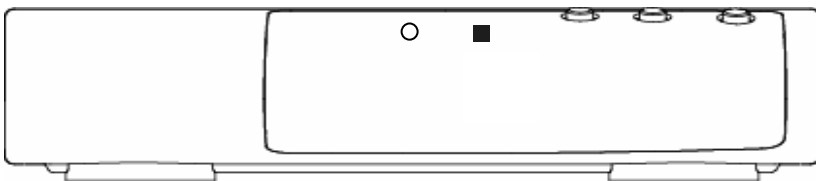


Digital to Analog Converter Box user manual

CAX-01/CAX-03/CAX-04



Please, read this user manual prior to using this product for the first time.

Call for help...Toll Free Number **☎ 1-877-685-8443**

Website **www.casticonverter.com**



CAX-01/CAX-03/CAX-04

SAFETY PRECAUTIONS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.



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 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.

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Apparatus should not be exposed to dripping or splashing and no object filled with liquids, such as vases, shall be placed on the apparatus.

WARNING: Do not install this equipment in a confined space such as a bookcase or similar unit.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT AND FULLY INSERT

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LABORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Where the main plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

The Marking Information is attached on the bottom of this product.

CAUTION: Any changes or modification in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS INSTALLATION AND OPERATING GUIDE AND THOSE MARKED ON THE UNIT. RETAIN THIS GUIDE FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

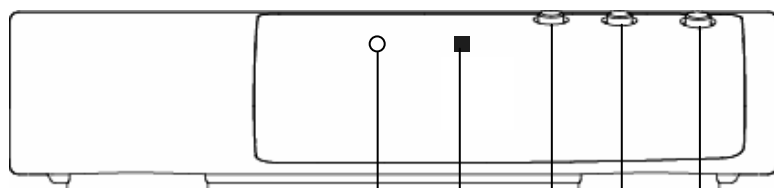
This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

INTRODUCTION	Product Description..... 5 • Front Panel..... 5 • Rear Panel..... 5 Remote Controller..... 6
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INTRODUCTION – PRODUCT DESCRIPTION

FRONT PANEL



POWER

Turns the Converter Box on or off.

CH UP (▲)

Move up the TV channel.

CH DOWN (▼)

Move down the TV channel.

REMOTE CONTROL SENSOR

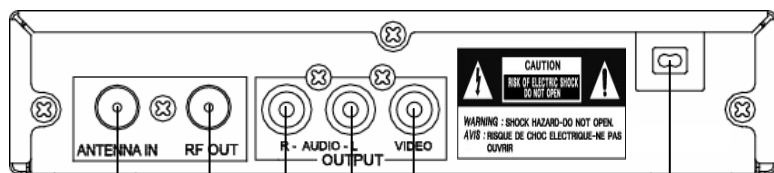
Receives signals from Remote Controller.

POWER LED INDICATOR

Red light is displayed when the unit is turned off.

Green light is displayed when the unit is turned on.

REAR PANEL



AC Power Code

Connect the power cord.

VIDEO OUTPUT

Connect to your TV or VCR for Video output.

AUDIO OUTPUT (L)

Connect to your TV or VCR for Audio(Left) output.

AUDIO OUTPUT (R)

Connect to your TV or VCR for Audio(Right) output.

RF OUT

Use to connect your TV using RF cable.

※ **CAX-03 and CAX-04 have analog pass-through.**

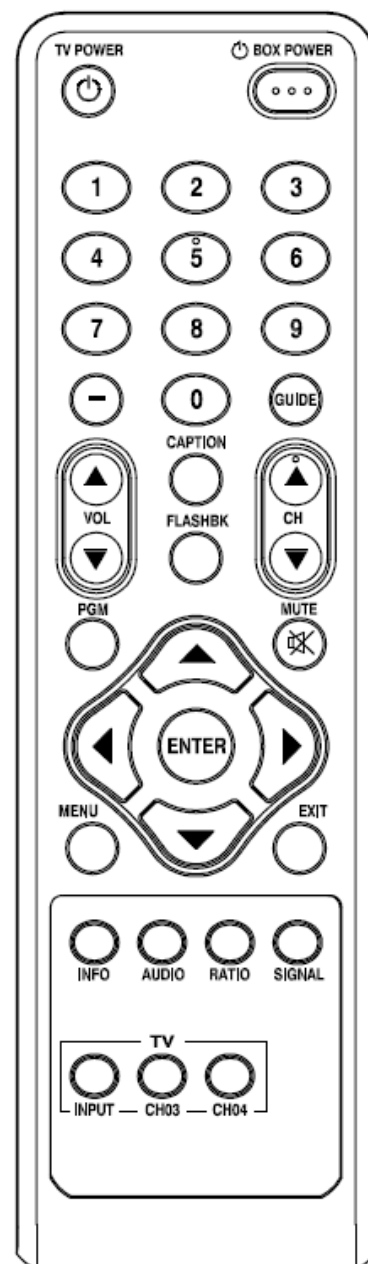
~ Standby mode: Analog Pass-Through, Power on: RF Output (CH03/04)

ANTENNA IN

Connect the AIR antenna cable here.

INTRODUCTION – REMOTE CONTROLLER

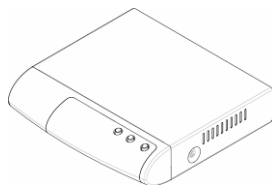
TV POWER	Turns on/off power of TV
BOX POWER	Turn on/off power of Converter Box.
Number(0~9) Buttons	Select channel or enter password.
Dash(-)	Used to enter a program number for multiple channels such as 1-1, 1-2, etc.
GUIDE	View Electronic Program Guide.
VOL ▲	Increase the sound level.
VOL ▼	Decrease the sound level.
CAPTION	Select closed caption: Off, CC, TEXT
FLASHBK	Go to the previous channel.
CH ▲	Move the TV channel up.
CH ▼	Move the TV channel down.
PGM	Program the remote controller to match your TV set.
MUTE	Switch the sound On or Off.
◀ ▲ ▼ ▶	Move between categories in MENU.
ENTER	Adjust the settings to your preference. Display current channel and time in TV viewing.
MENU	Display the MENU or the previous menu screen that was displayed.
EXIT	Completely exit from the menus.
INFO	Display information about TV program on the screen.
AUDIO	Select available Multi tracks depending on the broadcast. (Languages can be chosen only if they are included in the TV program.)
RATIO	Change the picture size.
SIGNAL	Display the digital signal strength.
INPUT(TV)	Select TV source (Tuner or AV input)
CH03(TV)	Select channel 3 of TV
CH04(TV)	Selects channel 4 of TV



INSTALLATION

PACKAGE CONTENTS

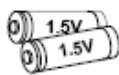
Ensure that the following the Converter Box and accessories are included. If an accessory is missing, please contact the dealer where you purchased the product.



