Digital Cable HD Twin PVR

User Manual

Imagin RE-9000CO PVR

IMAGIN
TELE & INTERNET

REBOX

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Notice

- Read this manual carefully and make sure you understand the provided instructions. For your safety, check what the result each action will be.

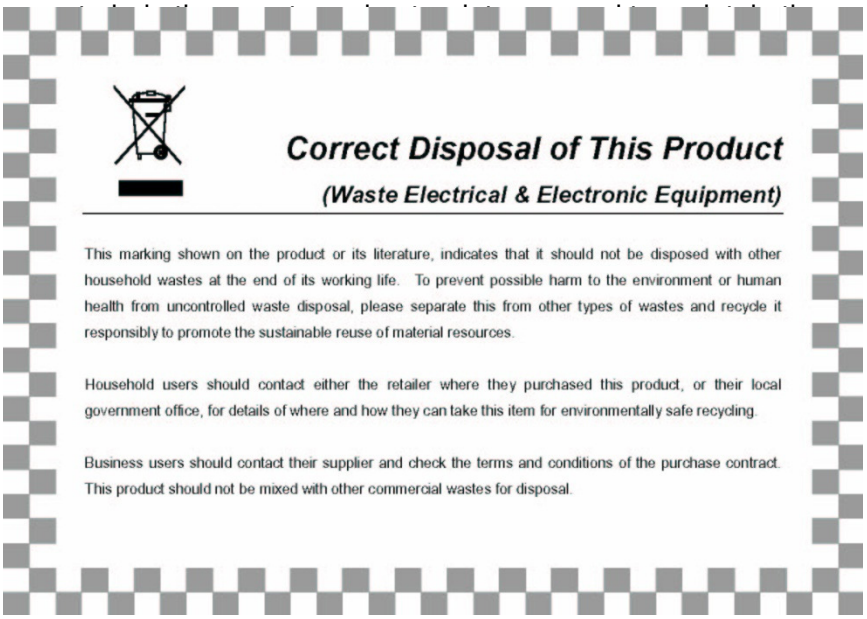
Warnings, Cautions and Notes

Throughout he whole manual, pay special attention to the following marks that indicate hazardous situations.

Caution
Indicates a situation which, if not avoided, could damage the equipment or apparatus.

Warnings
Indicates a hazardous situation which, if not avoided, could result in serious injury.

Note
Indicates additional information to the user to make the user aware of possible problems and information of any importance



Correct Disposal of This Product

(Waste Electrical & Electronic Equipment)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

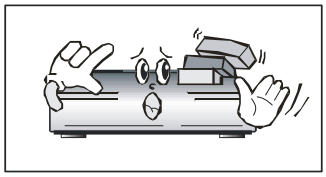
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Safety Information

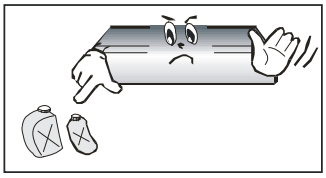
This digital cable receiver has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

Safety Instructions and Precautions

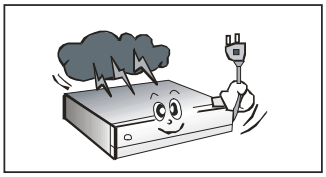


Avoid placing heavy things and blocking ventilation passage.

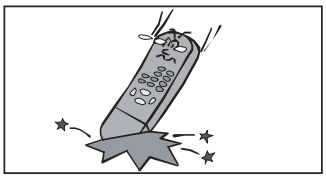
(Passage blocking can cause fire)



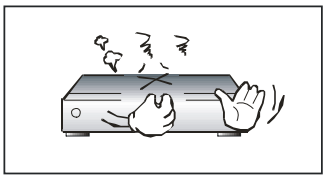
Avoid scrubbing the surface with Benzene or Volatile gasoline. Color can be damaged.



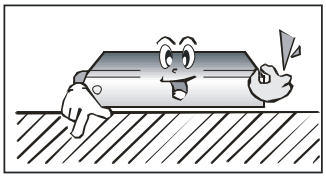
Leave the power and the antenna off for the ling absence or during thunder storm.



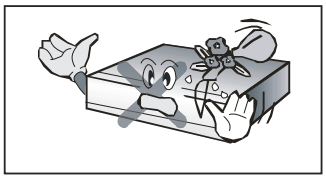
Avoid dropping and damaging Remote Control Unit.



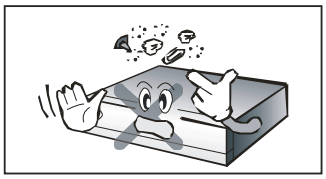
If there is smoke or burning smell, turn off & un-plug the set immediately. Contact your local repair center for advice.



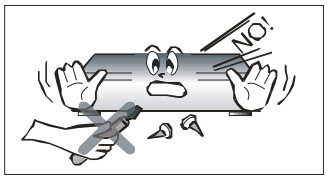
Avoid placing the set on slippery and slant surface.



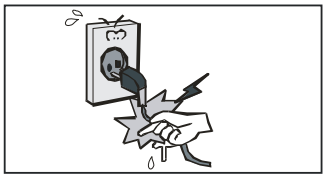
Keep away from the water.



Clear off the dust. Dust or Metallic particles inside the set can cause fire and electric shock.

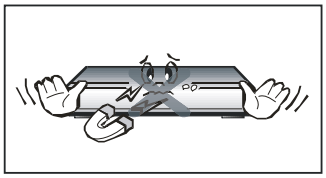


Avoid dissembling and assembling. Do not open the set.

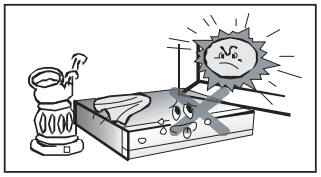


Do not snatch the cable to plug out.

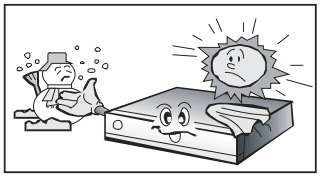
Do not move the set while power cord is plugged in.



Keep the distance from Magnetic items and Audio Speaker.



Place the set with the good ventilation and away from the direct sunlight and humidity.



Avoid the temperature of over 30C and below 5C.

1. Before You Begin

1.1 Features

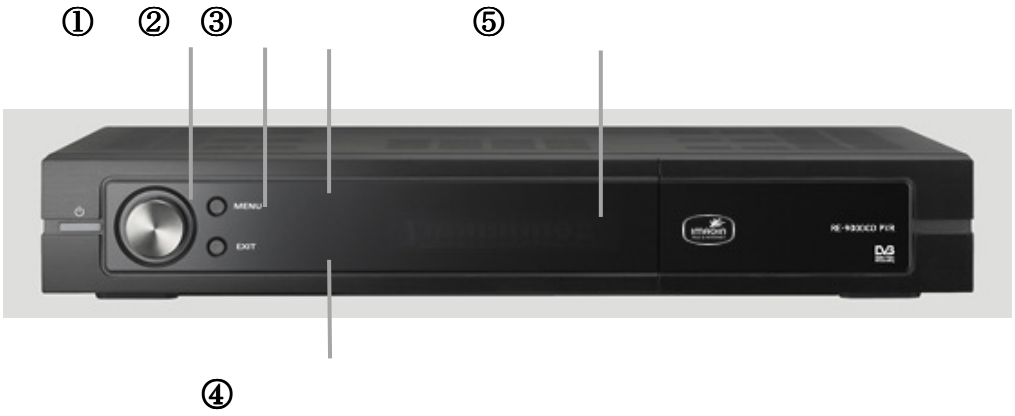
- Two Tuners
- Two recording and playback simultaneously
- Brilliant On Screen Graphic
- MPEG-2 Video(MP@ML), MPEG-1 Audio Layer1, Layer2, H.264/AVC, ACR(Dolby Digital)
- Digital Tuner with Loop-through
- S/PDIF AC3 audio
- User friendly OSD menu with full function
- Vector Font and 256 color GUI(Graphic User Interface)
- Multi-language menu
- VFD (Vacuum Fluorescent Display)
- Variable aspect ratio(4:3, 16:9) with Pan Vector or Letter Box
- EPG(Electronic Program Guide) for On-screen Channel Information
- Teletext and Subtitle supported(VBI & OSD)
- Installation by Easy Setup Guide
- Capacity for storing multi channel (8000 channels)
- Favorite Channel and Parental Lock Function
- HDMI (High Definition Multimedia Interface) supported
- Recording / Playback in STB
- Bookmarking & jump function

1.2 Accessories

- RF loop through cable
- HDMI cable
- Operating instruction (this Manual)
- Remote Control
- AAA dry cell batteries x 2

