

SAFETY INSTRUCTIONS	3
SYMBOLS USED ON THE RECEIVER	4
GENERAL INFORMATION	5
1. Main Features.....	5
2. Unpacking.....	5
3. General Operation of STB	6
4. Installation of STB.....	7
 FIRST STEPS	9
MENU INFORMATION	9
BASIC OPERATIONS	10
1. Main Menu.....	10
2. Channel List.....	10
3. AV Settings	10
3.1 AV Picture	11
3.2 AV Audio	11
4. Rating	11
4.1 Rating Lock/Unlock.....	12
4.2 Rating Limits	12
4.2.1 Rating Limits-TV shows	13
4.2.2 Rating Limits-Movie.....	13
4.2.3 Rating limits-Custom	14
4.3 Enter PIN	14
5. Closed Captioning	15
5.1 Font Options	15
5.1.1 Caption Font	15
5.1.2 Font Size.....	16
5.1.3 Font Style	16
5.1.4 Font Color	16
5.1.5 Font Effects.....	17
5.2 Background Options	17
5.3 Default	18

6. Setting	18
6.1 Channel Scan	19
6.2 Language	19
6.3 Power Saver	20
6.4 Antenna	20
6.5 Confirm System Reset.....	21
TECHNICAL SPECIFICATION.....	22
TROUBLE SHOOTING	24

SAFETY INSTRUCTIONS

Please read these safety instructions 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.

Never open the cover. Do not touch the inside of the unit during operation, it may cause dangerous electric shock.

Install the unit horizontally. Unbalanced installation may cause damage of the box.

If the unit doesn't use for a long periods, please take the power cord off from outlet.

Do not use a damaged power cord.

When the unit is suddenly moved to a hot area from a cold area, it may cause problems. In that case, turn off the power, and turn on after 1-2 hours.

Do not touch the power switch with wet hand. If there is liquid flowing into the unit, take the power cord off from outlet immediately. 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.

Do not put heavy objects on the unit.

SYMBOLS USED ON THE RECEIVER

The next paragraphs explain the meaning of the symbols, present on the receiver.



The caution risk of electrical shock - do not open symbol

This symbol tells you that you are not allowed to open the receiver. Only authorized (service) technicians are allowed to open the box.



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 of electric shock to people.



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.



The double insulation symbol.

This symbol tells you that the receiver is electrically safe within the normal use of the receiver as stated in the safety chapter.

FCC

This device complies with Part15 of the FCC Rules. Operation is subject to the following two condition: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: On the bottom of this device there is FCC caution, please take notice of it.

GENERAL INFORMATION

Incorporating the highly integrated single chip, the STB is a cost-effective and high performance digital ATSC converter box. The STB provides FTA (Free-To-Air) channels with user-friendly OSD (On Screen Display).

1. Main Features

- ❖ Fully ATSC / MPEG -2 HD compliant
- ❖ Receives HD ATSC Terrestrial broadcast Channels 2-69
- ❖ Decodes all 18 ATSC DTV standard formats
- ❖ 256 colors on screen display (OSD) supported
- ❖ PAL/ NTSC/SECAM supported
- ❖ Teletext output through VBI and OSD
- ❖ Multi-language OSD (English, French, Spanish, Korean)
- ❖ Parent control (V-chip)
- ❖ Favorite channel edit
- ❖ EIA 608 Closed Caption

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 (RCU)
- ❖ 1 x User's Guide
- ❖ 1 x Set Top Box

3. General Operation of STB

Please read this User's Manual before starting the operation of the receiver. It provides you the daily operating guidance of your STB with a series of user friendly on screen display and menus. The menu will help you get the most detailed information of your STB from installation, channel organizing, viewing and many other functions.

All functions can be carried out in using the RCU, and some of the functions can also be carried out in using the buttons on the front panel.

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

Any problems during your operation, please consult the relevant section of this manual (including the Problem Shooting), or call your local dealer or customer service adviser soon.