Converter Box



Remote Controller



Batteries



RF cable

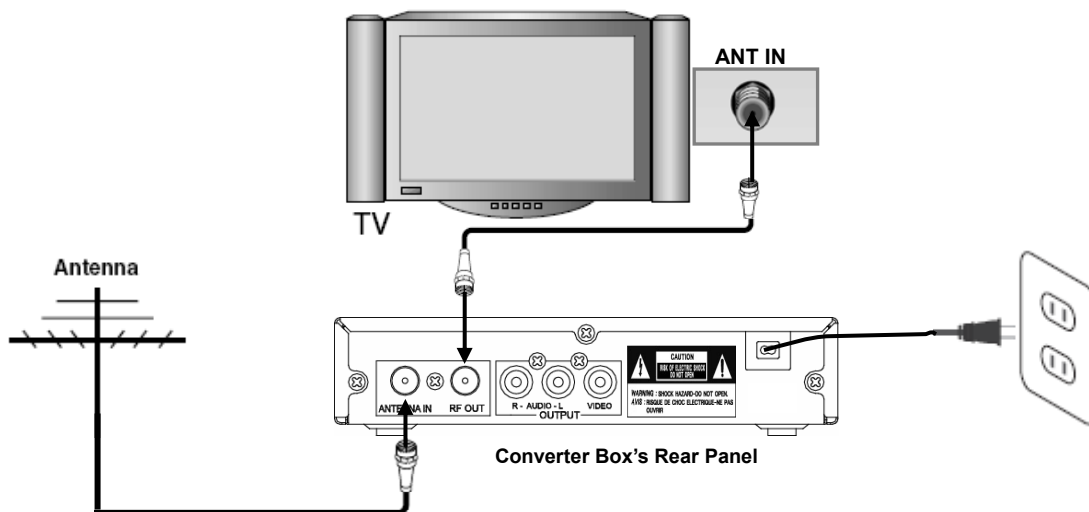


User Manual

Quick Start Guide

ANTENNA CONNECTIONS

1. Connect an antenna cable to the "**ANTENNA IN**" jack on the rear of the Converter Box.
2. Connect the "**RF OUT**" jack from the Converter Box to the "**ANT IN**" jack on your TV using the RF cable supplied with the Converter Box.



Note

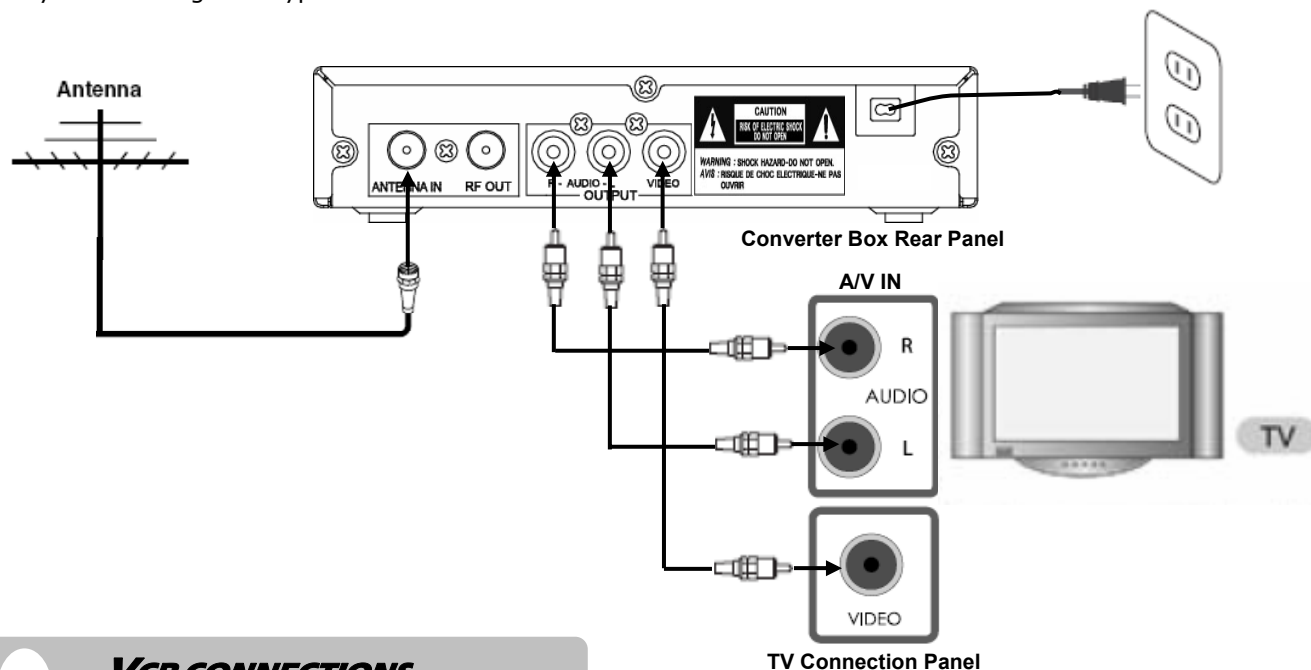
- If you connect "**RF OUT**" of the Converter Box to **ANT. IN** of your TV, you can watch the video and the audio of the Converter Box on **Ch.3** or **Ch.4** of your TV. The RF output channels can be selected in output channel of menu-option. (Refer to page 15)

※ CAX-03 and CAX-04 have analog pass-through.

~ These models are capable of passing through the analog signal to the TV set in standby mode.