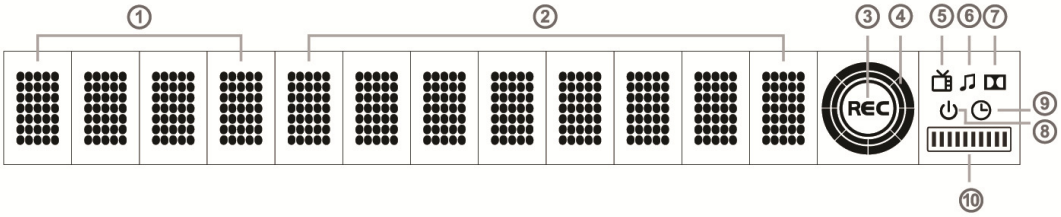
2. Controls and Functions

2.1 Front Panel



Item	Description
1. Power Button	Switches the receiver On/Off.
2. Jog Shuttle	① Increases/ decreases the volume level in viewing mode. ② Push to select the channel list in viewing mode. ③ Moves the cursor up/down or left/right in menu mode. To select between up/down and left/right movement, push the MENU button.
3. MENU Button	Displays the Main menu in viewing mode. Activates the highlighted menu item in menu mode.
4. EXIT Button	Exit from the current menu or cancels the current progressing operation if applicable. Selects the video resolution in viewing mode.
5. Display (VFD module)	Displays channel information and indicate operating status. In stand by mode, the display shows local time.

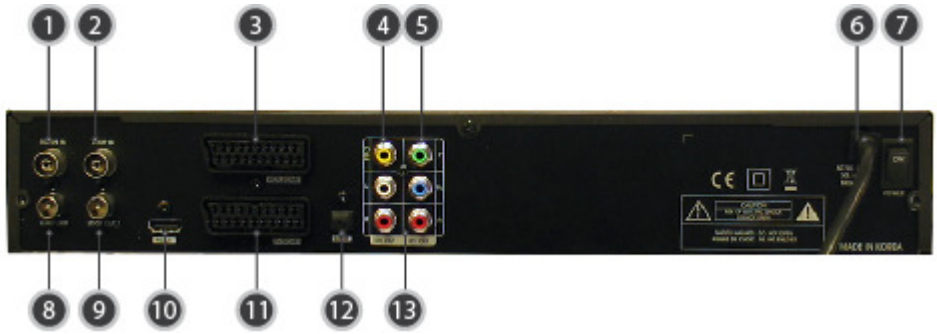
2.2 VFD (Vacuum Fluorescent Display)



Item	Description
1. Channel Number	Information of channel number
2. Channel Name	Information of channel name
3. REC	Turned on during recording
4-1. Normal Mode **(HDD and time-shift enabled)**	Turned on when it is on normal operation
4-2. Record Mode	Turned on when you make the recording
4-3. Play Mode	Turned on when you play recorded file of the storage
5. TV	Lights on when you watch the TV service
6. Radio	Lights on when you watch the Radio service
7. Dolby	Turned on during Dolby service
8. Standby	Turned on when receiver enter the standby mode (Not in use for some models)
9. Reservation	Lights on when it has reservation during standby mode

	(Not in use for some models)
10. HDD Capacity	Indicates the status of hard drive installed

2.3 Rear Panel



Item	Description
1. SIGNAL IN	Connect the digital signal cable.
2. LOOP IN	Need to connect loop cable between Loop Out and Loop In
3. VCR SCART	Connect a conventional VCR.
4. CVBS OUT	Using standard video cables, these jacks connect CVBS(Yellow).
5. YPbPr OUT	Using standard A/V cables, these jacks connect Y/Pb/Pr(Green, Blue, Red) HD component video input.
6. Electric Inlet Lead	90~240V AC(Auto-selectable), 50~60Hz. Make sure to check the power specification.
7. Power Switch	AC Power Switch.
8. LOOP OUT	Loop Out is an output port of the signal from SIGNAL IN
9. LOOP OUT_1	Loop Out is an output port of the signal from SIGNAL IN
10. HDMI OUT	Connect HDMI input of TV or PC monitor.
11. TV SCART	Connect a conventional TV.
12. S/PDIF	Output for connection to a digital amplifier.
13. Stereo Audio OUT	Using standard stereo audio cables, these jacks connect L/R(White, Red).

2.4 Remote Control Unit

All receiver features can be controlled with the remote controller.

Button	Description
1. POWER	Turns the receiver On/Off.
TV/Rad	Switches between TV and Radio.
TEXT	Shows the teletext
2. NUMERIC Buttons (0 ~ 9)	Select channels or can use as an alphabetic search key in the sorted channel lists.
BACK	Move to the previous channel.
MUTE	Turns the sound on/off.
3. OPT( )	Select the option such as Audio Language, Teletext Language, Subtitle Language and Multifeed.
A/V+( )	Select video mode (4:3, 4:3 Letter Box, 16:9) and audio mode (Left, Right, Stereo and Joint).
Favorite ( )	Select the group of satellite or favorite.
A-Z ( )	Sort the channels automatically in alphabetical order.
MENU	Display the main menu of the receiver and come out from inner level to viewing mode(Exit all).
EPG	Shows the TV/Radio Channel guide.
Information	Shows the information of the Banner and EPG.

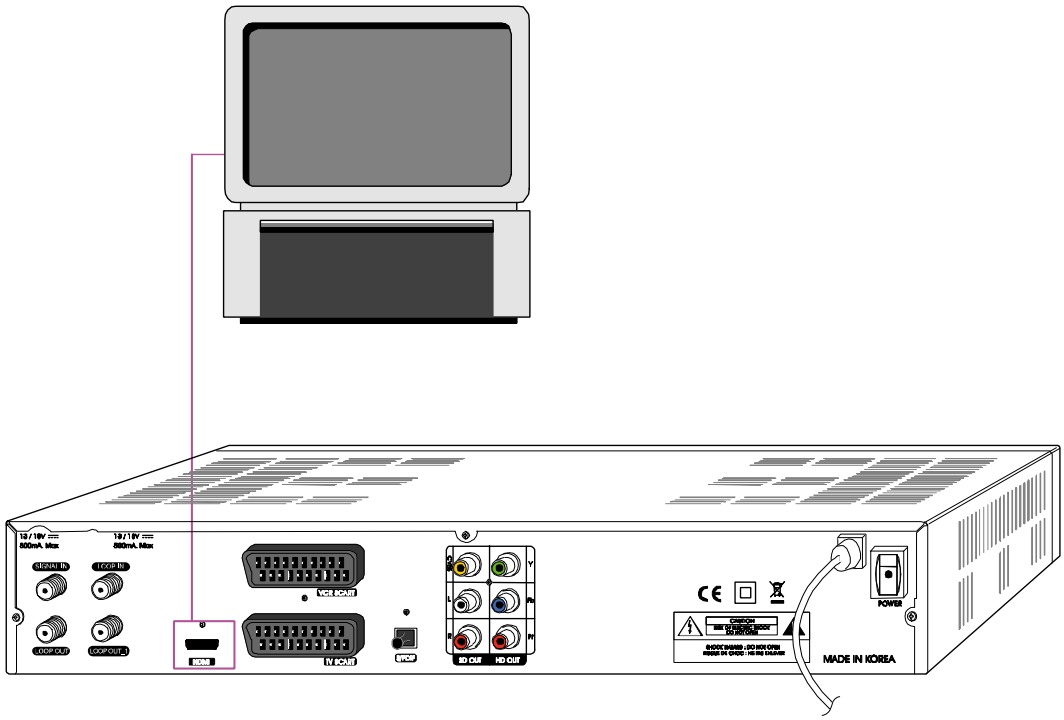
Button	Description
4. ◀/▶ (/)	Moves left/right or change settings in menu mode.
▲/▼ (/)	Moves up/down in menu mode.
OK( )	Confirms the choices and/or selections the highlighted menu item. While watching TV or listening to Radio, press the button and the channel list will appear.
5. V+/-	Changes the volume level in viewing mode.
P+/-	Changes channels in viewing mode. Selects other menu pages with sub-pages.
EXIT	Go back step or exit from the menu of the receiver.
6. PAUSE	Pauses playing mode, recording mode and Time Shift.
PLAY	Play the recorded file.
7. REW	Rewind playback.
STOP	Stop playing mode, recording mode and Time Shift.
FF	Fast forward playback.
REC	Record the channel.
SLOW	Playback in slow mode
LIST	Display the filelist.
A-B	Set the block to repeat, copy and cut.
MARK	Set the bookmark.
JUMP	Jump to bookmarked point.
8. SLEEP	You can turn the STB off after minutes set.
TV	You can change TV mode (Universal RCU)
STB	You can change STB mode