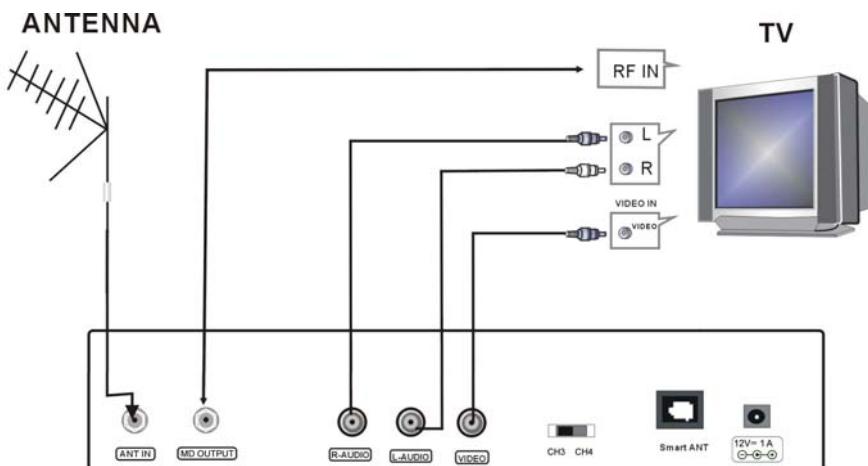
NOTE:

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

4. Installation of STB

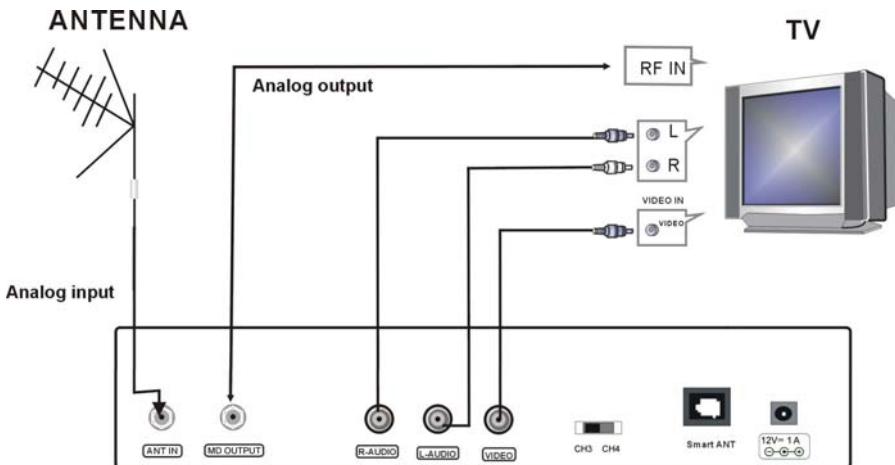
This section provides installation steps of your receiver. Refer to the manual supplied with the equipment for the installation of outdoor equipment such as the dish antenna. When connecting new equipment, be sure to refer to the related parts of the manual.

Connecting RCA Support to TV



Loop through function

When provide the analog signal from front end, and STB in standby mode or Power on mode, STB can receive the analog signal through MD out port , and send the Analog Signal to the RF in port of TV directly.



Step as below:

- Step1: Connect the Antenna Cable to the STB ANT in port.
- Step2: Connect the MD output to the RF in of TV by RF cable.
- Step3: Open the TV
- Step4: Press the power on or Standby key on the STB or Press the standby key on the remoter.
- Step5: Then you can receive the analog signal.

P/S:

When provide the Digital signal from front end, and STB in Power on mode, STB can receive the digital signal through MD out port, and send the Analog Signal to the TV RF in port ((CH3/CH4)) or AV port directly.

FIRST STEPS

1. Insert the plugs of the receiver's and the auxiliary equipments in the power socket and switch them on.
2. Select the AV channel on the TV set.
3. The receiver is delivered with pre-programmed TV channels and can be used immediately. To see if there are any new channels, activate the channel search, you will get new channels.

Caution!

Check the connections of all equipment and the antenna are in working order before you turn on the power switch of the receiver.

MENU INFORMATION

The user interface has various ways to enter into the menus and functions. Some of the keys on the remote control unit can provide direct access to its function. The most important keys are identified as EPG, MENU and SEL. Other keys are multi-functional which means that their function changes depend on the mode you are in.

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

1. Use the  keys to move the cursor up or down from one line to another line.
2. Use the  keys to move the cursor left or right from one line to another line.
3. Use the SEL key to enter the sub-menu.
4. In a sub-menu:
 - use the  keys to select one from the preprogrammed options in the sub-menu.
 - use the SEL key to confirm the selection;
 - the Yellow cursor indicates the active selection

BASIC OPERATIONS

1. Main Menu



Press [Menu] key on the RCU, the main menu will be shown on the screen.

- 1). Press [Up/Down] keys to select menu pages among Channel List, AV Setting, Rating, Closed Captioning and Setting.
- 2). Press [SEL] key, you will get access to the selected menu.

