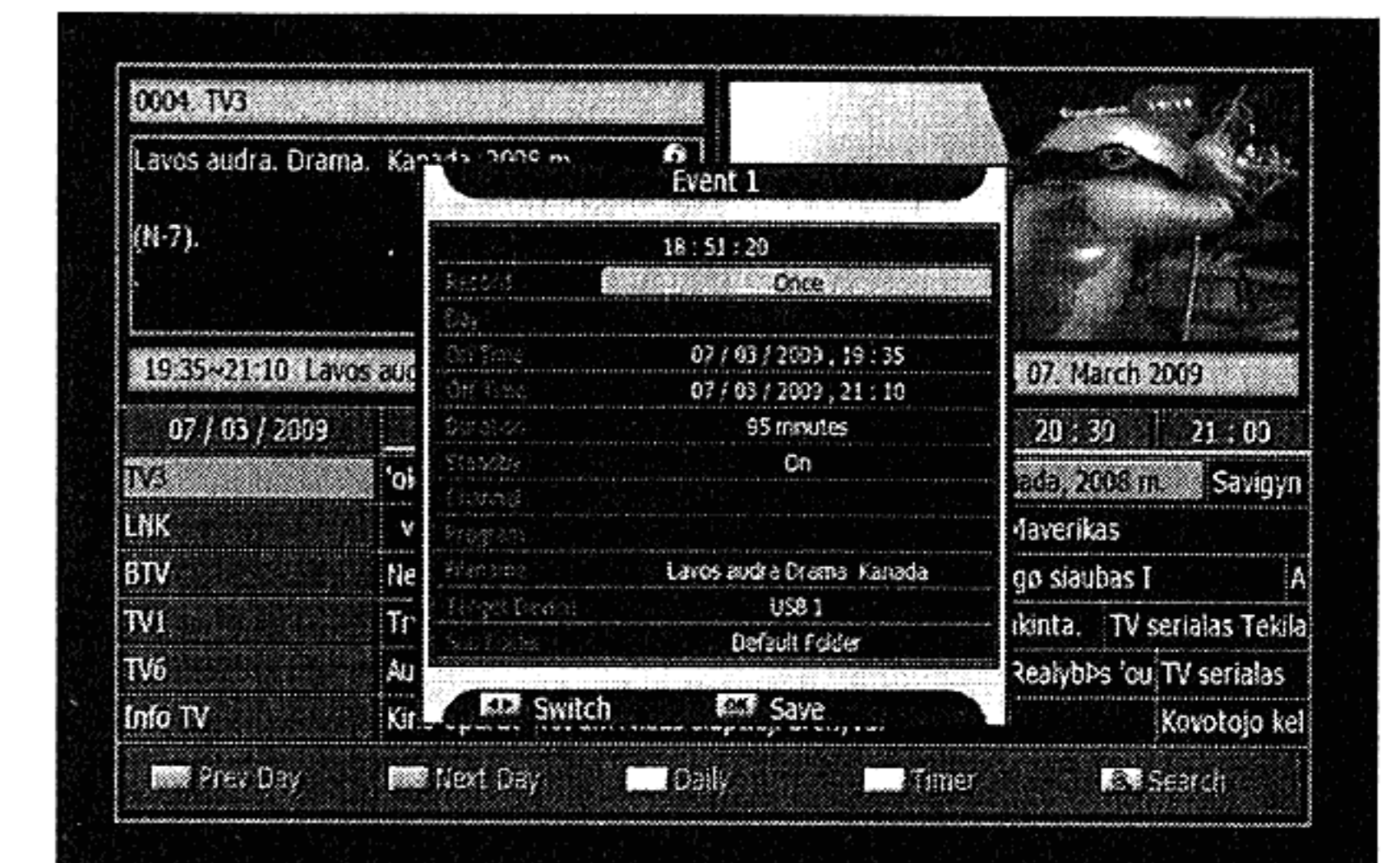
Pick start and end time, if you want to do a record and the channel you wish to record as well. Store your settings by pressing the **OK** button

Note: You can set up to 40 Timers.

Timer recording out of EPG (Guide)

You can set Time in EPG as well
Please follow these steps:

1. Start EPG by pressing the **Guide** button.
2. Use the **Arrow(▲/▼/◀/▶)** buttons to choose a event in your EPG.
3. To set a timer press the **Green** button.
4. A popup will appear , here you can set several parameters of your event recording Start and End time, record mode (once, daily, weekly or off), the channel, standby (you can set a state that your box turn to after recording), Filename and target device.
5. Store your settings by using the **OK** button.