✓ Some functions can not be supported subject to model type

3. Connections

3.1 Connecting to TV

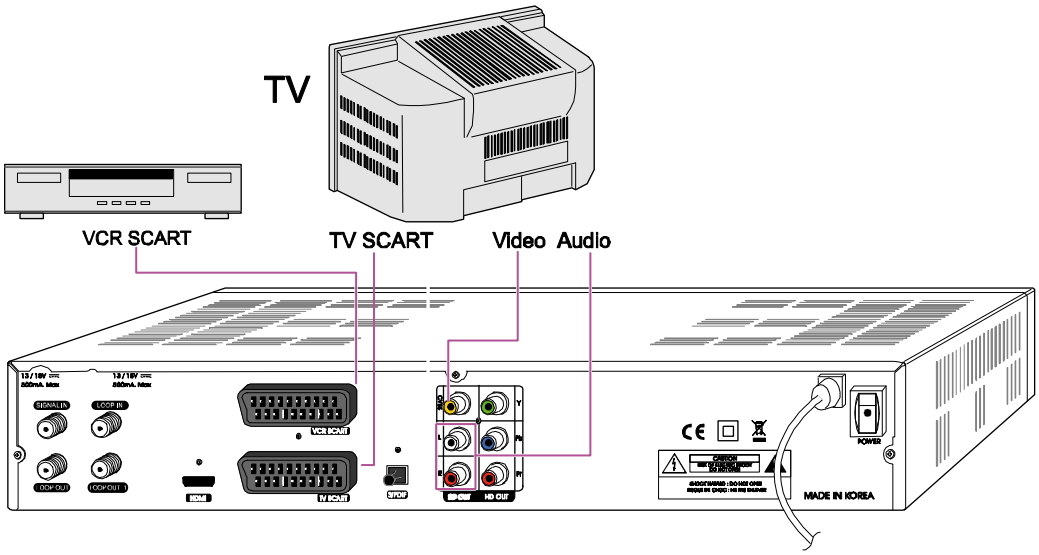
<Connecting to PC monitor or digital TV which has HDMI input port>



1. Connect STB's HDMI out and to HDMI in of monitor or TV.
2. Set STB's video output mode to 1080i or 720p or 576p using 'FUNC' key of remote controller.

For the best access to HD programming at the highest available resolution, use this connection method.

<Receiver to TV and VCR with SCART Cables>

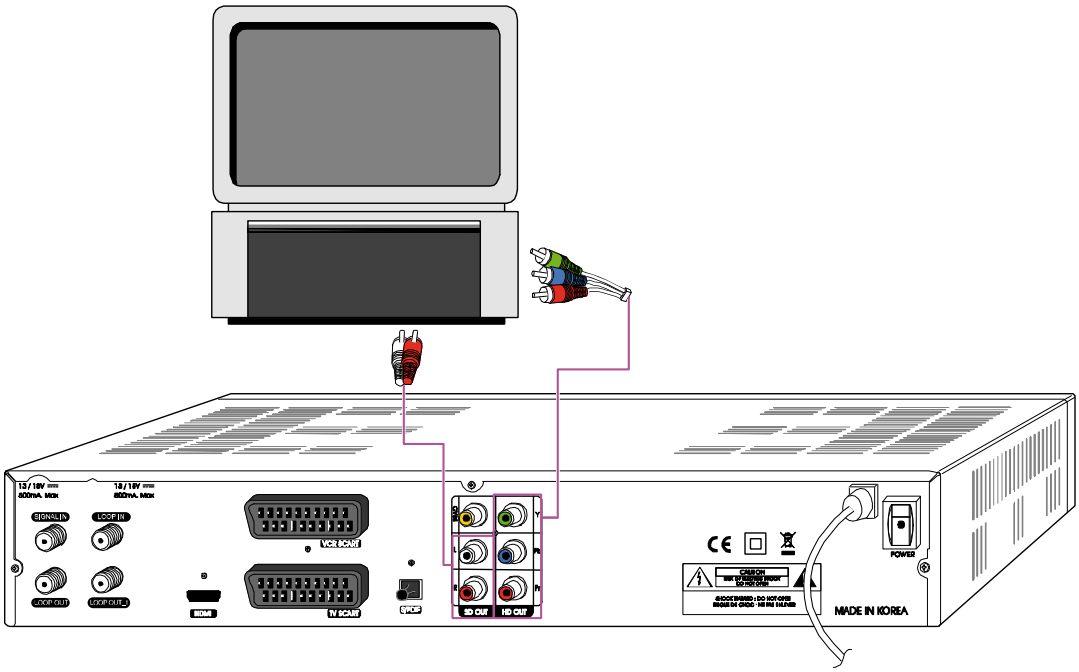


1. Connect the Video and Audio of TV to the Video and Audio. Connect Red and White connector to Audio R and Audio L, and Yellow to Video port respectively.

2. Connect the TV SCART of TV to lower SCART connector with fully featured SCART cable.

3. Connect the VCR SCART of TV to upper SCART connector with fully featured SCART cable.

<Connecting to digital TV which can support HD resolution (1080i, 720p, 576p) using YPbPr port>

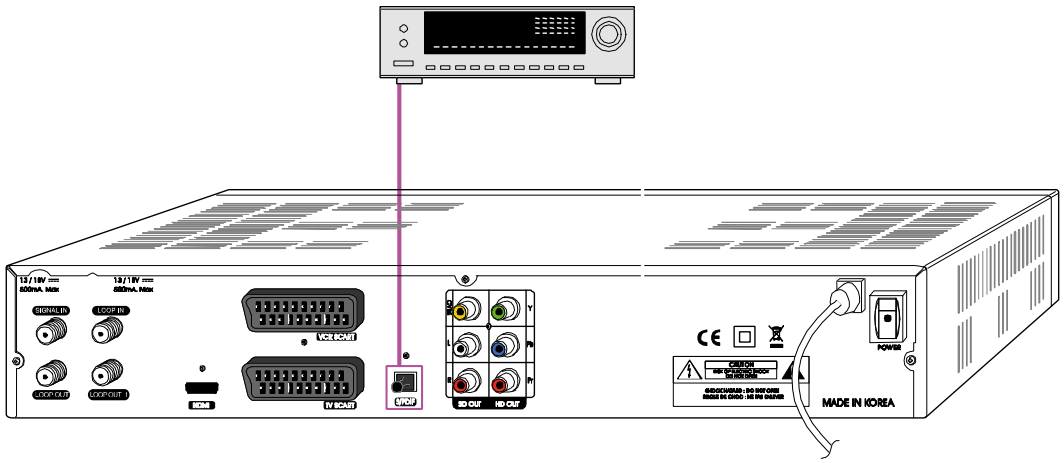


1. Connect STB's YPbPr out and audio L/R out to YPbPr in and audio L/R in of TV.

2. Set STB's video output mode to 1080i or 720p or 576p using 'FUNC' key of remote controller.

Please check TV's user manual for detail connecting method of the YPbPr input port.

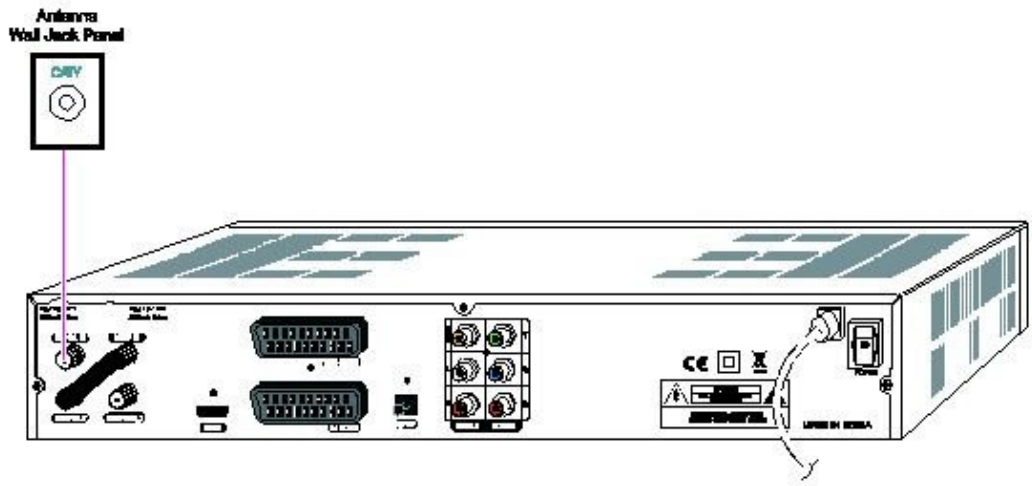
<Connecting to A/V receiver (Dolby digital amplifier)>



1. Connect STB's optical digital audio out to A/V receiver.
2. Set STB's audio out mode to 'AC3'.

<Signal and Tuner connection>

Connect the digital signal cable to the SIGNAL IN.



