

WARNING/CAUTION



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk to persons.



The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE

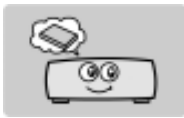
Please be aware that new software may change the functionality of the converter box.

The photo and the function explanation involved in this specification is for reference only. If there is any mistake, please refer to the entity.

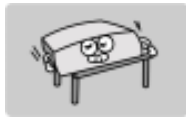
Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

SAFETY INSTRUCTIONS

Please read these safety instructions through carefully, before operating the receiver. Please observe all warnings and instructions on the equipment and contained in these operating instructions.



Be sure to read this user's manual before starting your operation.



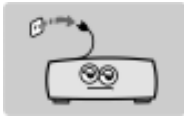
Install the unit horizontally. Unbalanced installation may cause the unit to be damaged by itself.



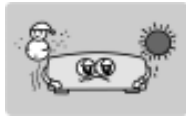
Never open the cover. Don't touch the inside of the unit, otherwise it may cause possible electric shock.



Do not put heavy objects on the unit.



If the receiver is not in use for long periods, always unplug the receiver from its power source. Don't use damaged power cord.



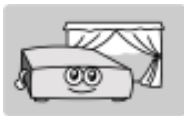
When the location of the unit will move from heat area to cold area, turn off the power for at least 1-2 hrs before you restart the receiver.



Do not touch the power with wet hand. Take off the power cord from the outlet if there's liquid flowing into the unit, otherwise, it may cause fire or electric shock.



Install the unit in a place with:
good ventilation
suitable temperature
no direct sunrays
low humidity
low vibration influence



Place the unit in a well ventilated and no heat environment.

Table of Contents

SAFETY INSTRUCTIONS	2	2.2 Aspect Ratio	17
		2.3 Language	18
GENERAL INFORMATION	4	2.4 Audio Language	18
		2.5 Caption Select	18
1. Main Features	4	2.6 DCC Setup	19
2. Unpacking	4	2.7 Sleep Mode	19
		3. LOCK	20
OVERVIEW OF THE EQUIPMENT	5	3.1 Lock System	20
		3.2 Set Password	20
1. Front Panel	5	3.3 Block Channel	21
2. Rear Panel	6	3.4 TV Rating-Children	21
3. Remote Control Unit	7	3.5 TV Rating-General	22
4. Installation of STB	8	3.6 Movie Rating	23
		3.7 Downloadable RRT	23
		TECHNICAL SPECIFICATION	24
FIRST STEPS	12	TRUBLE SHOOTING	24
MENU INFORMATION	12		
ON SCREEN MENUS SELECTION	13		
		1. Main Menu	13
		2. Channel	14
		1.1 Channel Scan	14
		1.2 Channel Add	15
		1.3 Channel Edit	15
		1.4 Manual Scan	16
		1.5 Output Channel	16
		2. OPTION	17
		2.1 Clock	17

GENERAL INFORMATION

Incorporating the highly integrated single chip, N99901T is a cost-effective and high performance digital ATSC receiver. N9901T provides FTA (Free-To-Air) channels with user-friendly OSD (On Screen Display), which undoubtedly makes it an ideal choice for viewers like you to enjoy the digital life.

1. Main Features

- ❖ Fully ATSC compliant for USA with NTIA Certification
- ❖ Receives ATSC Terrestrial broadcast Channels 2-69
- ❖ Receiving and Presenting Audio/Video Formats Contains in ATSC A/53E
- ❖ 256 colors on screen display (OSD) supported
- ❖ Full Compliant with ATSC A/74, Receiver Performance Guidelines
- ❖ Process and Display ATSC A/65C Program and System Infor-

mation Protocol Data

- ❖ Multi-language OSD (English, French, Spanish)
- ❖ Multi-language audio supported
- ❖ Multi-language Subtitle output supported
- ❖ Support Channel Display, Closed Caption, EAS and Parental Controls(V-Chip)
- ❖ Support 4:3 and 16:9 Aspect Ratios