PVR Functions

Player Functions:

Start the Vantage Player by pressing the **Media** button at your remote control. Your file list will appear now.

*Note: You can control your Vantage player by moving the cursor with your navigation keys and activate a function with your **OK** button.*

You have the following options:

- << fast rewind
- >> fast forward

*Note: The speed you moving back and forth will be controlled by pressing the **FWD** (▶▶) or **REW** (◀◀) button multiple times.*

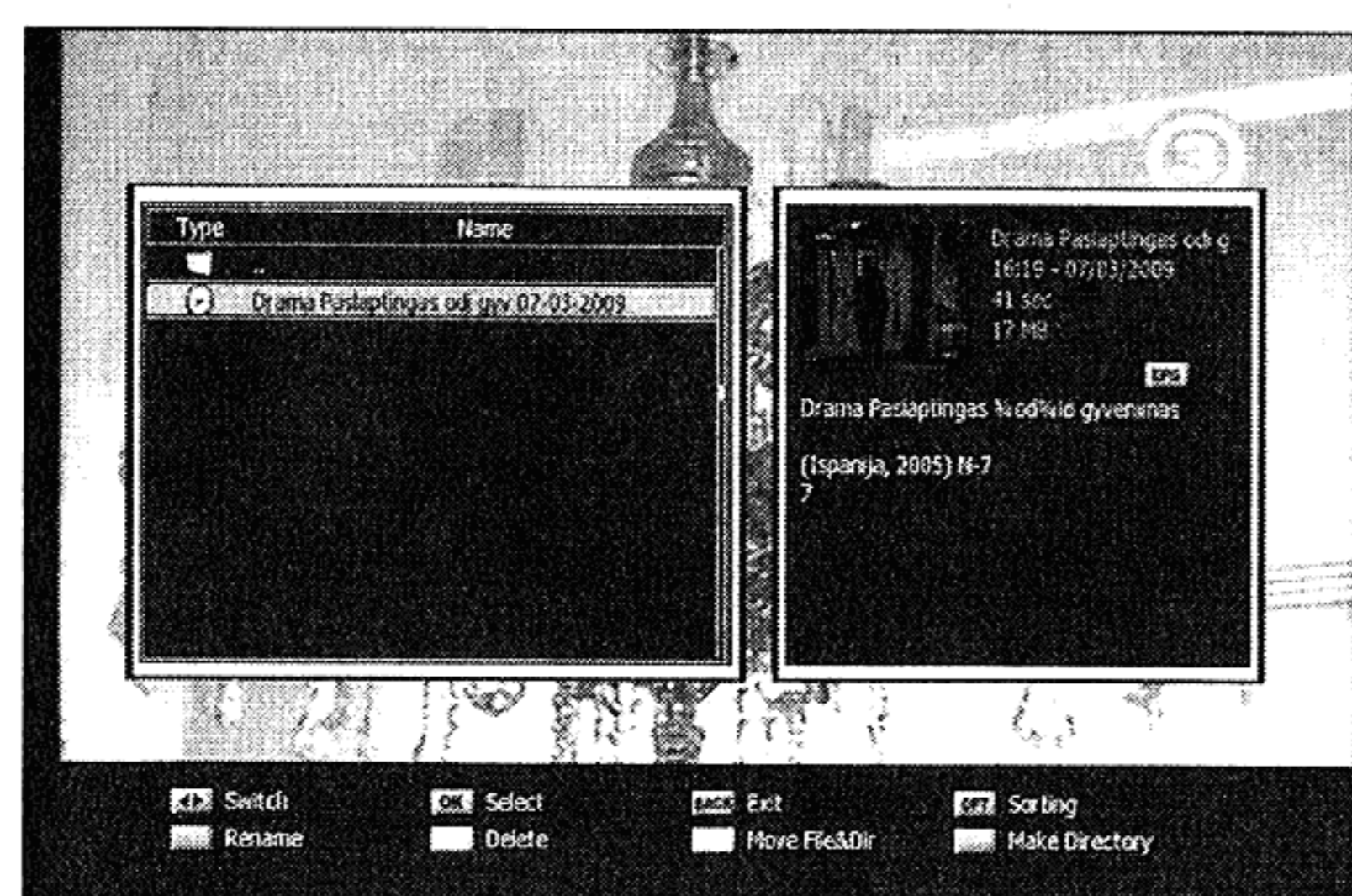
Page (▲/▼) buttons: You can jump 10 percent wise back and forth by using this buttons.

Media buttons: You can open your File list at every given time by pressing the **Media** button.

Stop (■) button: Stop playback.

Pause button: You can pause playback by pressing the **Pause** button. Pressing it again returns to playback.