Note: Connect the RF loop through cable between tuner 1 loop to tuner 2 in

4. Menu Overview

4.1 Menu Instruction

Press the MENU button to display the menu. You can select the sub menu using ▲/▼/◀/▶ button. The selected sub menu becomes highlighted.
When you have selected the sub menu you want, press the OK button.
When you want to return to the previous menu, press the EXIT button.
When you want to return to the live screen, press the Menu button.

4.2 Menu Help

In the menu, short information is displayed at the bottom of the screen.

Using ▲/▼ button.
Using P+/P- button.
Using ◀/▶button.
Using OK button.
Using Opt, A/V+, Fav button.
Using EXIT button.
Numerical button or ◀ Button.

4.3 Menu Structure

In the menu, short information is displayed at the bottom of the screen.

Installation

- Auto Scan : Search the channel automatically.
- Manual Scan : Search the channel manually with user's inputting parameters.

Option

- TV Output : Select the video or audio output.
- Language : Select the display language, audio language, and subtitle language.
- Time Setting : Setting current time.
- Parental Control : Change the password and select the censorship classification
- OSD Display : Setting OSD display related functions.

Channel

- Reservation : Reserving channels you want to record at your desired time.
- Delete : Delete the channels such as Favorite, TV/Radio CAS, etc.

Advanced

- Reset Factory Default : Restore the receiver to the default values.
- OTA : Upgrade the receiver into the latest software version via OTA

Status

- Information : Check the version of the receiver.
- Card : Check the smartcard information of smartcard reader.

PVR

- Record Setting : Set Time shift function and record time
- HDD Information : Check the capacity of HDD
- Format HDD : Format HDD permanently

5. Menu Operation

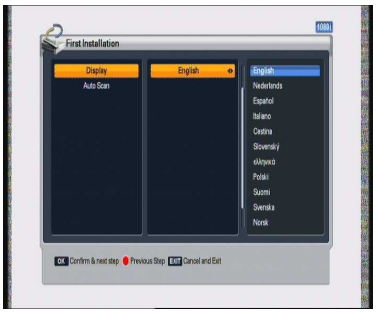
5.1 First Installation

You can install the receiver using First Installation for your convenience.

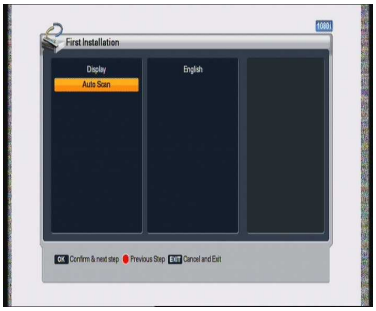
'First Installation' allow you to set your receiver using simple procedure.

1. Select the desired language using the ▲/▼ button.

2. Press the OK button to confirm and go to the next step.



3. If you want to search the channel automatically
Press the OK button



- Previous Step button : If you want to go to the previous step, press the Opt button and then you can reset options.
- Cancel and Exit button : If you want to skip 'First installation', press the Exit button.

1. Press the Menu button to display the main menu.
2. Press the OK button on the sub menu. Some sub menus such as Auto Scan. Manual Scan on the Installation are locked by password, and the password pop-up window appears. The default password is "0000".

5.2.1 Auto Scan

1. Select the setting menus using the ▲/▼ button. Press the ◀/▶ or numeric button to change the setting values. If you want to search the channel, press the OK button.

- Start Frequency / End Frequency : Start and end point of frequency range which Auto Scan is going to perform
- Step Frequency : An offset parameter for auto scanning between Start and End Frequencies. (regular interval searching)
- Scan Mode : Free+CAS Channel, Free Channel and CAS Channel
- Service Type : TV+Radio, TV and Radio

- Modulation : QAM16, QAM32, QAM64, QAM128, QAM256 and Auto. (To change the modulation value, use the ◀/▶ button.)
- Symbol Rate : If you want to search the channels of various symbol rates simultaneously, press the Opt button and input each symbol rate parameter one by one. (Opt->***-Opt->***…) You can set 8 Symbol Rates at a time.

2. The left window shows TV channels and the right window shows Radio channels during the scanning process. White channel names are new channels downloaded to your receiver. Black channel names are already existing channels.

3. If you press the OK button when scanning forchannels, pop-up window appears.

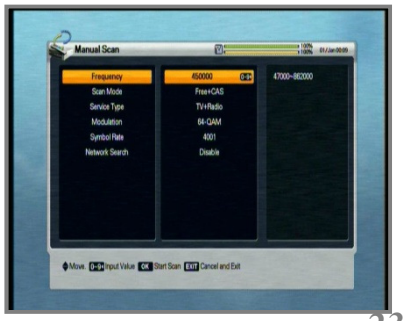
4. When you complete scanning for channels,
a similar pop-up menu appears.

5. If you want to save the updated channels, select 'Yes'.

5.2.2 Manual Scan

1. Change to the specific values you want to scan.

2. Press the OK button to start the manual scan.



- Frequency : The frequency of the transponder you want to find manually.
- Scan Mode : In the Free Channel mode, the receiver scans all channels without scrambled service.
- Service Type : The selection of TV, Radio and TV&Radio.
- Modulation : The selection of modulation (QAM16, 32, 64, 128, 256)
- Symbol Rate : The symbol rate you want to find.
- Network Search : When enable, the receiver searches for more transponders using the network index table.

5.3 Option

5.3.1 TV Output Setup

1. Select the TV output options using the ▲/▼/◀/▶ button.
2. If you press the OK button, the changed state will be saved and exit.

- SCART : Select your TV type.(RGB, S-VIDEO, CVBS).
  If you select RGB, the component out will be disabled.
- TV Screen : Select the screen format of your TV.(4:3, 4:3 Letter Box, 16:9)
- Dolby Digital(DD) : If you set it to the enable mode and the channel has DD audio, it can be automatically selected DD language
- Digital audio : If you set it to the enable mode, you can listen to Dolby-digital audio through AC-3 decoder.
- AUX Output : You can restore AUX A/V output.
  When you show the PIP mode, AUX output will be black screen.
  If you want to show the Aux A/V play, you can restore using this menu.

5.3.2 Language

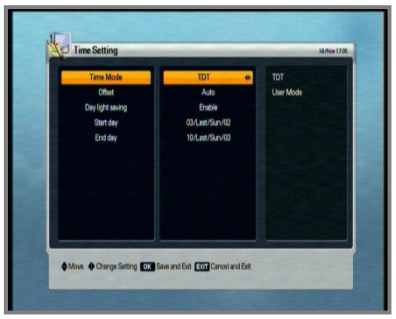
1. Select the language options using the ▲/▼/◀/▶ button.

2. Press the OK button to change the selected language.

- Display : Change the language used in the OSD and Menus.
- Audio 1-2 : Change the language that you listen to audio in.
- Subtitle 1-2 : Change the language that you watch the subtitle in.

5.3.3 Time Setting

1. Setting current time using the ▲/▼/◀/▶ button.
2. If you press the OK button, current changing state will be saved and exit.



- Time Mode (TDT, USER)
  TDT : Receive the time from broadcaster.
  USER : Set the time directly by user.
- Offset : Set the time difference between GMT and the local time.

5.3.4 Parental Control

1. If you want to change the password, press the ◀/▶ button, following message requiring new password will be displayed.
2. Change the password into new one by numeric button.
3. To ensure your change, you are supposed to input a password once more.

4. Select your desired rating level using the ◀/▶ button.
5. Press the OK button to save and exit. Rating mode allows you to block channel according to the age level you have set.

- View All : All channels can be watched.
- 7 : Channels are blocked under the age of 7.
- 12 : Channels are blocked under the age of 12.
- 15 : Channels are blocked under the age of 15.
- 18 : Channels are blocked under the age of 18.

You have to enter password to watch the channels which is blocked by the age level.

5.3.5 OSD Display

1. Select the options using the ▲/▼/◀/▶ button.
2. If you press the OK button, current changing state will be saved and exit.

- Banner display time : Banner will disappear after setting time passed.(1~9).
- Screen Saver : Screen Saver is a function to protect your TV in case Radio status or in Menu. (Disable, 5, 10, 20, 30, 60, 120 Minutes)
- Teletext Mixweight : Select the Teletext transparent type. (Low, Middle, High).
- VFD Display : Select the VFD display type (Channel Number + Name, Channel Name)

5.4 Channel

5.4.1 Reservation

You can reserve a channel recording at your desired time. In this mode, you can reserve channels up to 50.