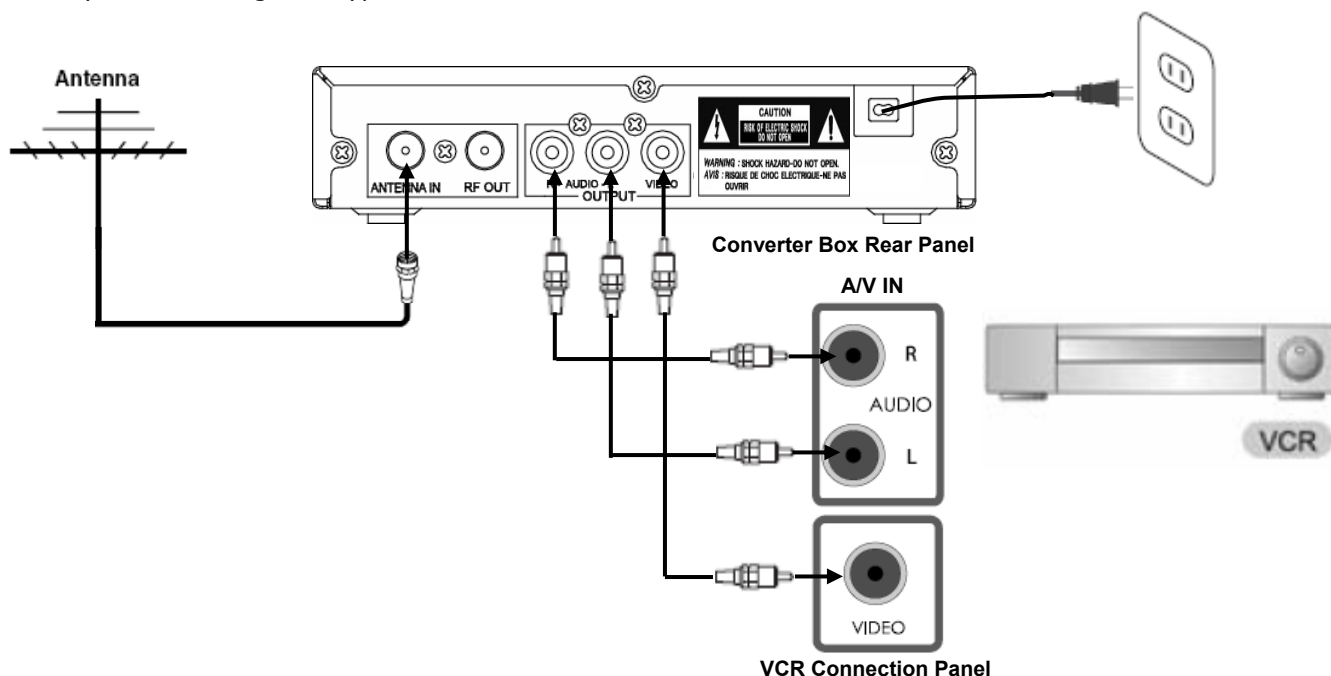
ANALOG TV (MONITOR) CONNECTIONS

1. Connect an antenna cable to the "**ANTENNA IN**" jack on the rear of the Converter Box.
2. Connect the "**R-AUDIO-L**" jacks and "**VIDEO**" jack from the Converter Box to the "**A/V IN**" jacks on your TV using RCA-type cables.



VCR CONNECTIONS

1. Connect an antenna cable to the "**ANTENNA IN**" jack on the rear of the Converter Box.
2. Connect the "**R-AUDIO-L**" jacks and "**VIDEO**" jack from the Converter Box to the "**A/V IN**" jacks on your VCR using RCA-type cables.



Note

- The VCR will record the onscreen display onto the tape during recording if:
 - the channel is changed with **CH** (▲/▼)
 - the sound level is adjusted with **VOL** (▲/▼) or by pressing **ENTER**, etc.
- The caption signal is recorded because the display format is set only 480i.

PROGRAM THE REMOTE CONTROLLER

You can control TV sets of all major brands after programming the Converter Box remote controller with the **PGM**(Program) button.

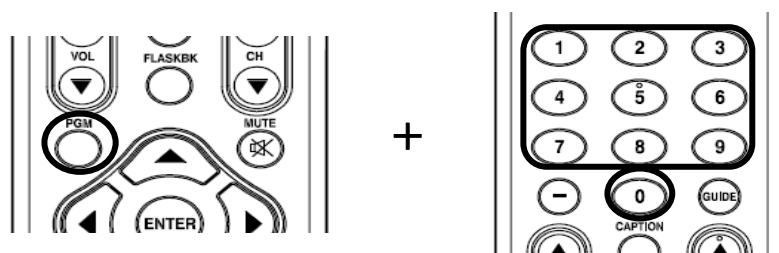
1. Refer to the Program Code List (**page 21 in this manual**).

Find the brand of your TV set and a 3-digit program code. If your TV set is not on the list, skip the rest of this section.

PROGRAM CODE LIST

MAKER(BRAND)	CODE LIST	MAKER(BRAND)	CODE LIST
ADMIRAL	072 081 160 161 096	ELECTROHOME	024 076 143
ADVENT	247	EMERSON	005 028 043 048 076 096 155 004 051 143 151 153 154
AIKO	103	FISHER	007 057
AKAI	006 146 248	FUJITSU	164 028 198 246
ALARON	028	FUNAI	028 043 052 249
AMARK	112 143	FUTURETECH	043

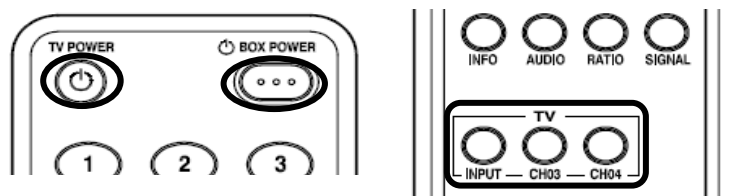
2. Keep the PGM button pressed while entering the correct 3-digit program code with the **Number (0~9)** buttons. After entering the 3-digit program code release the **PGM** button.



3. Aim the remote controller toward your TV and press the **TV POWER** button on the remote controller to check if the TV responds properly. If there is no response from the TV set, try step 2 again with another program code. If your TV responds properly, the programming is completed.

TURN ON THE CONVERTER BOX

1. Connect the AC power cable of the Converter Box to suitable wall outlet.
2. Press **POWER** on the converter box or **BOX POWER** in the remote controller.
The power indicator will turn green if power is on.
3. Press **TV POWER** of remote controller to turn on your TV
4. When the converter box is connected only to RF cable, if current channel of TV is not CH04 or CH03, press **CH04** or **CH03** of remote controller. * **Initial RF output channel is CH04**
5. When the converter box is connected to RCA cables, if your TV is in Tuner mode, press **INPUT** of remote controller to switch to AV mode.



MENU OPERATION - CHANNEL

In the 'MENU Operation', there are several ways to customize the menu settings provided. Most menus consist of three levels to set up the options, but some require greater depth for the variety of settings. If you press **MENU**, only the first and second level of the menu system will appear on the TV screen. The third level can be displayed by pressing **ENTER** or **▶**. If a menu has more than three levels, the pop-up dialogue box will be displayed as the fourth or fifth level. For navigating the menu levels, you will see '▶' on the right side of the menu label to help you go to the next level.

To view and remove the Menu:

Press **MENU** on the Remote Controller to display the menu.
Press **MENU** again or press **EXIT** to return to TV viewing.

Enter next level:

Press **ENTER** or **▶** on the Remote Controller.

Return to the previous level:

Press **MENU** or **◀** on the Remote Controller.



CHANNEL SCAN

Automatically finds all channels available through antenna or cable input. All of the active channels found from this scanning process will be stored in the channel list. You can check the list in the 'Channel Edit' menu.

1. Press **MENU**. The main menu will appear.
2. Press **ENTER** or **▼** to enter the sub-menu of CHANNEL menus. Use **▲/▼** to select 'Channel Scan'.
3. Press **ENTER** or **▶** to start finding available channels. If you want to stop channel scan in the middle of the scanning process, press **ENTER**.
4. After the channel search is completed, the channel which has the lowest channel number will appear on the TV screen.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

※ If the Lock System is on, the 'Channel Scan' is locked. In order to access 'Channel Scan', you have to enter the correct password.

Note

- In case inactive or weak channels do not appear on the list, you can add the channel from the 'Manual Scan' menu.
- If a channel is removed from the memory, you can always tune to that channel directly by using the **Number(0~9)** buttons on the Remote Controller.