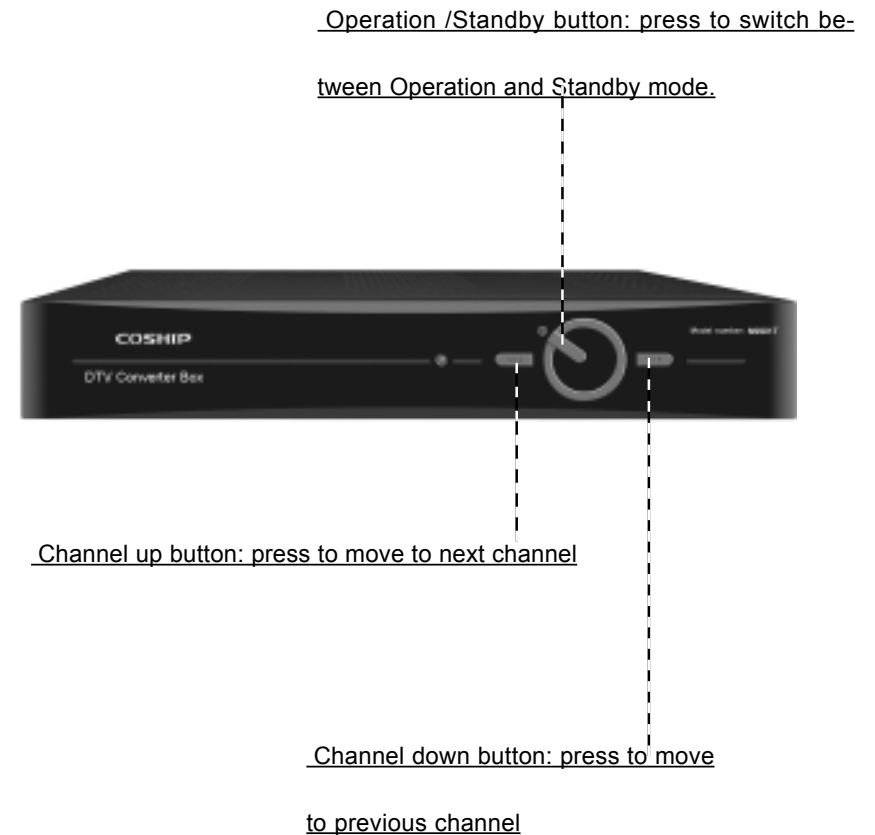
2. Unpacking

Unpack the receiver and check to make sure that all of the following items are included in the packaging.

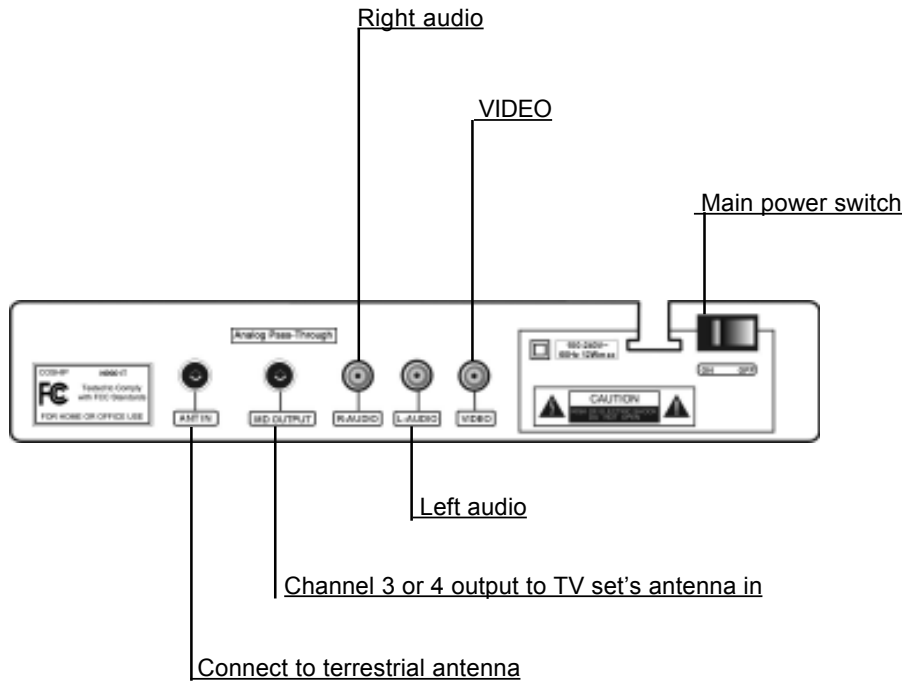
- ❖ 1 x Remote Control Unit
- ❖ 1 x User's Manual
- ❖ 1 x DTV converter box