1. Press the Opt, A/V+, Fav and A-Z buttons to use the reservation function. And then use the ▲/▼/◄/► button to the detail setting for your reservation.

< Functional buttons >

- Opt : You can edit the reservation
- A/V+ : You can add the reservation
- Fav : You can delete the reservation
- A-Z: You can sort the reservation

< Timer Event Icons >

- Once(1) : A single timer event
- Weekdays ( ) : Occurs at the same time on Monday to Friday
- Weekends ( ) : Occurs at the same time on Saturday to Sunday
- Weekly (7) : A timer event occurs at the same time each week
- Daily (30) : A timer event occurs at the same time every day

5.4.2 Delete

You can delete channels. You can select not only Mode such as Channel, CAS and Favorite, but also Option such as TV, Radio and etc.

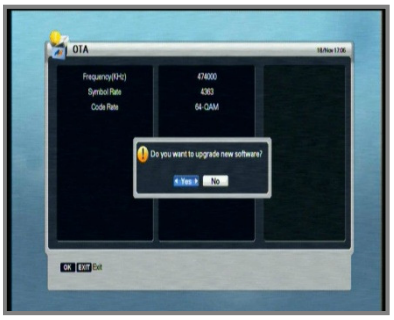
1. Select the Mode and Option you want to delete channels using the ▲/▼/◄/► button.
2. Press the OK button to delete and exit.

5.5.1 Reset Factory Default

1. If you want to change the set into the default values, press the OK button. The following confirmation window will appear.
2. If you select 'Yes', the system will be reset to the primitive state like new receiver.

5.5.2 OTA

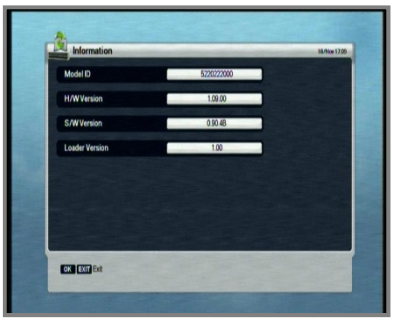
1. You can upgrade the latest software. The receiver checks whether the new S/W is released when you view channels or select this OTA menu.
2. If the new version is detected, the receiver will be rebooted automatically and the download screen will appear.



3. If any S/W can't be found, this following message will appear.

5.6.1 Information

1. You can watch the system information such as Model ID, Hardware version and Software version.



5.6.2 Card

1. You can check the CAS information when you insert the Conax smartcard into the reader.

5.7.1 Recording Setting

1. You can set Time shift function as Enable or Disable. And you can set Default record time.

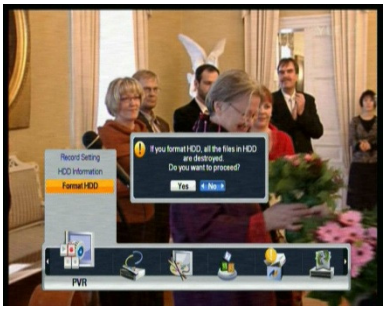
- HDD : If HDD is enabled, HDD function is always activated. If disable, HDD sleep. When you use HDD function, HDD will be activated.
- Time shift : If Time shift is enabled, whenever user change the channel, Time shift is activated automatically. If disabled, Time shift function doesn't work. To force Time shift function in A/V, you should use the PAUSE key.
- Default record time : You can set the default record time between 5 minutes and 10 hours.

5.7.2 HDD Information

1. You can see the capacity of HDD such as Total size, Free size, Used size and the model name of HDD.

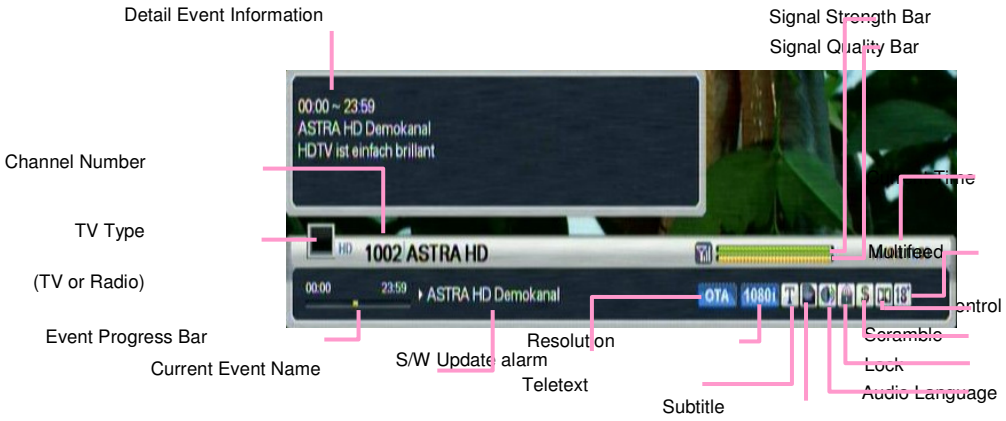
5.7.3 Format HDD

1. If you press the OK button, you can delete all files in HDD permanently.



6. Viewing General Information

6.1 Banner Information



1. Whenever you press the INFO button, the banner information window appears for a few seconds.

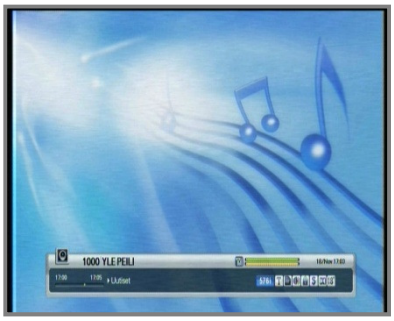
* You can also find the output resolution at the left top side

]

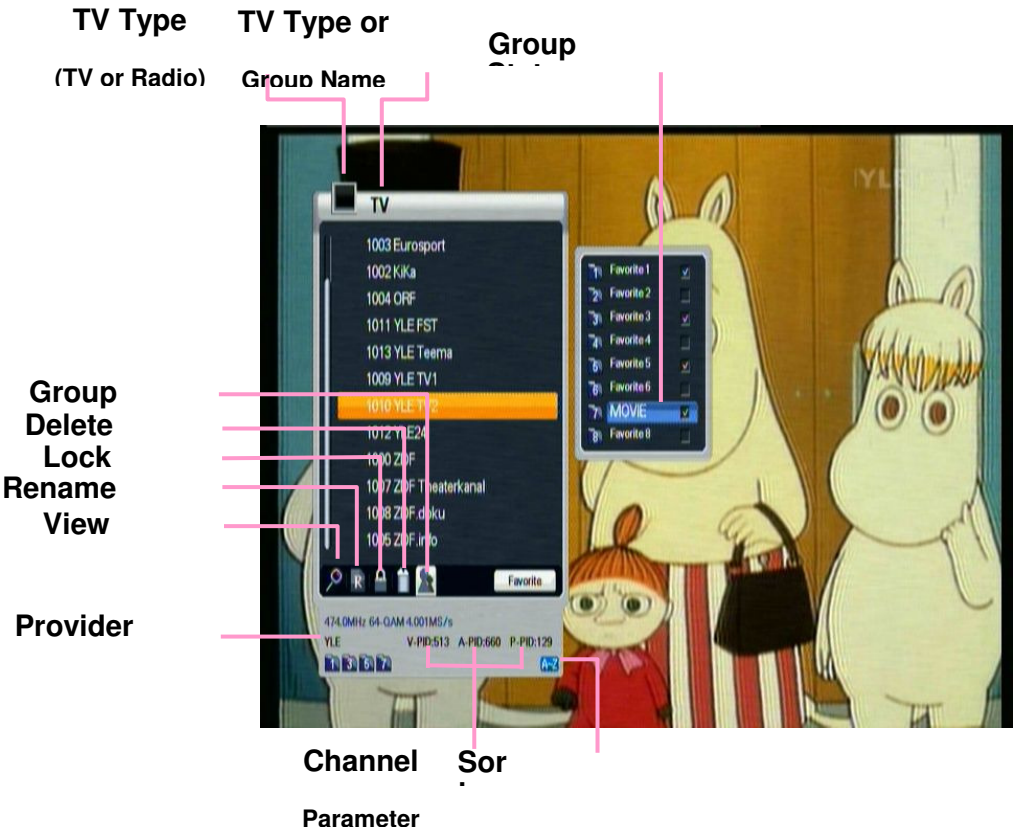
2. If you press the INFO button again on the banner, the detail EPG window appears.
3. If you press the OK button, information and EPG window will disappear.
4. Press the P+- button and then you can change the channel.
5. If '▶' exists on the Banner, press the ◀/▶ button and then you can watch the next EPG.