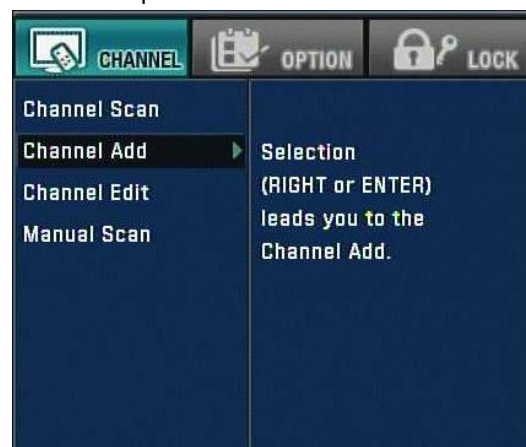


CHANNEL ADD

Automatically finds any additional channel which was not found in 'Channel Scan' process.

1. Press **MENU**. The main menu will appear.
2. Press **ENTER** or **▼** to enter the sub-menu of CHANNEL menus. Use **▲/▼** to select 'Channel Add'.
3. Press **ENTER** or **▶** to start finding available channels. If you want to stop channel scan in the middle of the scanning process, press **ENTER**.
4. After the channel search is completed, the channel which has the lowest channel number will appear on the TV screen.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

※ If the Lock System is on, the 'Channel Add' is locked. In order to access 'Channel Add', you have to enter the correct password.



CHANNEL EDIT

Add available channels or delete the channels from the channel list. The Channel list will appear on the screen and you will be able to see available channels.

1. Press **MENU**. The main menu will appear.
2. Press **ENTER** or **▼** to enter the sub-menu of CHANNEL menus.
Use **▲/▼** to select 'Channel Edit'.
3. Press **ENTER** or **▶** to view channel list on the right hand side of 'Channel Edit' on the screen.

To move one by one:

Use **▲/▼** to move one step on the channel-editing menu.

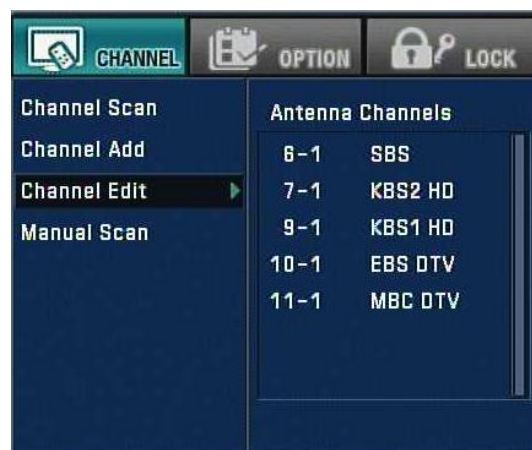
To move page by page:

Use **CH▲** or **CH▼** button to move to the next or previous page on the channel editing menu.

To add or delete a channel:

Press **ENTER** to add or delete the channel on the channel editing menu.

4. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



Note

- When a channel has been added, you are able to tune to the channel with the **CH▲/▼** buttons.
- When a channel has been deleted, you must enter the channel number by using the **Number(0~9)** buttons to view the deleted channel. You will not be able to tune to the channel using the **CH▲/▼** buttons.
- If a channel is deleted, the channel information will be displayed in grey color.

MANUAL SCAN

Add your favorite channels to the channel list or delete the channels from the channel list manually.

1. Press **MENU**. The main menu will appear.
2. Press **ENTER** or **▼** to enter the sub-menu of CHANNEL menus.
Use **▲/▼** to select 'Manual Scan'.
3. Press **ENTER** or **▶**, and 'Manual Scan' menu will appear on the right hand side of 'Manual Scan' on the screen.
4. Use **▲/▼** to select channel.
Press **ENTER** to add/delete the channel.
5. To add/delete additional channels in 'Manual Scan' menu, repeat steps above.
6. When you select the channel, you can see the quality of the signal being received. (You can use **SIGNAL** on the remote control to see the signal level during TV viewing.)
7. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

※ If the Lock System is on, the 'Manual Scan' is locked. In order to access 'Manual Scan', you have to enter the correct password.



MENU OPERATION - OPTION

CLOCK

Enables the user to set up the time. Normally, your clock is set using signals transmitted by DTV stations. Choosing your time zone sets the current time automatically. But if the Ant In jack on the connection panel is connected to a cable service, the clock cannot be set manually.

1. Press **MENU** to display the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select 'Clock' then press **▶** or **ENTER**.
4. Use **◀/▶** to set Time Zone (*Eastern, Central, Mountain, Pacific, Alaska, Hawaii, New F.land or Atlantic*)
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

Note

- There are cases where the TV station does not send, or sends wrong date or time information causing the Converter Box to set an incorrect time.



ASPECT RATIO

Selects the screen format. To view a picture with a wide (16:9) aspect ratio at 480i mode output format. You can choose Letter Box, Cropped, Squeezed, or Set By Program.

1. Press **MENU** to display the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select 'Aspect Ratio' then press **▶** or **ENTER**.
4. Use the **▲/▼** buttons to select the desired picture format. (Set By Program, Letter Box, Cropped, Squeezed)
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

- ※ While watching TV, you can change the picture aspect ratio using **RATIO** on the Remote Control. Use the **RATIO** button on the Remote Control to change the wide mode in the following cycle: Set By Program, Letterbox, Cropped, Squeezed.

Note

• Set By Program

Select the proper picture proportion to match the source's image.

• Letter Box

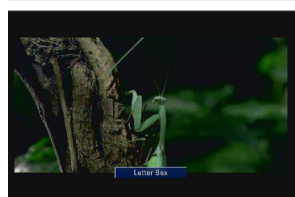
Select this when you want to see the original wide format. Letter Box mode will shrink the picture to fill the screen, and blank panels will appear at the top and bottom of the screen.

• Cropped

Select this when you want the entire screen to be filled. Left and right portion of the picture will be removed.

• Squeezed

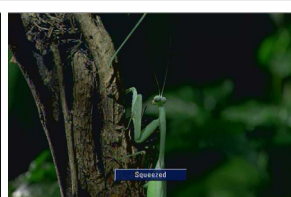
Select this when you want the entire screen to be filled. The picture will be squeezed from the ratio of 16:9 to the ratio of 4:3



Letter Box



Cropped



Squeezed

LANGUAGE

Select the language of the menu.

1. Press **MENU** to view the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select 'Language' then press **▶** or **ENTER**.
4. Use **▲/▼** to select the desired language then press **ENTER**.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



AUDIO LANGUAGE

Digital channels sometimes provide multiple audio tracks, often in a different languages. You can set a default audio language from the audio Language menu.

1. Press **MENU** to view the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select 'Audio Language' then press **▶** or **ENTER**.
4. Use **▲/▼** to select the desired language then press **ENTER**.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

※ If multiple audio tracks are available, the audio icon (🔊) appears on the Program Information display or Program Guide. You can select the language with the **AUDIO** button.