OVERVIEW OF THE EQUIPMENT

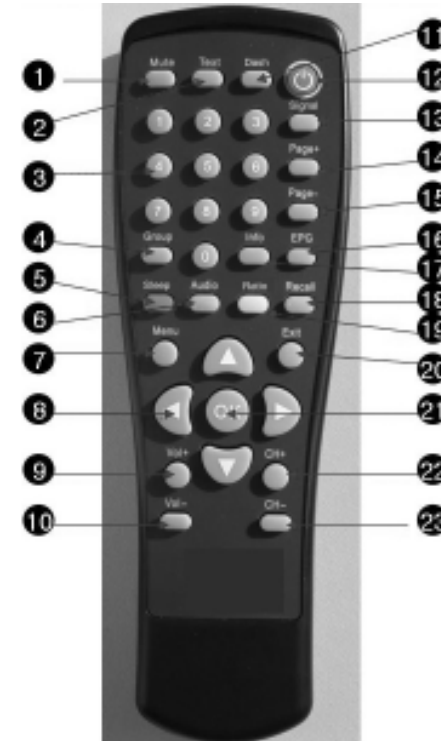
1. Front Panel



2. Rear Panel



3. Remote Control Unit



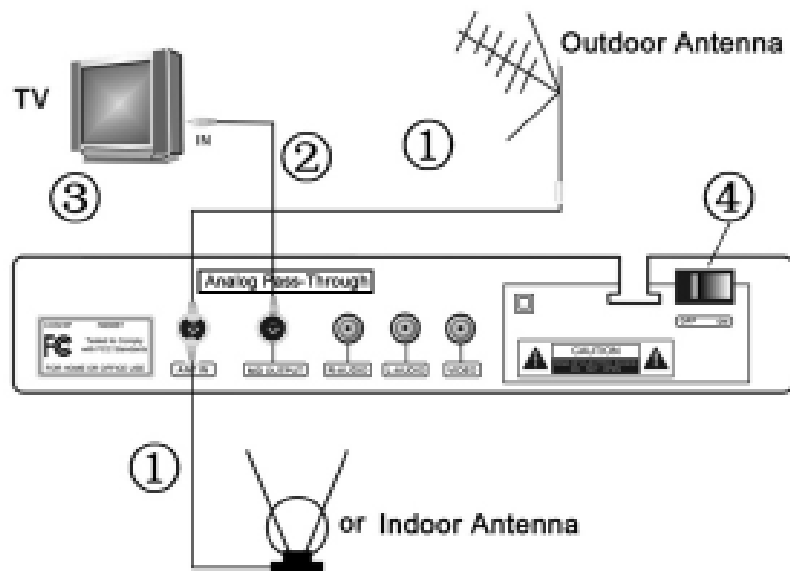
NO.	Function	NO.	Function
1	Mute	13	Signal strength
2	CC	14	Page+
3	Numeric Key	15	Page-
4	Reserved for future use	16	Guide
5	Sleep Mode	17	Information
6	Audio	18	Recall
7	Menu	19	Ratio
8	Arrow key	20	Exit
9	VOL+	21	OK
10	VOL-	22	CH+/PAGE+
11	Dash	23	CH-/PAGE-
12	Stand by		

4. Installation and channel set up

4. Installation and channel set up

You can choose one of the two ways below (**not both**) to install and scan digital TV channels

- 1) To receive digital channels with MD output (RF output)
(RF cable is included in the package)



- 1 Connect outdoor or indoor antenna to the “ANT IN” of the rear panel
- 2 Connect the converter box (MD output) and TV set (RF/ATN in) with RF cable
- 3 Turn on the TV set, tune to **channel 4**(or channel 3, but the converter system sets channel 4 as default)
- 4 Power on the converter box by putting the **power switch** to “on” of rear panel

- 5 Tune the converter box to “**operation**” mode, by pressing key on the remote control (when in “operation” mode, LED on front panel is **GREEN**)
- 6 Press “**menu**” button on the remote control to enter main menu, select “**channel scan**”, press “**OK**” button to start channel scan, when the scan finishes, channels will broadcast automatically, then press “**exit**” button on remote control to close the menu and enjoy the digital TV programs.



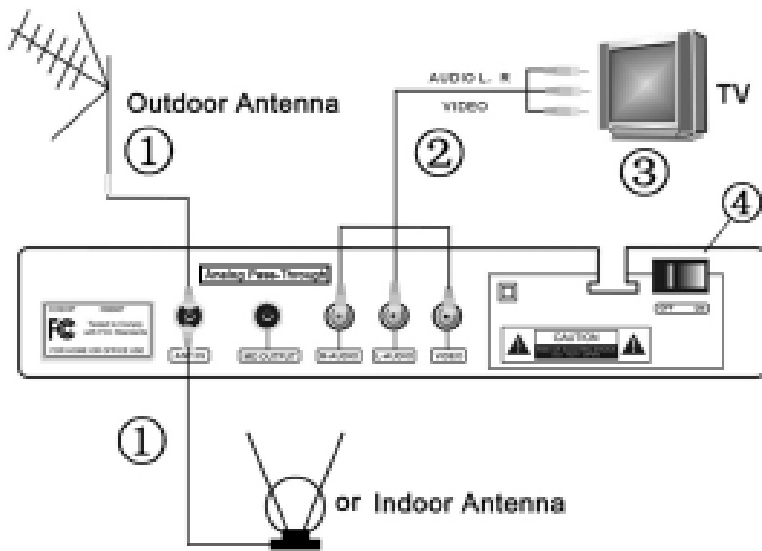
6

*** Analog pass through

Do above and below steps, it will allow you to watch analog channels with analog pass through function:

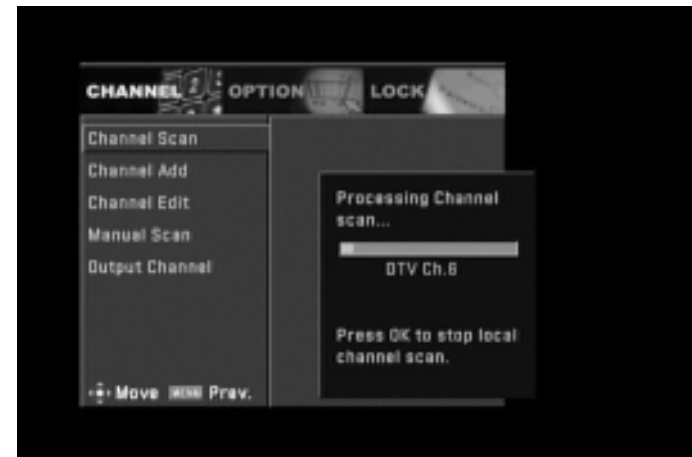
If you would like to transfer to analog channels(if available), you just need to tune the converter box to “**Standby**” mode the converter box and the analog signal will pass to the TV set through the converter box, means the TV will receive analog channels. Please note that when you are watching analog channels, you need to use the TV’s remote control or front buttons for channel operation. If you would like to come back to digital channels, you need to tune the converter box to “**operation**” mode.

2) To receive digital channels with RCA output (RCA cable is not included in the package)



- 1 Connect outdoor or indoor antenna to the “ANT IN” of the rear panel
- 2 Connect the converter box and TV with **RCA cable**, please make sure the colors of plugs (**yellow, red, white**) match the colors of sockets (**yellow, red, white**)
- 3 Turn on the TV set, tune it to **AV mode**
- 4 Power on the converter box by putting the **power switch** to “on” of rear panel

- 5 Tune the converter box to “operation” mode, by pressing key on the remote control (when in “operation” mode, LED on front panel is GREEN)
- 6 Press “menu” button on the remote control to enter main menu, select “channel scan”, press “OK” button to start channel scan, when the scan finishes, channels will broadcast automatically, then press “exit” on remote control to close the menu and enjoy the digital TV programs.



6

Note: if you you connect with RCA cable rather than RF cable, the analog pass through function won't work. So if you would like to use analog pass through function, please connect with RF cable.

FIRST STEPS

Connect the receiver to power source by inserting the receiver's plug in the power socket, and turn on the main power switch on the rear panel.

The receiver starts up in Standby mode when the front LED is RED color.

Connect the auxiliary devices with power sources, and turn them on.

To see if there are any new channels, then activate the channel search.

CAUTION!

Before connect the receiver to power source,check to make sure all of the devices (including antenna)are well connected.

MENU INFORMATION

The user interface has various ways to navigate through the menu and functions. Some of the keys on the remote control unit provide direct access to functions, such as MENU,OK key and colored keys. Other keys are multi-functional ,since their functions will change according to the different mode you are in.

Unless otherwise specified; this note explains the way you can operate the pages of the user menu.

1. Press the ◀ ▶ keys to move the cursor left or right, from one line to another line.
2. Press the ▲ ▼ keys to move the cursor up or down in the sub-menu.
3. Press the OK key to enter the sub-menu.
4. Press the EXIT key to escape from the current menu, and return to view mode.
5. In a sub-menu:
 - Press OK key to confirm your selection;
 - The green or white bar indicates the active selection

ON SCREEN MENUS SELECTION

1. Main Menu

Pressing the MENU key will display the Main Menu. This menu provides three options.

CHANNEL

Channel searching:
Search the desired channels for play.



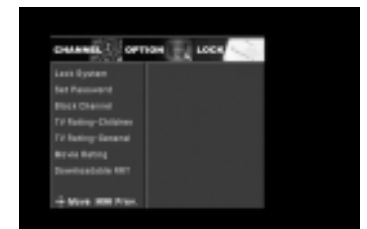
OPTION

Set up the receiver's parameter of the video & audio frequency,language and subtitle.



LOCK

Set up the parental lock and its password.