INFO button: Pressing it once show you the controls of the vantage player. Pressing it twice it will show you information about the current file.



PVR Functions

Player Functions

The Cut function

The Vantage player allow you to cut your recorded files. Using this function allow to cut out commercial breaks for instance.

Start Cutting by pressing the **Zoom** (⊕) button in Playback mode.

Function buttons:

Arrow (◀/▶) buttons: Move for and backwards within a recorded file up to the point you want to start or end cutting.

Arrow (▲/▼) buttons: Use this buttons to switch between cut and bookmark mode.

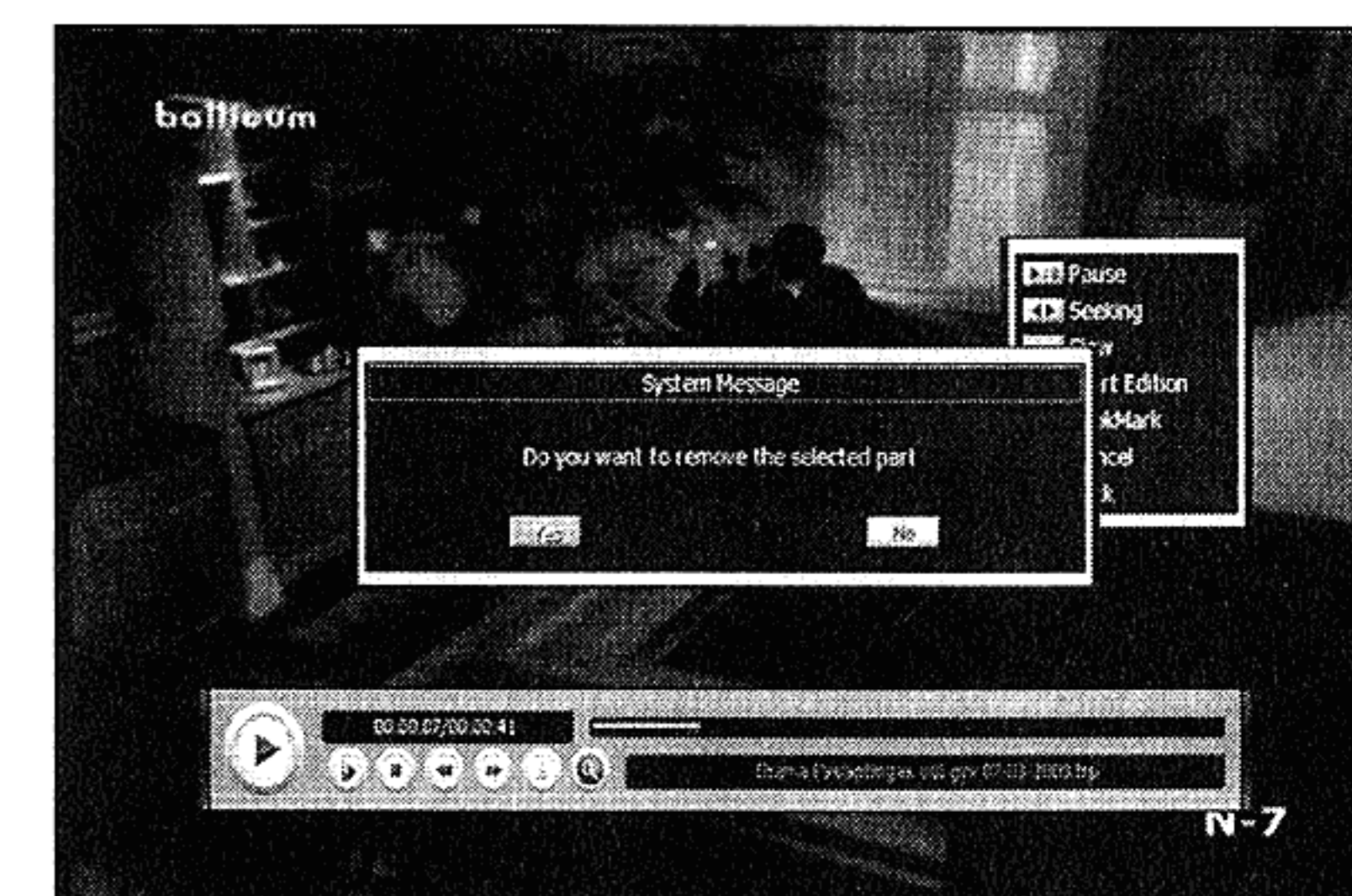
Green button: Press the **Green** button to mark the point where you want start cutting, move to the end point of the area you want to cut out and press **Green** again. At this point a menu pops up and offer you to cut the marked area. Please choose Yes and confirm with **OK** button.