6.2 TV & Radio changing

While watching TV or listening to Radio, you can select TV or Radio using the TV/Rad button.



6.3 TV or Radio Channel Lists



6.3.1 Watching Mode

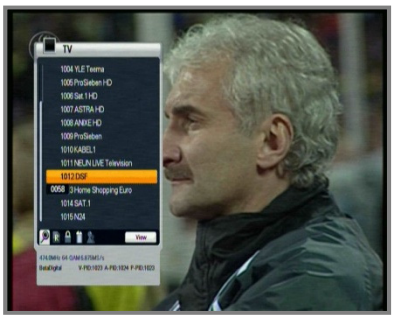
While watching TV or listening to Radio, you can watch the channel list. Press the OK button to display the channel list. You can watch several icons at the bottom of the channel list.

Each icon has a special and convenient function for user. If you want to change the mode, press the ◀/▶ button to go to the desired icon.

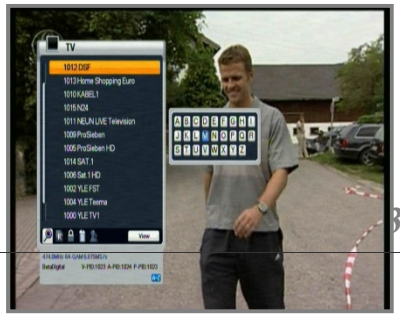
1. If you want to view the sorted channel list, press the A-Z button.
2. Press the ▲/▼ button to move the cursor.
3. Press the OK button to watch the desired channel.
4. If you want to hide the channel list, press the button.

- When you want to sort the channels, press the A-Z button.
- When you want to change the TV/Radio mode, press the TV/Rad button.
- When you want to watch the next or previous channel page, press the P+- button.

5. If you know the correct channel-number to watch, press the number using the numeric button.



6. If you want to go Alphabetic move, you must change the channel list to the sorted status. To become the sorted status, press the A-Z button on the channel list or on the Live



screen.

7. Press the numeric button. Then Alphabetic Pad will appear.
8. You can select the Alphabet using the numeric key(1-9)/▲/▼/◀/▶ button.
9. Press the OK button. If the selected channel by user input-letter not exists, there will be any change.

6.3.2 Delete Mode

1. Select the Delete Icon using the ◀/▶ button.
2. Select channel you want to delete using the ▲/▼ button. Press the OK button. Checked sign will be marked on the right side of the channel name.
3. Press the EXIT button to save and exit.

6.3.3 Rename Mode

1. Select Rename Icon using the the ◀/▶ button.
2. Select the channel to rename and press the OK button. And then a small editing name window will be displayed.
3. You can write each letter of the channel name using the ▲/▼/◀/▶ button and the OK button.
4. After renaming is done, select "Done"tab.
5. Press the EXIT button to exit.

You can change the Favorite group name.

1. Select the desired group.
2. Change the name of group according to above procedures.

<Remark>

It is impossible that Delete & Group function can be changed in grouping mode.

- Space ( ): Write between two characters.
- Back ( ): Delete characters.
- Caps (A↔a) Change between caps and lower case letter.
- Done ( ): To save the change.
- Cancel ( ): Exit rename mode.

6.3.4 Lock Mode

1. Select Lock Icon using the the ◀/▶ button.
2. Select the channel to be locked and press the OK button.
3. Set the password. Locking mark will appear on the left side of the Channel name. To cancel it, just press the OK button.
4. Press the EXIT button to save and exit.

6.3.5 Group Mode

You can make the group up to the 8th group. It can accommodate 100 Channels in one group.
So you can get 800 favorite channels.

1. Select Group Icon using the ◀/▶ button.
2. Select the channels that you want to make favorite channel list.

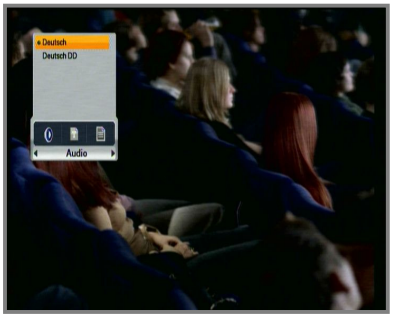
3. Press the OK button, and then a small favorite Window will appear on the right side of the screen.
4. Choose the group number using the ▲/▼ button and press the OK button. To cancel it, just press the OK button again.
5. If you want to select other channel in current group, press the ◄/► button. And then highlighted channel will be showed on the channel list.
6. Press the OK button to set the group with selected group using the ◄/► button.
7. Press the EXIT button to save and exit.

6.4 Option

While watching TV or listening to Radio, press the Opt button. You can watch small pop-up
window. You can select a option.(Audio Language, Teletext Language, Subtitle Language) If
you want to change the option mode, press the ◀/▶ button.

6.4.1 Audio Language

1. Select the 'Audio' using the ◀/▶ button.
2. Press the ▲/▼ button to select a desired audio language.
3. Press the OK button to change the audio language.



6.4.2 Teletext Language

1. Select the 'Teletext' using the ◀/▶ button or press "Text" button on RCU.
2. Press the ▲/▼ button to select a language.
3. Press the OK button.
4. You can watch the Teletext contents in the language if it is available.

6.4.3 Subtitle Language

1. Select the 'Subtitle' using the ◀/▶ button.
2. Press the ▲/▼ button to select a language.
3. Press the OK button.
4. If the selected language is

different from what is available,
you can't watch the subtitle.

6.5 A/V+

While watching TV or listening to Radio, press the A/V+ button. You can watch small pop-up window. You can select an option.(Audio Mode, Video Mode, Video format) If you want to change the option mode, press the ◀/▶ button.

6.5.1 Audio Mode

1. Select the 'Audio Mode' using the ◀/▶ button.
2. Press the ▲/▼ button to set the output direction for speakers. (STEREO, LEFT, RIGHT, JOINT)
3. Press the OK button to save and exit.

6.5.2 Video Mode

1. Select the 'Video Mode' using the ◀/▶ button.
2. Press the ▲/▼ button to set screen format of your TV.
3. Press the OK button to save and exit.

6.5.3 Video Format

1. Select the 'Video Format' using the ◀/▶ button.
2. Press the ▲/▼ button to set video resolution of your TV.
3. Press the OK button to save and

exit.

6.6 Fav

While watching TV or listening to Radio, press the Fav button. You can watch small pop-up window. You can select a Favorite group.

6.6.1 Favorite

1. Select the 'Favorite' using the ◀/▶ button.
2. Press the ▲/▼ button to select a group.
3. Press the OK button, then you can watch the channel list of selected group.

6.7 A-Z

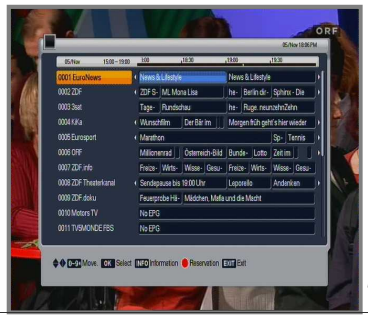
While watching TV or listening to Radio, press the A-Z button. You can watch the sorted channel list.

6.8 EPG

Press the EPG button and the electronic channel guide appears if applicable.
Time intervals are arranged in a row and Channel lists are shown in a column.

6.8.1 EPG Information

1. Press the ◀/▶ button to change time interval.
2. Press the ▲/▼ button to watch the guide about the channel, and then the detail EPG information will appear in the below. On the other hand, the