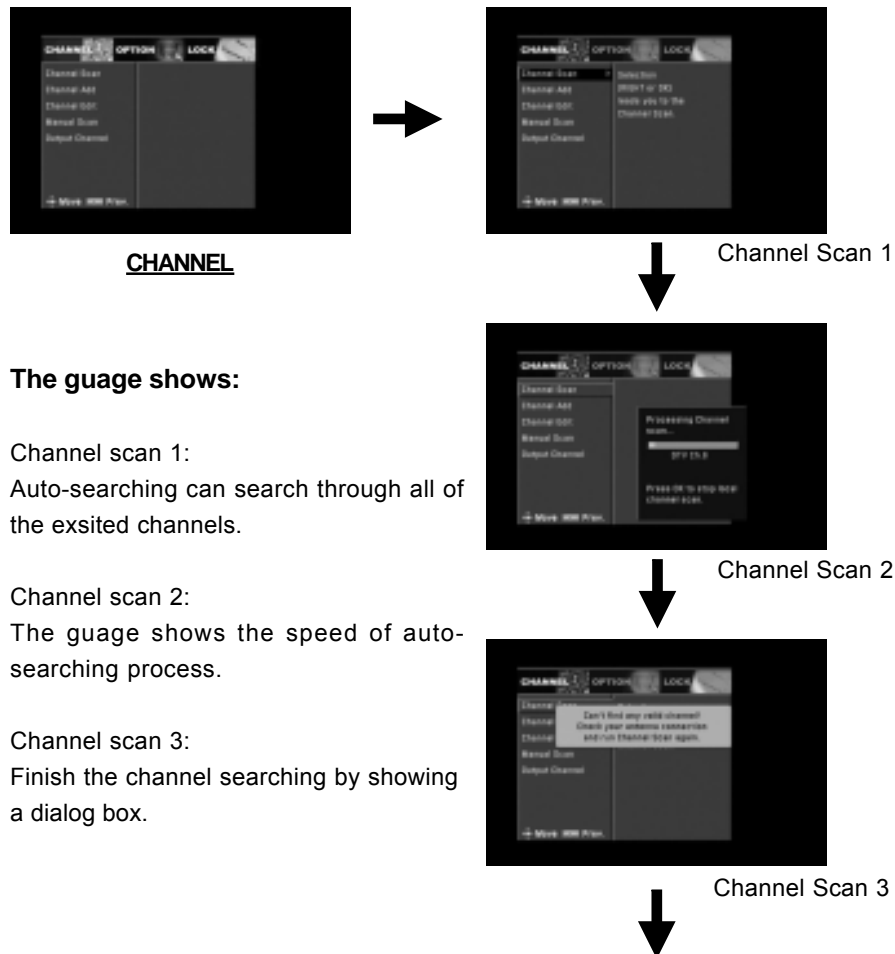


2. Channel

1.1 Channel Scan

From here, press OK key to scan the channels.

During the searching process, OK key is used to cancel the whole process.



The gauge shows:

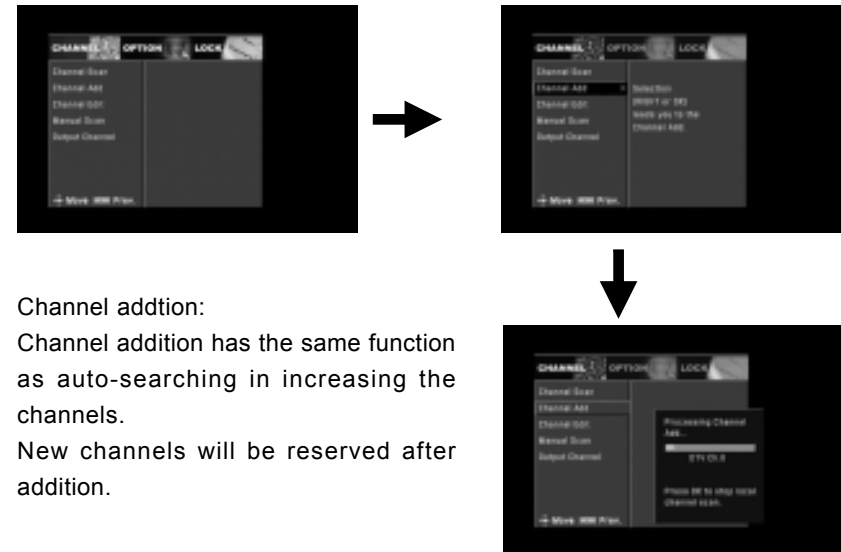
Channel scan 1:
Auto-searching can search through all of the existed channels.

Channel scan 2:
The gauge shows the speed of auto-searching process.

Channel scan 3:
Finish the channel searching by showing a dialog box.

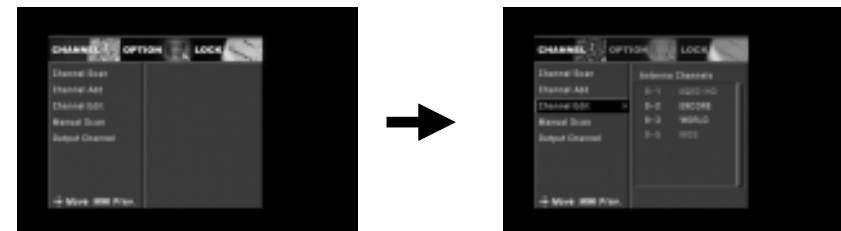
1.2 Channel Addition

The right arrow key or OK key to lead you to the channel adding.



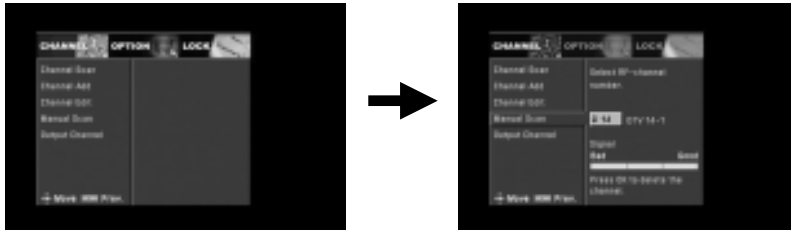
1.3 Channel Edit

Press OK to delete or add the selected channel.