Red button: You can delete your marks by pressing the **Red** button. You can delete Bookmarks the same way.

Bookmark functions:

Arrow (◀/▶) buttons: Move for and backwards within a recorded file up to the point you want to set a bookmark.

Yellow button: Use the **Yellow** button to set Bookmarks in a recorded file. You can use the **Yellow** button in playback mode to jump to your bookmarks.



Comfort Features

In this chapter we introduce you to some comfort function of your STB.

PiP: Picture in Picture

You can start PiP by pressing the **PIP** button. In this mode your program will move to a small picture in the upper right quadrant of your screen. You can now change the channel on your main screen by using the **Numeric (0~9)** or **PR +/-** buttons or by using the channel list.

Press the **Swap** to switch between your PiP and Main screen.

Finish this function by pressing the **PIP** button.

MoSAic

Press the **Red** to open up this function. You can choose from a menu how many screens you want to use for this feature. You can choose between 2 x 2 pictures or 2 x 3. In this mode you get an overview about 4 or 6 channels on your screen. The actual pictures will be refreshed one after another. You can switch to next channels in your channel list by pressing the **Blue** button and move backwards with the **Red** button. You can use your **Arrow(▲/▼/◀/▶)** to move to every of this small screens and activate it to live mode using the **OK** button. If you want to see a this channel on your main screen press **OK** again.

Teletext

Open Teletext by pressing the **Text** button. A popup menu let you (if available) choose between teletext languages. Choose your language and confirm with **OK** button. Now you can use teletext services you can go to teletext sites directly by addressing it with your **Numeric** buttons or you can move site wise with your **Arrow(▲/▼)** buttons.

Favorites

Your Receivers offers the opportunity to organize your favorite channels in so called favorite lists:

You can access your Fav lists directly by pressing the **FAV** button. Press the **FAV** button again to move to the next favorite list Please press this button again to move back to your main channel list.

Glossary

SPDIF

S/PDIF specifies a Data Link Layer protocol and choice of Physical Layer specifications for carrying digital audio signals between devices and stereo components. The name stands for Sony/Philips Digital Interconnect Format (more commonly known as Sony Philips Digital InterFace), the two companies being the primary designers of the S/PDIF format

Common Interface Module:

CI Modules (Common Interface) are interfaces between STB and smartcard.

There are many different types of CI Modules available. The decision which one has to be used depends on the cryptosystem your TV provider is actually using.

CI Modules are physical PCMCIA cards.

EPG: Electronic program guide

An Electronic Program(me) Guide (EPG) or Interactive Program(me) Guide (IPG) or Electronic Service Guide (ESG) is an on-screen guide to scheduled broadcast television or radio programs, typically with functions allowing a viewer to navigate, select, and discover content by time, title, channel, genre, etc. by use of their remote control, a keyboard, or other input devices such as a phone keypad.

HDMI: High Definition Multimedia Interface

The High-Definition Multimedia Interface (HDMI) is a compact audio/video connector interface for transmitting uncompressed digital streams. It represents a digital alternative to consumer analog standards such as Radio Frequency (RF) coaxial cable, composite video, S-Video, SCART, component video, D-Terminal, and VGA. HDMI connects digital audio/video sources such as set-top boxes, Blu-ray Disc players, personal computers, video game consoles, and AV receivers to compatible digital audio devices, computer monitors, and digital televisions.

OSD: On Screen Display

Is a graphical menu on the screen that allow you to control and setup your Receiver. One can control it by using a remote control or control buttons at the front display of your STB. The OSD is available in multiple languages.

High Definition Television:

(High-definition television (HDTV) is a digital television broadcasting system with higher resolution than traditional television systems (SDTV) . HDTV is digitally broadcast because digital television (DTV) requires less bandwidth if sufficient video compression is used

RGB:

The RGB color model is an additive color model in which red, green, and blue light are added together in various ways to reproduce a broad array of colors. The name of the model comes from the initials of the three additive primary colors, red, green, and blue.

YUV: older but common name for Component Video or YPbPr.

YPbPr is a color space used in video electronics, in particular in reference to component video cables. YPBPR is the analog version of the YCBCR color space; the two are numerically equivalent, but YPBPR is designed for use in analog systems whereas YCBCR is intended for digital video.

Composite Video:

Composite video is the format of an analog television (picture only) signal before it is combined with a sound signal and modulated onto an RF carrier.