2. Channel List



In the sub-menu of Channel List, user can find many channels, also can see the channel name and order on this list. It includes two options:

- 1) Adjust video display;
- 2) Adjust audio output.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

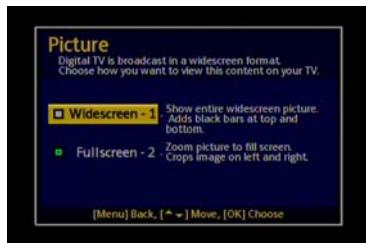
3. AV Settings



In the sub-menu of AV Setting, user can adjust audio and video settings according to the expected requirements.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

3.1 AV Picture



In this mode, user can choose the expected format to view the contents on the TV screen.

Two options are provided as below:

1) Widescreen:

It shows the entire widescreen picture.

2) Full screen:

It shows the zoom picture to fill the screen.

Press [Back] back to the previous page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm you selection.

3.2 AV Audio



In this mode, user can choose preferred audio output format,

Two options are provided as below:

1) Stereo: Output sound in stereo.

2) Alternate Audio: this option enable user pressing OK key on the RCU to toggle among alternate audio programs.

Press [Back] back to the previous page;

[Up/Down] arrow used to select your option;

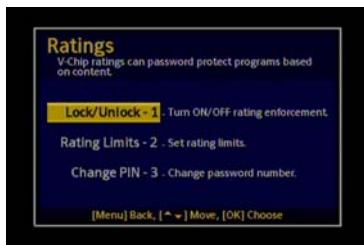
[SEL] key used to confirm you selection.

4. Rating

In this mode, user can set rating limits or change password according to the content.

Three options are as below:

1) Lock/Unlock: In this mode, user can turn on/off the rating enforcement.



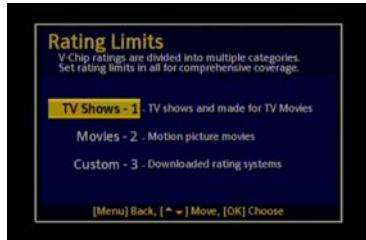
- 2) Rating limits: user can set rating limits in this mode.
- 3) Change PIN: user can change password. RCU to toggle among alternate audio programs. Press [Back] back to the previous page; [Up/Down] arrow used to select your option; [SEL] key used to confirm you selection.

4.1 Rating Lock/Unlock



- In this mode, user can turn on/off the rating enforcement according to specific usage. Three options are included:
- 1) Turn Off: do not enforce selected rating limits;
 - 2) Turn On: enforce selected rating limits;
 - 3) On/Enable: enforce selected rating limits and support downloadable rating ratings.
- Press [Back] back to the previous page; [Up/Down] arrow used to select your option; [SEL] key used to confirm you selection.

4.2 Rating Limits



- In the mode of Rating limits, V-chip ratings are divided into multiple categories, set rating limits is all for comprehensive coverage. Three options:
- 1) TV Shows: TV shows or programs made for TV movies.
 - 2) Movies: Motion picture movies.
 - 3) Custom: Downloaded rating system.
- Press [Back] back to the previous page; [Up/Down] arrow used to select your option;

[SEL] key used to confirm you selection.

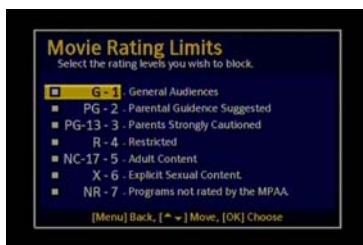
4.2.1 Rating Limits-TV shows



In this mode, TV rating limits allows user to select the rating level which expect to block.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

4.2.2 Rating Limits-Movie



In the mode of movie rating limits, user can select the rating levels which expected to block.

It includes total 7 levels as below:

G—For general audiences;
PG—For parental guidance suggested;

PG-13—Parent strongly cautioned;

R—Restricted;

NC-17—Adult content;

X—explicit sexual content;

NR—Programs not rated by the MPAA.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

4.2.3 Rating limits-Custom



In the mode of custom rating limits, user can use the downloaded systems to select a rating system to set program restrictions. Such as: G, PG, PG-13, R, NC, etc.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

4.3 Enter PIN



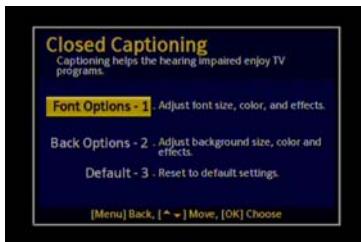
If user wants to enter in the mode, PIN must be required to get access to the locked programs.
Input your PIN in using the numerical keys on the RCU.