CAPTION SELECT

You can modify and configure how your caption will appear.

1. Press **MENU** to display the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select 'Caption Select' then press **▶** or **ENTER**.
4. Move between the options using **▲/▼** (ACC, DCC, DCC Service)
5. Select type of options using **◀/▶** then press **ENTER**.
ACC (Off, CC1, CC2, CC3, CC4, Text1, Text2, Text3, Text4)
DCC (Off, Standard, Custom)
DCC Service
 (Service1, Service2, Service3, Service4, Service5, Service6)
6. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



Analog Captions

Allows you to select mode for displaying Analog Caption Data. (Analog Caption Service : CC 1-4 display program's dialog and Text 1-4 display data service information.)

Note

- **Off:** Analog Caption is not displayed
- **CC1** is the primary caption service that synchronizes the captioning language with the sound, used by most broadcasters. Captioning is displayed in the same language as the program's dialog.
- **CC 2** is the special non-synchronous caption service that does not need to be in sync with the sound and may provide simplified captioning, which is usually delayed.
- **CC 3** serves as an alternate captioning service channel. Captioning is often a secondary language translation such as French, Spanish, simplified English or displayed at a slower rate.
- **CC 4** is another special non-synchronous caption service that does not need to be in sync with the sound and may provide simplified captioning.
- **Text 1-4** usually displays information on the lower portion of the screen and is used for a data service, generally not program related.

Digital Captions

Use caption feature defaults as provided by the program (Standard) or customize caption appearance (Custom) with the Custom menu options.

Off : Digital Caption is not displayed.

Standard : Caption will appear based on Default text provided by a broadcaster.

Custom : Caption will appear based on the customized text. And if this option is selected, the DCC Setup menu is activated.

Note

- If Digital and Analog Caption are received simultaneously, you can only select DTV Captions, analog captions will not appear.
- When DCC is "OFF", Analog Caption (ACC) is available
- Analog Captions will appear if they are provided by broadcaster
- If available, press **CAPTION** button to select a analog caption type while viewing TV.

DCC SETUP

In Caption Select, if you select **Custom** option of digital caption, you can change font size, font type, text color, text opacity, background color, background opacity edge color, edge type.

1. Press **MENU** to view the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select '*DCC Setup*' then press **▶** or **ENTER**.
4. Select the options using **▲/▼** and select data of options using **◀/▶** then press **ENTER**.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

Note

- **Font Size** : Selects the font size for captions
- **Font Type** : Selects the font type for captions
- **Text Color** : Selects the font color for captions
- **Text Opacity** : Selects the font opacity for captions
- **BG Color** : Selects the background color for captions
- **BG Opacity** : Selects the background opacity for captions
- **Edge Color** : Selects the edge color for captions
- **Edge Type** : Selects the edge type for captions.



SLEEP MODE

This function allows automatic switching from the On state to the Sleep mode after a period of time without user input.

1. Press **MENU** to display the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select '*Sleep Mode*' then press **▶** or **ENTER**.
4. Select desired period of time using **▲/▼** then press **ENTER**.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

- ※ 'Off' option disables the "automatic switching to sleep mode" function.
- ※ Initial period of time is **4 hours**.



OUTPUT CHANNEL

You may select the TV channel for viewing the video and the audio of the Converter Box on Ch.3 or Ch.4.

1. Press **MENU** to display the on-screen menu.
2. Select the **OPTION** menu using **◀/▶** then press **ENTER** or **▼**.
3. Use **▲/▼** to select '*Output Channel*' then press **▶** or **ENTER**.
4. Select desired RF out channel (Ch.3 or Ch.4) using **▲/▼** then press **ENTER**.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

※ Initial output channel is **Ch.4**.



MENU OPERATION - LOCK

Set up blocking schemes to block specific channels, ratings, and external viewing sources. Rating guidelines are provided by broadcasting stations. Most TV programs and TV movies can be blocked by TV Rating and/or Individual Categories. A password is required to gain access to this menu.

Note

- **If you have forgotten your password :** Key-in '**7777**' and then change the password.
- **If you have not entered a password yet :** Key-in the '**0000**' password using the **Number(0-9)** buttons to create a personal 4-digit security password.
- **If you have already entered a password :** Key-in the 4-digit password using the **Number(0-9)** buttons to confirm the personal 4-digit security password.
- The Rating system does not apply to news programs.

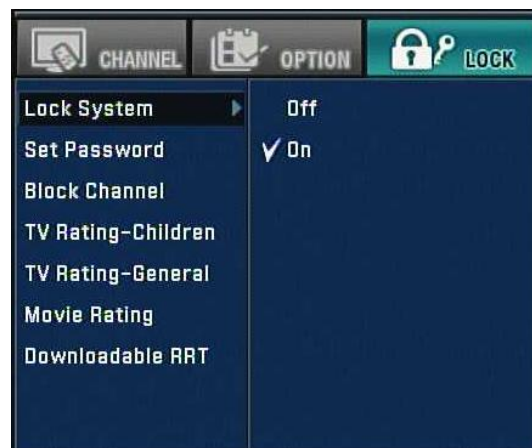
LOCK SYSTEM

Activates or disables the blocking scheme you set up previously.

1. Press **MENU**. The main menu will appear.
2. Use **◀/▶** to select **LOCK** then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'Lock System' then press **▶** or **ENTER**.
4. Use **▲/▼** to select an option (On or Off) then press **ENTER** button to confirm your selection.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.

Note

- When the Lock System is on, '*Channel Scan*', '*Channel Add*' and '*Manual Scan*' of menu-channel is locked. In order to access '*Channel Scan*', '*Channel Add*' or '*Manual Scan*', you have to enter the correct password.



SET PASSWORD

Change the password by entering a new password twice.

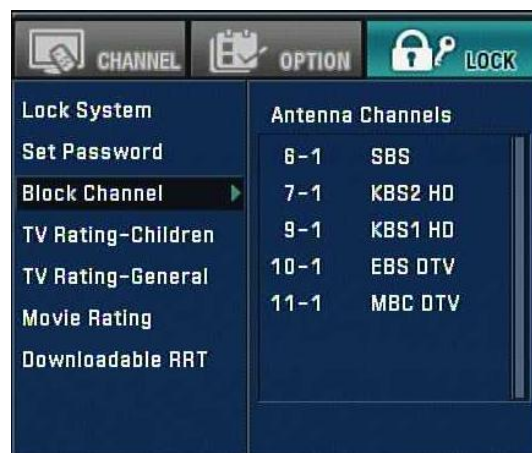
1. Press **MENU**. The main menu will appear.
2. Use **◀/▶** to select **LOCK** then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'Set Password' then press **▶** or **ENTER**.
4. Enter the new 4-digit password.
5. Enter the same password again to confirm.
6. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



BLOCK CHANNEL

Blocks any channel that you do not want to view or that you do not want your children to watch. If you select a blocked channel, a block screen with a pop-up box will appear. Block Channel can override Channel Edit menu settings.