1.4 Manual Scan

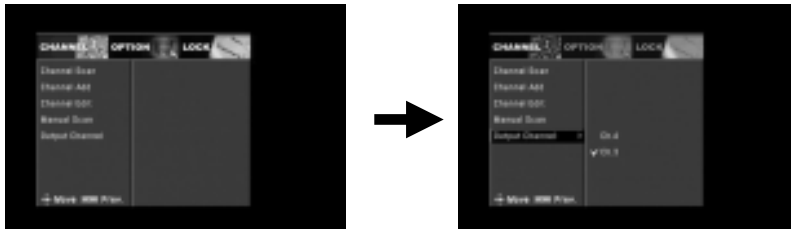
In this mode, only one RF channel can be searched. You can use the function to scan the desired channel. Select the RF-channel number.



Manual scan, users can add channels according to the related frequency index.

1.5 Output Channel

Select the CH3 or CH4



2. OPTION

2.1 Clock

Current Time: Display the current time.

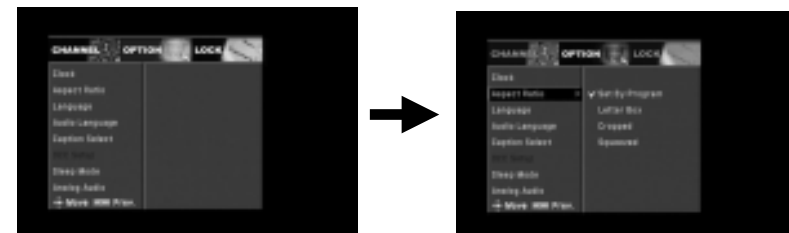
Time Zone: Select proper option according to the time zone you have been.



Setup to select user's local time zone.

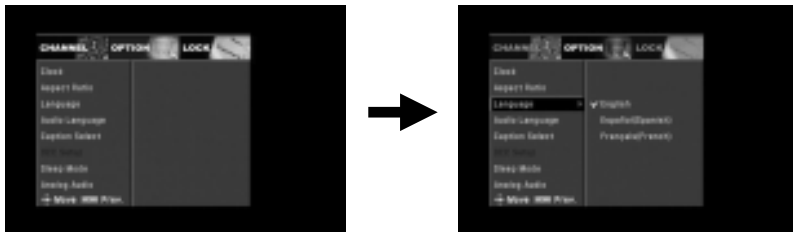
2.2 Aspect Ratio

This option allows you to select the aspect ratio of the video output.



Setup the proportion of the display (Main screen).

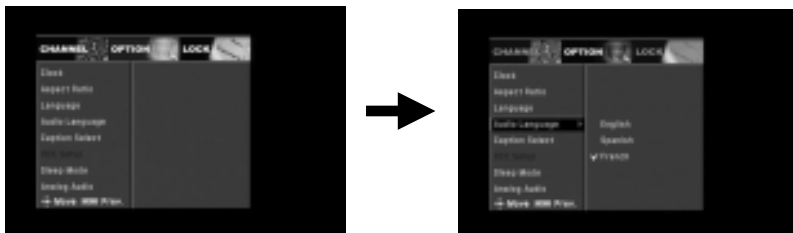
2.3 Language



Select the desired language for main menu.
Options available:English,Spanish,French.

2.4 Audio Language

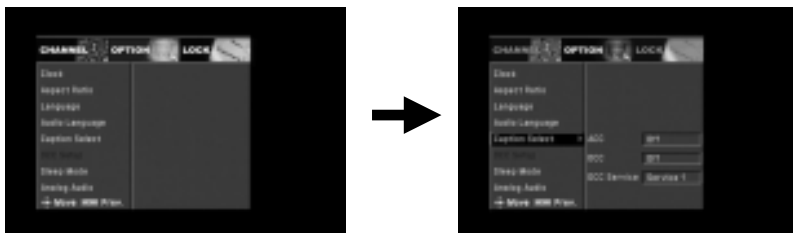
This option allows you to select your first and second choice of the audio language.



Select the language of audio frequency if multi-language options are available.

2.5 Caption Select

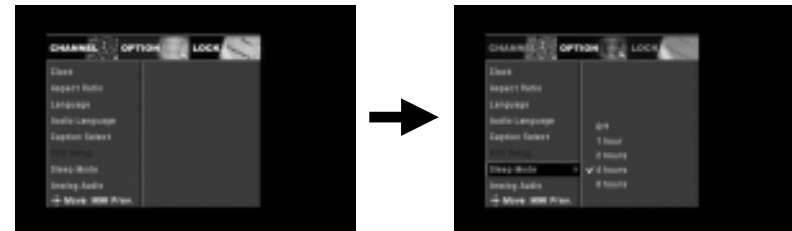
Select the desired option for caption.



Set up the caption of the programs.