User also can change PIN, you will be asked to enter the PIN twice for confirmation.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm you selection.

5. Closed Captioning

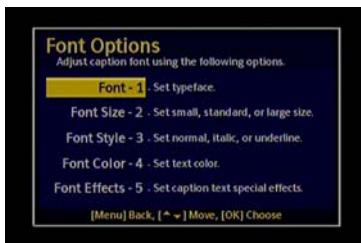


In the mode of Closed Captioning, it allows the hearing impaired users also can enjoy the TV programs.

It includes 3 options.

- 1) Font Options: Adjust font size, color and effects;
- 2) Back Options: Adjust background size, color and effects;
- 3) Default: Reset to default settings.

5.1 Font Options



In the mode of Font Option, user can adjust caption font in the following options, such as: font size, style, color and effects according to specific expectation.

5.1.1 Caption Font



It provides the function for user to choose a typeface for display.

User can apply the default font, and also can set the expected font in selecting the options in this font list.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm your selection.

5.1.2 Font Size



In this mode, user also can choose the default font size in selecting Default option. It also has other 3 optional size:

- 1) Small: use small font size;
- 2) Standard: use standard font size;
- 3) Large: use large font size.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm your selection.

5.1.3 Font Style

In the mode of Font Style, user can choose the typeface style for the displayed captions.

It includes 3 options:

- 1) Normal: use normal font style;
- 2) Italic: use Italic font style;
- 3) Underline: use underline font style.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;
[SEL] key used to confirm your selection.

5.1.4 Font Color



In this mode, user can choose favorite Font Color for display.

Besides default color, it has 8 options, such as: White, black, Red, Green, Blue, Yellow, Magenta, Cyan.

Press [Back] back to the previous page;
[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection.

5.1.5 Font Effects



In this mode, user can choose a special font effects. Select Default, you can use default version directly.

There are 4 other options as below:

- 1) Transparent: Text is clear with underlying video shown;
- 2) Translucent: Text color and underlying video are both shown;
- 3) Solid: Text is a solid color;
- 4) Flashing: Text is a solid flashing color.

Press [Back] back to the previous page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection.

5.2 Background Options



User can adjust the background effects in selecting the following 4 options:

- 1) Edge Color;
- 2) Edge Type;
- 3) Back Color;
- 4) Back Effects;

User can enter in these modes to set favorite options:

Press [Back] back to the previous page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection.

5.3 Default



User also can enter in the Default mode, to reset the caption options to the default settings.

Select “Cancel”, you will cancel the current operation and back to the previous menu.

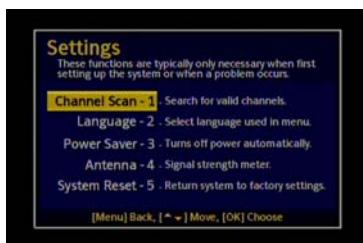
Select “Reset”, you will reset caption settings.

Press [Back] back to the previous page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection.

6. Setting



This mode only necessary when user set up the system first, or when a problem occurs during the operation.

It includes total 5 options:

1) Channel Scan:

Search for valid channels;

2) Language:

Select language used in menu;

3) Power Saver:

Turns off power automatically;

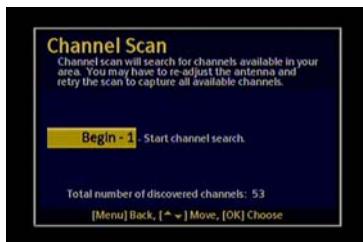
4) Antenna:

Signal strength meter;

5) System Reset:

Return system to factory settings.

6.1 Channel Scan



Channel Scan will search for channels available in your local area, user should re-adjusting the antenna and re-scanning to get all the available channels.



Select "Begin", then the channel search will start working, and a bar will show you the scan progress...

The bottom of the screen will show the total number of the discovered channels.

Escape from this process, please select "Cancel Scan".

6.2 Language



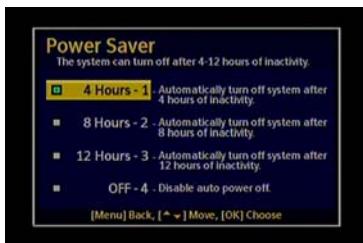
In the mode of Language, user can choose language which will be used in the menu system.

It includes 3 options:

- 1) English;
- 2) Spanish;
- 3) French.