1. Press **MENU**. The main menu will appear.
2. Use **◀/▶** to select **LOCK** then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'Block Channel' then press **▶** or **ENTER**. The channel list menu will appear.
Use **▲/▼** to move between the channels.
To lock or unlock a channel:
Use **ENTER** button to block or unblock the channel.
The **🔒** mark will appear beside the station name indicating the blocked channel.
4. Repeat step 3 to block or unblock additional channels on the channel list menu.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



TV RATING - CHILDREN

This option prevents children from watching certain children's TV programs according to the ratings limit set. The Rating- Children does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating- sub menu, your children can view those programs.

1. Press **MENU**. The main menu will appear.
2. Use **◀/▶** to select **LOCK** then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'TV Rating-Children' then press **▶** or **ENTER**.
4. Use **▲/▼** to select 'Age' or 'Fantasy Violence' then press **▶** or **ENTER** button.
Age : Selection applies regardless of content category of rating.
Fantasy Violence : Selection applies if TV programs include rating for Fantasy Violence.
5. Use **▲/▼** to select a rating then press **ENTER** to confirm your selection.
6. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



Note

- **TV-Y** : All Children.
- **TV-Y7** : For children age 7 and older.

TV RATING - GENERAL

Blocks TV programs that you and your family may not wish to watch, based on the rating scheme set.

1. Press **MENU**. The main menu appears.
2. Use **◀/▶** to select LOCK then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'TV Rating-General' then press **▶** or **ENTER**.
4. Use **▲/▼** to select 'Age', 'Dialogue', 'Language', 'Sex', or 'Violence' then press **▶** or **ENTER**.

Age: Selection applies regardless of content category rating.

Dialogue: Selection applies if TV programs have rating for Dialogue.

Language: Selection applies if TV programs have rating for Language.

Sex: Selection applies if TV programs have rating for Sex.

Violence: Selection applies if TV programs have rating for Violence.
5. Use **▲/▼** to select a rating then press **ENTER** to confirm your selection.
6. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



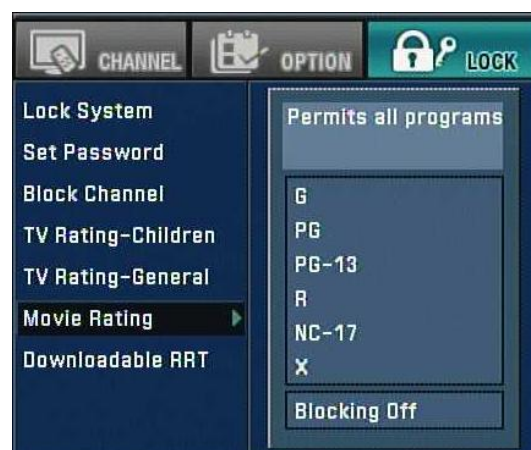
Note

- **TV-G** : General Audience.
- **TV-PG** : Parental Guidance Suggested.
- **TV-14** : Parents Strongly Cautioned.
- **TV-MA** : Mature Audience Only.

MOVIE - RATING

Blocks movies according to the movie rating restrictions so children cannot view certain movies. You can set the ratings to block out all the movies with ratings above a specified level. Keep in mind that the movie ratings apply only to movies shown on TV, not TV programs such as soap operas.

1. Press **MENU**. The main menu will appear.
2. Use **◀/▶** to select LOCK then press **▼** or **ENTER** button to move to the second level.
3. Use **▲/▼** to select 'Movie-Rating' then press **▶** or **ENTER**.
4. Use **▲/▼** to select a rating then press **ENTER** to confirm your selection.
5. Press **MENU** or **◀** to return to the previous category or press **EXIT** to return to TV viewing.



Note

- The Rating system doesn't apply to news programs.
- **G (General Audiences)** : GENERAL AUDIENCES, Suitable for all ages.
- **PG** : PARENTAL GUIDANCE SUGGESTED- Some material may not be suitable for children.
- **PG-13** : PARENTS STRONGLY CAUTIONED- Some material may be inappropriate for children under 13.
- **R (Restricted viewing)** : RESTRICTED, No one 17 or Under without parent or guardian admitted.
- **NC-17 (Restricted Viewing)** : No one 17 or under admitted.
- **X (Hard Core Films)** : Adults Only.

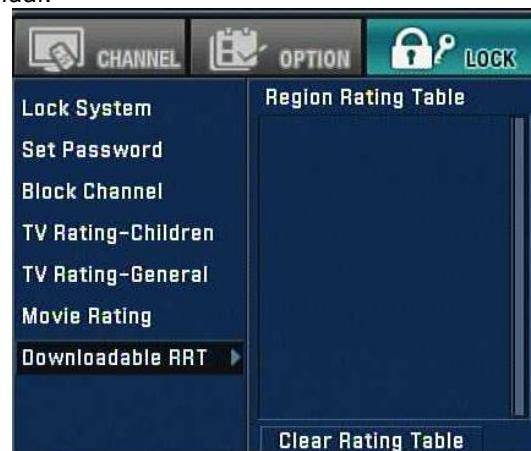
DOWNLOADABLE - RRT

If the broadcasting signal has Region5 rating data, rating data is displayed in the Region Rating Table. The displayed data has ordinal rating format or categorical rating format. Based on the rating table, your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

1. Follow steps 1-2 as shown above (Movie Rating).
2. Use ▲/▼ to select 'Downloadable-RRT' then press ► or **ENTER**.
3. Use ▲/▼ to select rating item then press ► or **ENTER**.
4. In Categorical rating use **ENTER** to select rating.
In Ordinal rating use ▲/▼ to select rating.
5. Press **MENU** or ◀ to return to the previous category or press **EXIT** to return to TV viewing.

Note

- This function operates only when converter box has received Region5 Rating data.



ELECTRONIC PROGRAM GUIDE

The Electronic Program Guide contains schedule and program information of all channels. This guide also provide local over-the-air channel information including conventional digital channels. Use the Electronic Program Guide to view schedule and descriptive program information for the channels. The EPG supplies information, such as program name, start and end time of all available channels. In addition, the detailed information about the program is often available in the EPG. (The availability and the amount of program details will vary depending on the broadcaster.)

To Display the Electronic Program Guide

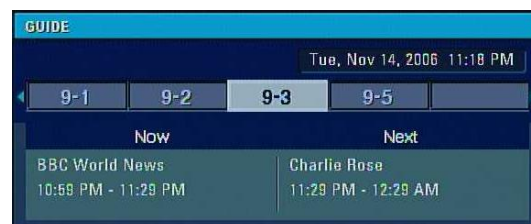
Press **GUIDE** on the Remote Controller.

To Exit the Electronic Program Guide

Press **EXIT** or **GUIDE** to return to the channel you were viewing.

To view the Electronic Program Guide of other channels

Use ◀/▶ on your Remote Controller to navigate the guide screen.