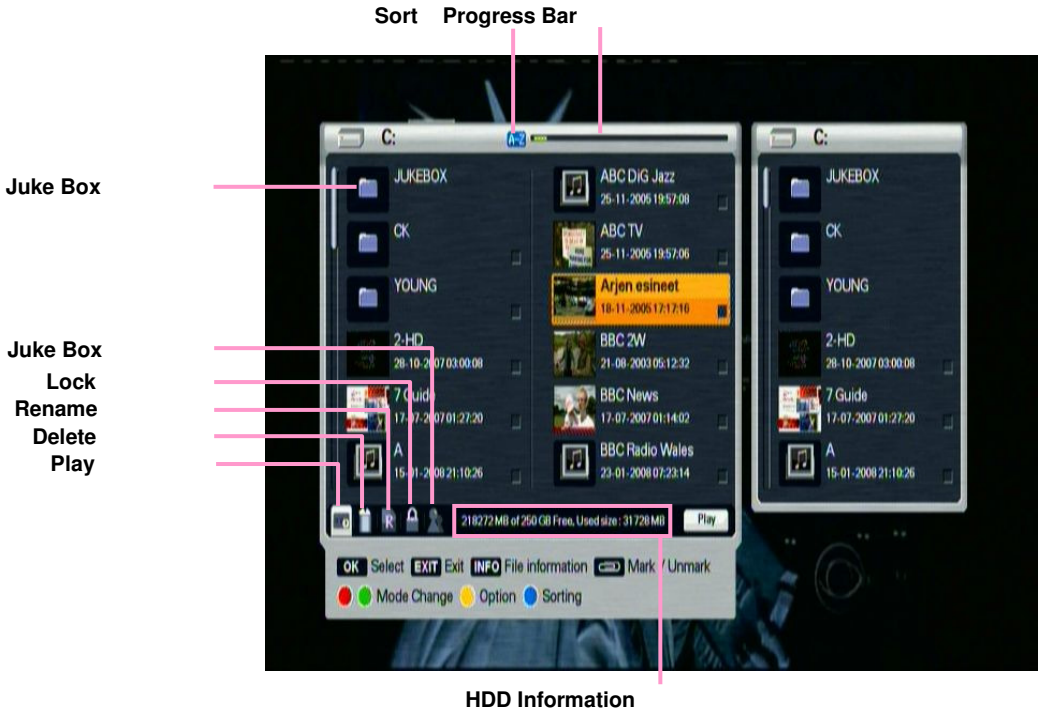
small screen in the left will be changed if only you press the OK button on the channel list.

3. Press the 'EXIT' button to exit.

- Press the Opt button to reserve channels with event. If you want to know the detail description about reservation, refer to the reservation description in chapter 5.4.1.
- When one or two channels are being recorded, you can search the reservation list only.

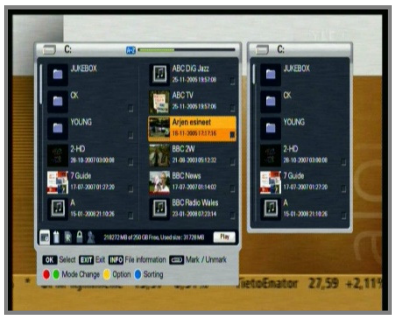
7. PVR

7.1 File List

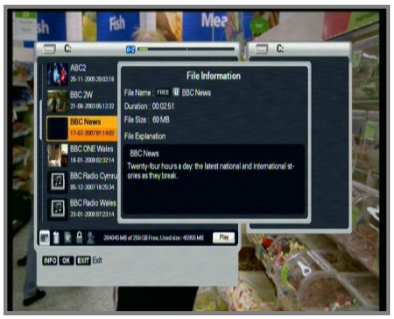


7.1.1 Playback mode

1. Select the 'Playback mode' using the Opt button.
2. Select the recorded file using the ▲/▼ button.
3. Press the OK button and then the file will be played.
4. In the 'Playback mode', you can move the progress bar to left using the Opt button and move it to right using the 'A/V+' button.
5. Press the EXIT button to close the file list.



6. You can watch the detail file information.
7. Press the "INFO" button to watch the information for the selected file
8. Press the EXIT button to hide the information.



7.1.2 Delete mode

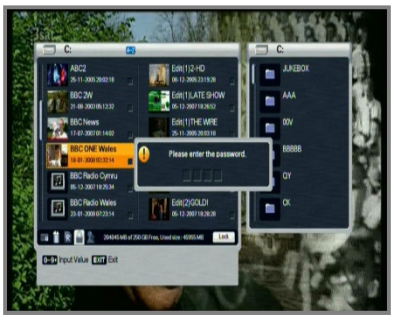
1. Select the 'Delete mode' using the Opt button.
2. Select the file you want to delete using the ▲/▼ button.
3. If you decide to delete the file, press 'Yes' on the pop-up window.
4. Press the EXIT button to exit.

7.1.3 Rename Mode

1. Select 'Rename mode' using the Opt button.
2. Select the file to rename and press the button. And then a small editing name window will be displayed.
3. You can write each letter of the file name using the ▲/▼/◄/►/numeric button and the button.
4. After renaming are done, select 'Done' tab.
5. Press the EXIT button to exit.

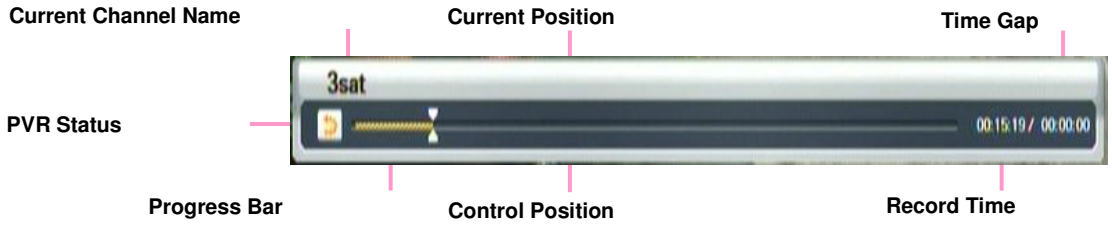
7.1.4 Lock Mode

1. Select 'Lock mode' using the Opt button.
2. Press the OK button. And then the following message window will appear.
3. Input your password and then the highlighted file will be locked.
4. If you want to lock another file, select the file using the ▲/▼ button. And press the button.
5. Press the EXIT button to exit.



7.2 PVR Banner

To access the PVR Banner, press the ◀/▶ button or the trick button such as PLAY(▶),
FF(▶▶), REW(◀◀), SLOW(▪ ▶).



- The description of icons
  - : Time Shift status
  - : Recording status
  - : Playback and trick status
  - : Time Shift playback and trick status
  - : Recording, playback and trick status

7.2.1 Time Shift

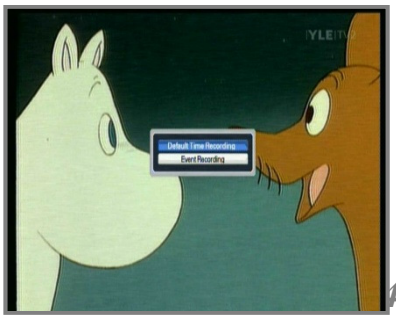
Time Shift function automatically records the current playing program temporarily.

1. If Time Shift function is set to enable in the PVR menu. Time Shift is always working on air and changing the channel. You can not stop Time Shift function in enabled mode except the case you choose to record the channel.

2. If Time Shift function is set to disable in the PVR menu. Time Shift will work only when you press the PAUSE(‧‧) button.

7.2.2 Record

1. Press the Record(●) button to record the channel you're watching. And then following pop-up window will appear.
2. Select the mode (Default recording & Event recording) you want. If you seclet 'Default recording", you can continually



reacord the channel . If you select 'Event recordding, you can record the program you are watching only.

3. Record mode can't be canceled by any control such as changing channel, etc. except pressing the STOP(■) button.

- Max duration time for recording is set to the default record time which set in Menu. If you want to change the duration, press the ◀/▶ button.

(Minimum: 5Minutes, Maximum: 10Hours)

One recording and playback the same channel simultaneously

1. Press the Record(●) button on the desired channel.
2. Press the REW(◀◀) button and use the ▶▶/◀◀/◀/▶ button to find position you want to watch.

3. Press the PLAY(▶) button when found the desired position.
4. The recorded content will be played from that position until the current recorded part..

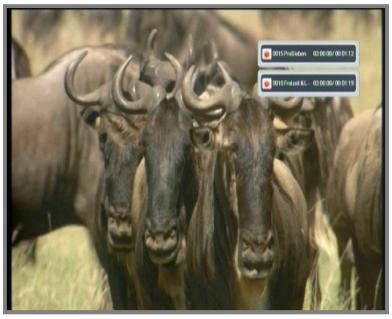
One recording and view live channel simultaneously

1. You can watch another channel while recording. Press the Record(●) button on the desired channel.
2. Press the OK button to view the channel list
3. Select the channel you want to watch using the ▲/▼ button.

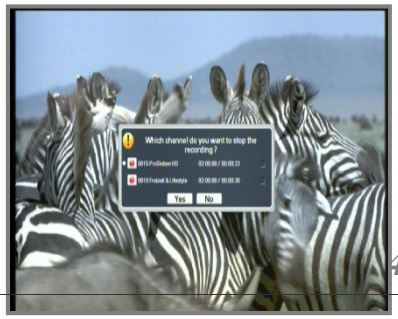
- Several channels are restricted due to the frequency of the recorded channel.

Two recording

1. Press the REC button on the desired channel.
2. When you change the channel, you can record another channel pressing the REC button.
3. Two channels will be recorded simultaneously.