Composite video is often designated by the CVBS acronym, meaning any of “Color, Video, Blank and Sync”, “Composite Video Baseband Signal”, “Composite Video Burst Signal”, or “Composite Video with Burst and Sync”.

Lettebox:

Letterboxing is the practice of transferring widescreen film to video formats while preserving the film’s original aspect ratio. On video displays with a 4:3 aspect ratio, the resulting videographic image has mattes (black bars) above and below it; LTBX is the identifying acronym for films and images so formatted

Pan & Scan:

Pan and scan is one method of adjusting widescreen film images so that they can be shown within the proportions of a standard definition 4:3 aspect ratio television screen, often cropping off the sides of the original widescreen image to focus on the composition’s most important aspects. Some film directors and film enthusiasts disagree with pan and scan cropping, because it can remove up to 45% (on 2.35:1 films) of the original image, changing the director’s original vision and intentions. The vertical equivalent is known as “tilt and scan” or “reverse pan and scan”.

Dolby Digital (or ATSC A/52 and AC-3) is a multi channel -Soundsystem of Dolby labs. Its been used in movies, DVDs and digital TV transmissions.

PCM: Puls-Code-Modulation

Pulse-code modulation (PCM) is a digital representation of an analog signal where the magnitude of the signal is sampled regularly at uniform intervals, then quantized to a series of symbols in a numeric (usually binary) code. PCM has been used in digital telephone systems and 1980s-era electronic musical keyboards. It is also the standard form for digital audio in computers and the compact disc “red book” format. It is also standard in digital video.

Troubleshooting

Problem	Solution
No display LED on the front panel. No power supply	Plug the power cord correctly.
No picture.	Ensure that the STB is switched on. Check the connection status. Check channels and Video output status.
Poor picture quality.	Check the signal level If this is too low, try adjusting the alignment of your dish.
No sound.	Check the volume level of the TV and STB Check the mute status of the TV and STB Check the connection of audio cable.
Remote Control does not operate.	Point remote control directly towards your receiver. Check and replace batteries. Check if anything blocks the front panel.
Service is not running or scrambled.	Make sure the smart card is appropriate for the selected service.
You have forgotten your PIN code.	See chapter 5, “Parental Lock” in this User’s manual.

Specifications

TUNER & CHANNE	
Input Frequency	47~870 MHz
Input connector	IEC Female (RF IN), IEC Male (RF OUT)
IF Frequency	36.125 MHz
FEC Mode rate	1/2,2/3,3/4,5/6,7/8
Demodulation	QAM
Constellation	16, 32, 64, 128 and 256 QAM
QAM System Clock	28.92Mhz
Switching Mode Power Supply	
Input Voltage	AC90-250V~,50/60Hz
Power Consumption	MAX.50W (Standby: Less than 3W)
MPEG TS A/V Decoding	
Transport Stream	MPEG-2 ISO/IEC 1318-1
Profile Level	MPEG-2 MP@ML MPEG-2 MP@HL, MPEG-4 AVC/H.264 HP@L4
Aspect Ratio	4:3, 16:9
Video Resolution	1080i, 720p, 576p, 576i
Audio Decoding	MPEG-1, Musicam Layers 1 & 2
Audio Mode	Single channel/Dual channel/Joint Stereo/Stereo
Sampling Rate	32,44,1& 48KHz
System Resources	
Main Processor	ST40 CPU core: 266MHz(STi7101)
Flash Memory	8 Mbyte
Video DDR SDRAM	64 Mbyte
System DDR SDRAM	128 Mbyte
EEPROM	8Kbyte
A/V & Interfaces	
Digital output(HD)	HDMI(TMDS main video output) YPbPr
TV-Scart & RCA(SD)	Video : CVBS / RGB output Audio : L/R output
VCR-Scart(SD)	Video : CVBS output / CVBS input bypass Audio : L/R output / L,R input bypass
Digital Audio output	Digital AC-3 Decoding output Digital Audio Bitstream output(S/PDIF)
S-Video	Video : S-Video output
RS-232C	Transfer rate 115.2Kbps, 9 pin D-sub type
PVR Ready(Optional)	USB2.0 High speed host controller Serial ATA hard-disk drive support

Specifications

Conditional Access System	
PCMCIA (Optional)	2 Slot of CI
Front panel	
Display	Dot-Matrix VFD (Vacuum Fluorescent Display)
Keys	7Keys
Accessories	
RCU	IR(Freq. : 38Khz), Battery : 2x1.5V AAA
HDMI Cable	1.5M
Manual	
Physical Specification	
Size (W x H x D)	300 X 220 X 63mm
Net Weight	2Kg
Operation Temperature	0~50 C
Storage Temperature	-10~+60 C