CHANNEL BANNER DISPLAYS

The Channel Banner appears whenever you tune into a new channel or press **ENTER** while viewing a program.

1. Press **ENTER** while watching a program.
The Channel Banner appears on the TV screen (channel number, station name, and current time).
- 2., Press **ENTER** to make the Banner disappear.



Note

- Station name and Current time are displayed only if they are provided by the broadcaster.
- If the channel is scrambled, you may not be able to see the program.
- **The Channel Banner will contain the following information.**
 - a. **Channel Number** : Displays current channel number
 - b. **Station Name** : Displays the station name of the current channel
 - c. **Time** : Displays the current time
 - d. **NO SIGNAL** : Displays the NO SIGNAL icon when the channel is invalid or an antenna isn't connected
 - e. **CH BLOCKED** : Displays the CH BLOCKED icon when the channel is locked
 - f. **Volume Mute** : Displays the Volume Mute icon when sound is off

PROGRAM INFORMATION DISPLAYS

The Program Information Display will appear if you press the **INFO** button on the Remote Controller while viewing a program.

1. Press **INFO** while watching a program : The Program Information will appear on the TV screen.
2. Press **INFO** or **ENTER** while the Program Information is displayed : The Program Information will disappear from the TV screen.



Note

- Station name and Current time are displayed only if they are provided by the broadcaster.
- **The Channel Banner will contain the following information.**
 - a. Program Title :** Indicates title of current program
 - b. Date :** Displays the current date
 - c. Start Time, End Time :** Displays the start time and end time for the current program
 - d. Time :** Shows current time
 - e. Channel Number :** Displays the current channel number
 - f. Station Name:** Displays the station name of the current channel
 - g. Extended Text Message Icon ([i]) :** Indicates that there is an Extended Text Message available providing detailed description of the program
 - h. Multiple Audio Icon ([M]) :** Channels sometimes provide multiple audio tracks, often in a different language. When multiple audio tracks are available, the Multiple Audio Icon will appear and you can select the audio tracks with the **AUDIO** button.
 - i. DTV Caption Icon ([CC]) :** Indicates that the current program contains Digital Closed Caption Data Service
 - j. Wide Icon ([16:9]) :** Indicates that the current program is shown in wide picture format
 - k. Content Advisory Icon ([P]) :** Content Advisory data is used for the parental guide control to block programs that are beyond pre-defined rating criteria set by users. This icon means that the current program contains content advisory data, and displays rating of the program
 - l. Program Details :** Displays program information

NORMAL OPERATION

VOLUME ADJUSTMENT

You may adjust the audio volume of the Converter Box.

VOL ▲/▼ buttons (Remote Controller)

Use **VOL ▲/▼** on the Remote Controller to adjust the sound level for analog audio output of the Converter Box.



MUTE (Remote Controller)

Press **MUTE** to turn off the volume for audio output of the Converter Box.



SELECTING CHANNELS

You can select channels as described below.

Number and Dash (-) buttons (Remote Controller)

Use **Number(0~9)** and **Dash (-)** buttons to select a channel directly.

The **Dash (-)** button is used to enter a program number for multiple channels such as 1-1, 1-2, etc.



FLASHBK button (Remote Controller)

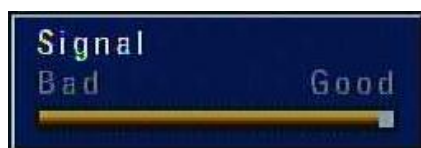
Press to return to the previous channel you viewed. For example, if the Converter Box is tuned to channel 54 and then you changed to channel 56, pressing **FLASHBK** will return to channel 54.

CH▲/▼ buttons (Remote Controller or front panel)

Use **CH▲/▼** on the Remote Controller to cycle through the channels memorized in the Converter Box..

SIGNAL STRENGTH

Shows the signal strength bar for incoming signal to help you adjust the antenna to the correct position for your location. You can view the signal strength bar by pressing **SIGNAL** on the Remote Controller. And a beep sound will be heard.



APPENDIX

REMOTE CONTROLLER CODE TABLE

※ NEC Format (Carrier frequency=38KHz)

Custom Code: 01FE					
FUNCTION	KEY DATA	FUNCTION	KEY DATA	FUNCTION	KEY DATA
BOX POWER	00H	-	19H	DOWN	16H
MUTE	03H	0	0EH	LEFT	14H
1	01H	GUIDE	1AH	RIGHT	17H
2	02H	VOL +	18H	MENU	0CH
3	06H	VOL -	10H	EXIT	0FH
4	04H	CAPTION	1EH	INFO	47H
5	05H	FLASHBK	0DH	AUDIO	41H
6	07H	CH UP	13H	RATIO	42H
7	08H	CH DOWN	11H	SIGNAL	1DH
8	0AH	UP	15H		
9	0BH	ENTER	12H		

PROGRAM CODE LIST

MAKER(BRAND)	CODE LIST	MAKER(BRAND)	CODE LIST
ADMIRAL	072 081 160 161 096	ELECTROHOME	024 076 143
ADVENT	247	EMERSON	005 028 043 048 076 096 155 004 051 143 151 153 154
AIKO	103	FISHER	007 057
AKAI	006 146 248	FUJITSU	164 028 198 246
ALARON	028	FUNAI	028 043 052 249
AMARK	112 143	FUTURETECH	043
AMERICA ACTION	043	GATEWAY	242
AMPRO	073	GE	006 073 144 160 161 004 008 009 034 056 074 091 155 081 120
ANAM	043 054 055 056 080 112	GIBRALTER	004 073
AOC	058 006 004 112	GOLDSTAR	004 106 119 110 112 113 127 143
APEX DIGITAL	015 226	GRUNPY	028 043
AUDIOVOX	076 103 043	HALL MARK	004
BAYSONIC	043	HARLEY DAVIDSON	028
BELL&HOWELL	072	HARMAN KARDON	164
BRADFORD	043	HARVARD	043
BROKSONIC	096	HITACHI	163 004 007 009 011 072 010 012 023 075 143 158
CANDLE	006 002 003 004	INFINITY	164
CAPEHART	058	INKEL	129
CARVER	164	INTEQ	073
CELEBRITY	001	JBL	164
CETRONIC	043	JCB	001
CINERAL	103 120	JCPENNEY	004 006 008 024 030 065 101 143 156 160
CITIZEN	006 002 003 004 101 103 143	JENSEN	013
CLASSIC	043	JVC	038 001 034 083 206
CONCERTO	004	KENWOOD	006 001
CONTEC	043 051	KLOSS	002 059
CORONADO	143	KTV	006 043 143 154
CRAIG	043 054 028	LG	004 106 119 110 112 113 127 143
CROSLEY	164	LODGENET	072
CROWN	043 143	LOEWE	207 164
CURTIS MATHES	006 004 101 143 011 072 081 120 164	LOGIK	072
CXC	043	LUXMAN	004
DAEWOO	076 103 055 004 127 143 016 043 044 125 120	LXI	007 015 052 081 160 164
DAYTRON	004 143	MAGNAVOX	006 003 004 022 059 060 061 063 064 127 164 094 160 028 250
DENON	011	MAJESTIC	072
DUMONT	004 073	MARANTZ	164 006
DWIN	161	MATSUI	164
DYNASTY	043	MATSUSHITA	080
DYNATECH	062	MEGATRON	004
ELECTROBAND	001	MEMOREX	004 007 072 028 096