Press [Back] back to the previous menu page; [Up/Down] arrow used to select your option; [SEL] key used to confirm your selection to choose the favorite language..

6.3 Power Saver



To set up Power saver, it will provides the function to turn off the system when 4~12 hours of inactivity.

It includes 4 options:

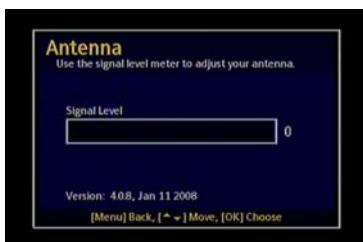
- 1) 4 hours: Automatically turn off the system after 4 hours of inactivity;
- 2) 8 hours: Automatically turn off the system after 8 hours of inactivity;
- 3) 12hours: Automatically turn off the system after 12 hours of inactivity;
- 4) OFF: Do not use power saver function.

Press [Back] back to the previous menu page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection to choose your favorite language..

6.4 Antenna



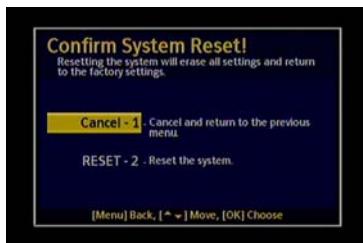
In this mode, user can use signal level meter to adjust the antenna.

Press [Back] back to the previous menu page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection to choose your favorite language.

6.5 Confirm System Reset



In this mode, resetting the system will erase all settings and return to the factory settings.

It includes 2 options:

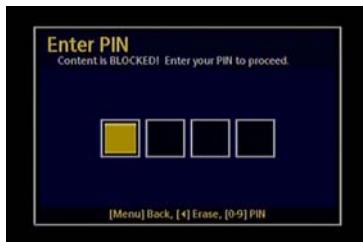
Cancel: cancel and return to the previous menu;

Reset: reset the system.

Press [Back] back to the previous menu page;

[Up/Down] arrow used to select your option;

[SEL] key used to confirm your selection to choose your favorite language.



In this mode, user have to enter PIN to get access to the content, user can press the numerical keys on the RCU to input the PIN.

TECHNICAL SPECIFICATION

Tuner ATSC	
Input Frequency	57~803MHz
Bandwidth	6 M
Input Impedance	75 Ohms
Signal Input	F- Female
Input Level	-79 ~ -10 dBm
Channel Decoding	
Standard	ATSC A/53 8/16 VSB and MMDS 2/4/8/16 VSB
Standard	ATSC
Video Decoding	
Standard	ISO/IEC 13818-2, MPEG-2 MP@ML
Aspect Ratio	4:3,16:9
Video Resolution	720x480(NTSC)
AV Output	
Video De-emphasis	CCIR REC.405-1, 625Lines
Video Bandwidth	5.5MHz
Video Output Impedance	75 Ohms
Video Output Level	1.0 Vp-p
Audio Output Frequency	20Hz~20KHz
Rear Panel	
RF out	75Ohm F-Connector(NTSC Channel 3 or 4)
CVBS	RCA Connector
Stereo L/R	RCA Connector
Smart Antenna	Optional

Front Panel/RCU	
IR Receiver	38KHz
Button	Power on/off, Channel up/down
Power/Ambient	
Input Voltage	AC100~140V, 50/60Hz
Power Consumption	12Wmax
Operation Temperature	0~40°C

TROUBLE SHOOTING

Problem	Possible Causes	Remedy
LED on front panel does not light.	AC power cord disconnected.	Connect power cord properly into the power socket.
No picture or sound.	Wrong connection of the video/audio output to TV input terminal.	Connect two terminals correctly with RCA or RF cable.
	Wrong Connection of antenna cable.	Connect the antenna cable correctly.
	Wrong direction of antenna.	Adjust the direction of antenna.
	No signal or weak signal.	Check the cable connections, TV and other equipment connected between the TV and the receiver or adjust the antenna.
	Wrong setting of channel information in menu screen.	Type the setting value correctly.
Black and white screen or V-Hold.	Your TV mode is different from Set Top Box broadcasting mode.	Use AV mode.
The remote controller is not working.	Battery exhausted.	Change the batteries.
	Fluorescent light interfering with the remote controller.	Switch off the light.
	Remote controller is incorrectly aimed.	Select clear flow between remote and the STB.
Distorted menu screen.	Too high brightness and contrast level of TV set.	Adjust brightness and contrast to low level.
Not working.	Process Down.	Unplug the power from the wall and plug back on it