2.6 Sleep Mode

Sets the time after which the receiver switches itself off.



Select the time interval, and set up auto-turnoff when no operation being taken for a long periods.

2.7 Analog audio

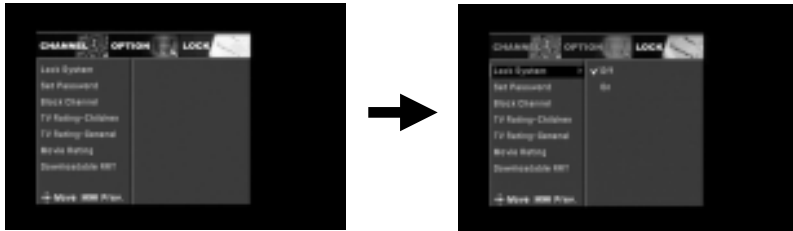
Select the desired option for RF Analog Audio Output.



3. LOCK

3.1 Lock System

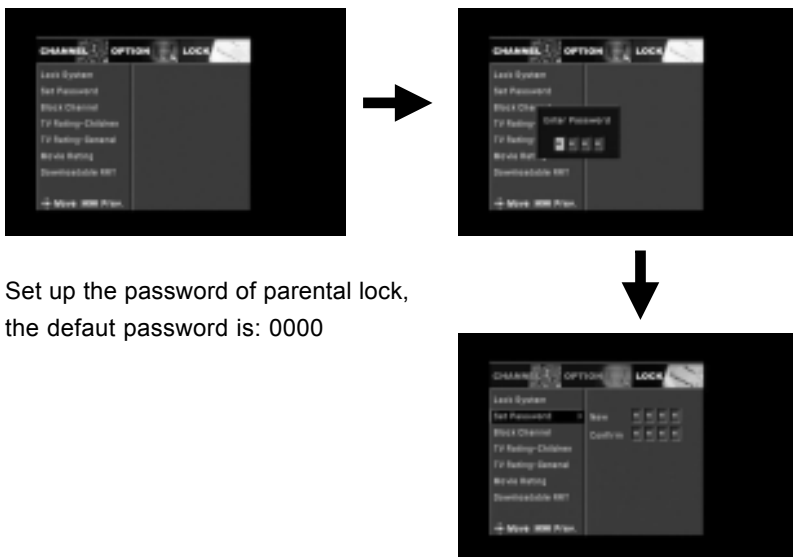
Select On or Off. If On is selected, a password is needed before you entering the menu.



Parental lock, used to open/close the menu.

3.2 Set Password

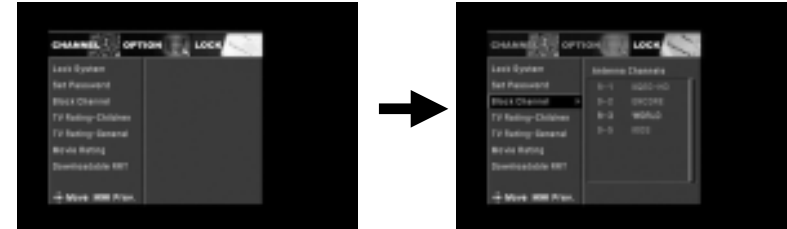
Enter a new password at the "New" item.
Enter the new password again to confirm.



Set up the password of parental lock, the default password is: 0000

3.3 Block Channel

Select the channels which you tend to lock, then press OK to confirm.



3.4 TV Rating-Children

This function can help to prevent children from watching illegal channels.

Age: TV-Y, TV-Y7 and Blocking Off.

Fantasy Violence: Select TV-Y7 or Blocking Off.