MAKER(BRAND)	CODE LIST	MAKER(BRAND)	CODE LIST
METZ	088	SEMIVOX	043
MGA	024 006 004 042	SEMP	015
MIDLAND	073	SHARP	081 014 019 028 004 022 143 175
MINERVA	088	SIGNATURE	072
MINUTZ	008	SONY	001 126 139
MITSUBISHI	109 024 042 004 040 146 028 081 225	SOUNDESIGN	003 004 028 043
MOTOROLA	081	SPECTRICON	112
MTC	006 004 062 101	SQUAREVIEW	052
MULTITECH	043	SSS	004 043
NAD	015 025	STARLITE	043
NEC	006 134 040 056 007 019 024 237	SUPRE MACY	002
NIKEI	043	SUPREME	001
NIKKO	103	SYLVANIA	006 003 059 060 063 064 127 160 164 044 249
NTC	103	SYMPHONIC	052 249
ONKING	043	TANDY	081
ONWA	043	TATUNG	056 062
OPTIMUS	080	TECHNICS	034 080
OPTONICA	019 081	TECHNOL ACE	028
ORION	096 201 202 203 204 205 028	TECHWOOD	004
PANASONIC	034 056 080 164 208 222	TEKNIKA	002 003 004 024 028 043 072 101 143 103 164
PHILCO	006 003 004 024 056 059 060 063 064 127 143 164	TELERENT	072
PHILIPS	164 005 038 093 127 006 003 004 059 210	TERA	172
PIONEER	023 025 135 176 004 018 006 209 234	TMK	004
PORTLAND	004 143 103	TNCI	073
PRISM	034	TOSHIBA	015 030 007 040 062 101
PROSCAN	144 160 161	TOTEVISION	143
PROTON	004 058 143 171 173 112	UNIVERSAL	008 009
QUASAR	034 056		146
RADIO SHACK	004 019 127 143 043	VIDIKRON	174 188 164
RCA	160 161 144 156 065 006 004 023 024 056 074 152 081	VIDTECH	004
REALISTIC	007 019	WARDS	004 064 164 008 009 019 028 060 061 063 072 074 143
RUNCO	072 073	WESTING HOUSE	076
SAMPO	006 004 058 242	YAMAHA	004 006
SAMSUNG	004 101 127 133 143 160 089 105 211 228 229	YORK	004
SANSEI	120	YUPITERU	043
SANSUI	096	ZENITH	072 073 095 103 011 096
SANYO	007 053 057 082 020	ZONDA	112
SCOTCH	004		
SCOTT	004 005 028 043 048 143		
SEARS	004 007 015 028 030 057 082 094 143 160 052 164		

TROUBLESHOOTING

Symptoms	Check Point
No picture & No sound or Cannot turn on power	• Check whether the power is on • Check if power cord is firmly connected to the product and the power outlet • Test the wall power outlet, plug another product's power cord into the outlet
Picture OK & No sound	• Check the volume level of the TV and product • Check the MUTE state of the TV and product • Press the Audio button to change the audio type • Check audio cables are correctly connected to devices
No picture	• Check the product in operation mode • Check the channel is on air • Check video cables are correctly connected to devices • Check the input source setting of TV
No color, or wrong colors	• Check the connection between product and TV For a 3-wire component connection, match the red, green, and blue cables from product to your TV
No OSD	• Check whether the video component cables are connected If you want to display OSD, connect composite cable (Video Out) instead of video component cables. • Check the OSD display option in setup menu
The Remote Controller doesn't work	• Check to see if there is any object between the TV and the remote control causing obstruction • To manipulate the product with remote controller, the remote controller's emitting part should directly point towards the receiving part of product's remote controller • Check the batteries are installed with correct polarity • Install new batteries

PRODUCT SPECIFICATIONS

General Specifications

Broadcasting Standard	DTV(ATSC)
Demodulation Method	8-VSB (free channel only)
Power Requirement	AC 120V~, 50-60Hz
Power Consumption	8 Watts under/ In standby: 1 Watt under
Dimension (W x D x H)	180 x 171.4 x 38(mm)
Weight	1.1Kg

RF Specifications

Tuning System Type	F/S
Band Coverage	DTV 2~69
Antenna	75-ohm external antenna terminal
Input/Output	75-ohm F-Type Antenna in (1)
	75-ohm F-Type RF Out (1)
	Composite Video Out (1)
	Analog L/R Audio Out (2)



LIMITED WARRANTY

This limited warranty is provided by CAST Information Co., Ltd(CASTi) to the original purchaser and is limited to non-commercial use of the product.

Labor & Parts Warranty

CASTi products purchased in the United States are warranted to be free from defects in materials or workmanship for a period of **6 months** from date of purchase. If the unit fails to conform to this warranty, we will service the product free of charge using new or refurbished parts and products, at CASTi's sole discretion.

This warranty does not apply to products or parts that have been damaged due to abuse, misuse, accident(including acts of God), unauthorized alteration or modification, negligence, improper operation or maintenance, use in violation of instructions and precautions provided with the product, or if the product serial number is removed or changed.

Packaging and shipment instruction

Before sending the defective product for repair or replacement, please contact our **Customer Support Center at 1-877-685-8443(Operation hours : 9am~5pm Pacific Time)** to obtain a RMA number. All returned products without the RMA number will be rejected.

You must retain the original sales receipt to provide proof of purchase.

1. When sending the defective product to our Customer Support Center, you must use the original carton box or a reasonable substitute packaging to prevent damage.
2. All accessories included with the original product package must be sent along with the main unit.
3. RMA number obtained from our Customer Support Center must be written on the mail package along with the return address.
4. All costs including transportation, shipping, or insurance costs relative to the return of the product is your responsibility.

All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranties set forth above. With the exception of any warranties implied by state law as hereby limited, the foregoing warranty is exclusive and in lieu of all other warranties, agreements and similar obligations of manufacturer or seller with respect to the repair or replacement of any parts. In no event shall CASTi be liable for consequential or incidental damages. No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of this warranty in any manner whatsoever.

This warranty gives you specific legal rights and you may also have other rights, which may vary, from state to state. Some states do not allow limitation on how long an implied warranty lasts, when an action may be brought, or the exclusion or limitation of incidental or consequential damages, so the above provisions may not apply to you.

CUSTOMER SUPPORT CENTER

For service and repair please call **1-877-685-8443** or visit our website **www.casticonverter.com**.