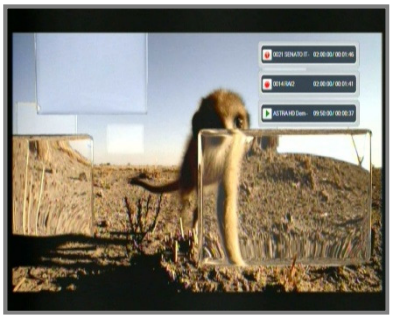
4. If you want to stop recording, press the STOP button.
5. Select the desired channel using the ▲/▼ button, and press the OK button on the desired channel.



6. If your recording channel is reserved on the 'Reservation' menu, the pop-up windows appears when the 'Reservation' function executes according to the reserved time.

Two recording and playback one file simultaneously

1. Press the REC(●) button on the desired 2 channels as above.
2. Press the LIST button to open the file list.
3. Select the desired file using the ▲/▼ button.
4. Press the OK or PLAY(▶) button to playback the file.
5. Press the STOP(■) button to stop watching the file and then recording channel will be shown.

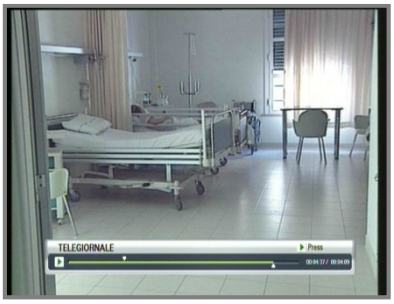


7.2.3 Playback

1. Press the LIST button to open the file list.
2. Select the file you want to watch using the ▲/▼ button.
3. Press the OK or PLAY(▶) button..

4. Press the EXIT button to exit from the file list.
5. When you play the file, the file list will be disappeard.
6. Press the ◀/▶ button or trick button such as REW, FF, etc., if you want to check the status of playing.

9. Press the numeric button(0~9) in Playback mode.
10. Each number means the ratio of the number to ten. If you press number 3, control position will be located 30% progressed position.



Jump in playback mode

1. You can locate the control position to the desired position using the ◀/▶ button.
2. By releasing the ◀/▶ button, playback continues from this position.

For your convenience, the bookmark function enables you to set bookmarks within the media
file to continue or target a special position in media file.

1. Play the file you want to watch.
2. Move the control position to the favored position using the ◄/► button. Then press the MARK button and the white small bar will be placed at that position.
3. To delete the Bookmark, move the control position using the ◄/► button to the desired Bookmark and then the color of the control position turns black Just that time, press the MARK button.
4. Press the JUMP button and the control position will jump to the next bookmarked position and playback starts from this point.

- The maximum number of the Bookmark is twenty in a file.
- The first Bookmark exists at the starting position of the file.

7.2.4 FF/REW/SLOW mode

These functions are available in Playback mode and Time Shift mode.

<Fast Forward / Speed : x2, x3, x4 >

1. Press the FF(►►) button.
2. If you press the FF(►►) button continuously, speed will be increased up to 4 times.

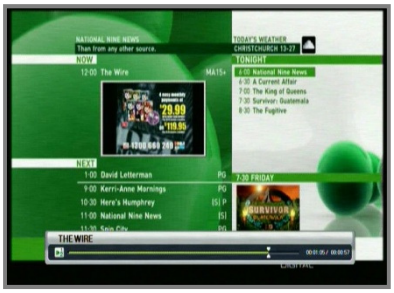
- : Fast forward icon on Playback mode.
- : Fast forward icon on Time Shift mode.

<Rewind / Speed : x2, x3, x4>

1. Press the REW(◄◄) button.
2. If you press the REW(◄◄) button continuously, speed will be increased up to 4 times.

<Slow>

1. Press the SLOW(▪ ►) button.
2. If you press he SLOW(▪ ►) button continuously, speed will be decreased up to 1/4 times.

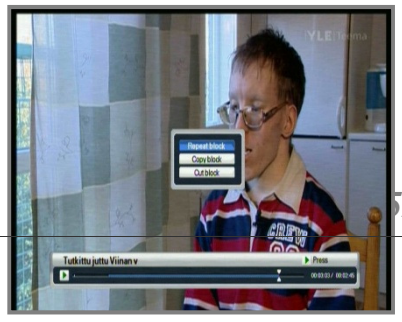


7.2.5 Set repeat, copy and cut block

You can set the block to repeat, copy and cut the recorded file on the PVR Banner.

1. Play the recorded file.
2. Locate the control position to the favored starting position using the ◄/► button.
3. Press the A-B button to set the starting point and then move the ending point using the ◄/► button.

1. Press the A-B button again on the ending point and then pop-up window are displayed.
2. You can select the function such as Repeat block, Copy block, Cut



block using the ▲/▼ button.

3. Press the OK button to start repeating or copy or cut block.
4. Press the EXIT button or the A-B button to cancel setting block.

Additional Information

A.1 Troubleshooting

There may be various reasons behind receiver problems. Check the receiver according to the procedures described below.

If you can't solve your problem even after following the troubleshooting procedures, please contact the dealer. Do not open the receiver cover. It may cause a dangerous situation.

Symptom	Cause	Remedy
The front panel doesn't display any message.	The power cord is not plugged in.	Check that the power cable is plugged in to the wall outlet.
No picture or sound.	Wrong connection of the Audio/Video output of the receiver to TV.	Connect the Audio/Video output of the receiver to TV correctly.
	Wrong connection of the antenna.	Connect the antennal cable correctly.
	No or Bad signal message appears.	Check other device connected between Antenna and the receiver, or adjust the antenna position.
	Audio muting	Press the MUTE button
	TV Power off.	Turn TV on.
No picture.	The receiver can't receive the signal.	Check the antenna cable, replace the cable, or connect the cable to the receiver tightly.
	Incorrect values of some tuner parameters.	Set the values of tuner parameters correctly. Refer to the Installation menu.
The remote controller does not operate.	The batteries of the remote controller are not inserted or exhausted.	Check whether the batteries are inserted correctly in your remote controller.

A.2 Technical Specifications

1. Tuner & Demodulator

Parameter	Specifications
Input Frequency Range	47MHz to 862 MHz
RF Input Signal Level	-15 ~ +15dBm
RF Impedance	75 Ω
Demodulation	QAM
Symbol Rate	7Msps

2. MPEG

Parameter	Specifications
Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Input Rate	Max. 15Mbit/s
Video	MPEG-2 MP@ML, H.264/AVC
Audio	MPEG-1/2 Audio Layer 1,2, AC3(Dolby Digital)
Aspect ratio	4:3 or 16:9
Active Pixel	1920x1080i, 1280x720p, 720x576p, 720x576i
Audio Mode	Stereo, Dual channel, Joint stereo, Mono
Audio Sampling Frequency	32/44.1/48kHz

3. Connector

Port	Specifications
Video	TV SCART (RGB, CVBS, S-VIDEO), VCR SCART (CVBS) RCA (VIDEO) Component (YPbPr)

	HDMI
Audio	TV SCART, VCR SCART RCA(Audio L,R) SPDIF

4. Power Supply

Parameter	Specifications
Input Voltage	90~260VAC (SMPS)
Power consumption	Operation : 28W Standby : 3W
Protection	Separate internal fuse Lighting protection Lighting protection

5. Conditional Access

Parameter	Specifications
Embedded	1 Slot Smart card reader (Conax)

6. HDD

Parameter	Specifications
Type	SATA
Capacity	500 Gbytes (optional)

7. Environmental

Parameter	Specifications
Operating temperature	0 ~ 45 C
Storage	-10 C ~ +50 C
Storage humidity range	5 ~ 90% Rh Non condensing
Operating humidity range	10 ~ 85% Rh Non condensing
Weight	3.4Kg

Dimension(H x W x D)	60mm x 360mm x 270mm

8. SCART Socket

PIN No.	TV	AUX
1	Audio Out Right	Audio Out Right
2	-	Audio In Right
3	Audio Out Right	Audio Out Left
4	Audio ground	Audio ground
5	Blue Ground	Blue Ground
6	-	Audio In Left
7	Blue Out	Blue In
8	Function Control Out	Function Control In
9	Green Ground	Green Ground
10	-	-
11	Green Out	Green In
12	-	-
13	Red Ground	Red Ground
14	Fast Blanking Ground	Fast Blanking Ground
15	Red(C) Out	Red(C) In
16	Fast Blanking Out	Fast Blanking In
17	CVBS ground	CVBS ground
18	CVBS ground	CVBS ground
19	CVBS(Y) Out	CVBS Out
20	-	CVBS(Y) In
21	Ground	Ground

HD Digital Cable Receiver Twin Tuner PVR

RE-9000 CO PVR

http://www.rebox.tv