Fantasy Violence

Age

3.5 TV Rating-General

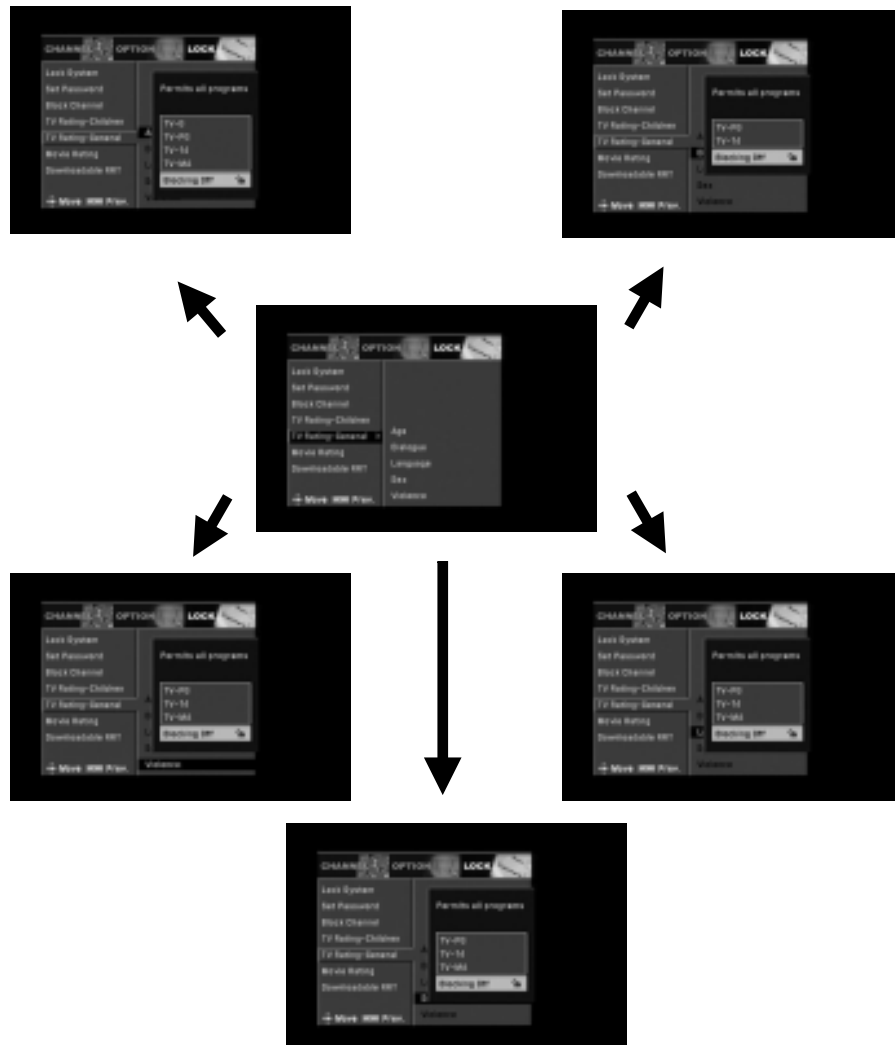
Age: TV-G, TV-PG, TV-14, TV-MA and Blocking Off.

Dialogue: TV-PG, TV-14, TV-MA and Blocking Off.

Language: TV-PG, TV-14, TV-MA and Blocking Off.

Sex: TV-PG, TV-14, TV-MA and Blocking Off.

Violence: TV-PG, TV-14, TV-MA and Blocking Off.



3.6 Movie Rating

G: General audiences.

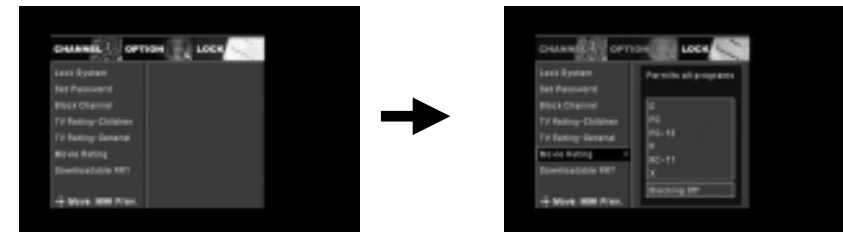
PG: Parental guidance suggested.

PG-13: Parents strongly cautioned.

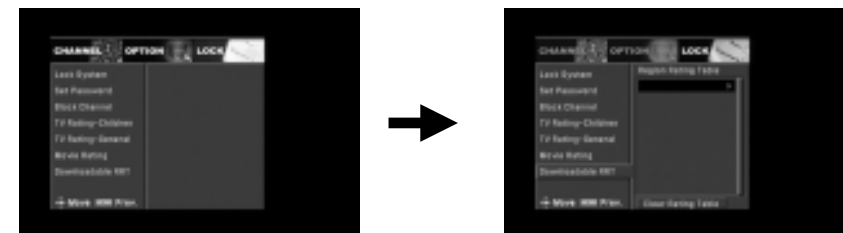
R: Restricted.

NC-17: No one 17 and under admitted.

x: Adult only



3.7 Downloadable RRT(Region Rating Table)




TECHNICAL SPECIFICATION

TUNER	ATSC
Input frequency	57MHz ~ 803MHz (Center Frequency)
Bandwidth	6M
Input level	-83 ~ -5dBm
Input impedance	75Ω
Signal Input:	RF type(ANT IN), RF type(MD output)

TROUBLE SHOOTING

Note : If you cannot solve the problem by referring to the above trouble shooting, please contact your re-seller.

Problem	Possible Causes	What To Do
The display on the front panel does not light up.	Main cable is not connected.	Check that the main cable is plugged into power socket.
No sound and picture, but the front panel shows time.	The unit is in standby mode.	Press the  key on the RCU.
No sound or picture.	Poor signal quality or bad interconnections	Check the antenna system Check cable connections.
Bad picture/ Blocking error.	Signal is too strong.	Try a signal attenuator to the RF IN port.
There is interference on your digital terrestrial channel.	The system is connected using RF leads and the output channel of the receiver interferes with an existing terrestrial channel or Video signal.	Change the receiver output channel to a more suitable channel.
The RCU is not working.	Battery exhausted.	Change the battery.