

## OPERATING MANUAL

### Declaration of Conformity

Production Name : BTSC STEREO CATV CONVERTER

#### FCC WARNING :

*This equipment generates or uses radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose authority to operate this equipment if an unauthorized change or modification is made.*

#### INFORMATION TO USER:

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

- 1. Reorient / Relocate the receiving antenna.*
- 2. Increase the separation between the equipment and receiver.*
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- 4. Consult the dealer or an experienced radio / TV technician for help.*

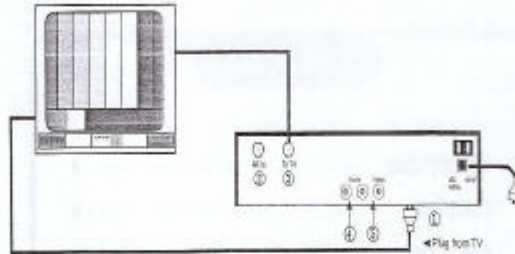
**CAUTION :** Changes or modifications not expressly approved by manufacturer responsible for compliance could void the user's authority to operate the equipment.

## Operating Instructions

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## Connections



1. Insert the electrical power plug from the TV set into the back of the converter (position 1), ensuring that your TV set's power switch is at the "on" position.
2. Connect this cable to the terminal marked "RF In" (position 2) on the converter.  
BE CERTAIN THAT THE CENTER CONDUCTOR IN THE CABLE ENTERS THE TERMINAL AND IS NOT BENT
3. Using the coaxial cable included with your converter, connect one end to the terminal on the converter marked "To TV" (position 3) and the other end directly to the TV set.
4. Connect Video output (position 4) of converter to video input of TV or VCR.
5. Connect Audio output (L/R, position 5) of converter to left/right audio channels of stereo receiver or a TV with stereo sound.
6. Insert the converter electrical power plug into the AC wall socket.
7. Turn the converter and TV set on by pressing the power button in front of the converter.
8. Insert a 1.5-volt battery into the converter remote control unit.
9. Set the TV set channel selector to the channel number (CH3 or CH4).

### Note

1. Some TV sets cannot be turned on from the converter and must be turned on at the TV set using the TV On/Off button.
2. Some TV sets, when connected to the power outlet on the converter, tune to channel 2 when the converter is turned off and then turned back on. These sets all require to the converter channel (3 or 4) each time they are turned on.

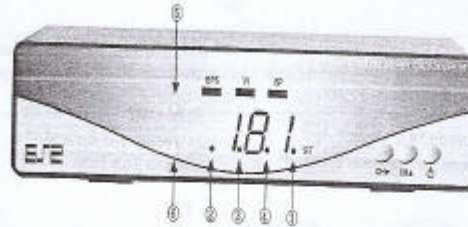
## Features

1. **Power on/off**  Turn on the converter and lights the channel display when pressed, or turns both off when pressed again.
2. **Numeric Keys**  Selects channels directly by number.
3. **Last Channel Recall**  Selects channels that was turned just before the current channel.
4. **Favorite Channel Recall**  Selects channels previously stored in the Favorite Channel Memory.
5. **Channel Up /Down**  Changes the channel either by stepping up one channel at a time (▲), stepping down one channel at a time (▼).
6. **Volume Up / Down**  Raises or lowers the sound volume level.
7. **Mute**  Reduces the volume to minimum level.
8. **Favorite Channel Memory**  Selects Favorite channels when watched TV.
9. **Parental Channel Selection**  Select and deselect an undesired channel.
10. **Parental Lock**  Press once to lock parental lock channel and again to unlock parental lock channel.
11. **Parental Code Change**  Change parental code.
12. **TV/CATV Selection**  Select and deselect a TV/CATV.
13. **Output Channel Selection**  Select and deselect a Output channel of converter.
14. **STD/HRC/IRC / Selection**  Select Mode STD/HRC/IRC.
15. **Sleep Timer**  Set to a sleep timer. Power off will always de-activate Sleep Timer.
16. **Separate Audio Program (SAP) Selection**  Select and deselect a SAP (Separate Audio Program).
17. **Stereo (Stereo Selection)**  Select and deselect a Stereo Mode.
18. **Clock**  Set Clock Time.
19. **Clock Time Mode**  Set to change Clock Time.
20. **Fine Tuning Up / Down**  Changes the fine tuning upward and downward.
21. **Center Fine Tuning**  Set for the tuning center.
22. **Special Keys**  Appear on the front of the panel to indicate that it has been activated.

### CAUTION

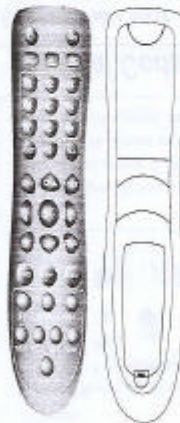
Connect only the TV's AC Power cord to the AC power cord to this outlet.  
This outlet allows 400 watts maximum power consumption.  
To prevent the risk of fire or damage to the converter, do not connect any equipment of more than 400 watts power consumption, or any other equipment (toaster, hair dryer, etc.).

## Indicators



- ① Stereo Indicator : Displays Stereo Channel selected.
- ② Favorite Indicator : Lights when channel currently tuned is selected for Favorite Channel.
- ③ Sleep Indicator : Lights when channel currently tuned is selected for Sleep Time.
- ④ Parental Lock Indicator : Lights when channel currently tuned is selected for Parental Lock.
- ⑤ AM Indicator : Shows the time is before noon.
- ⑥ PM Indicator : Shows the time is after noon.

## Remote Control Unit



### Battery Replacement

The batteries are located in the bottom compartment of the remote control unit. For battery replacement, press down on the ridged area and remove the battery compartment cover by sliding it in the direction of the arrow. Replace the old batteries with new ones (size AAA). Make sure that the positive(+) and (-) poles marked on the battery match the pole marking on the remote control unit.

### Note

- If you won't be using the remote control unit for a long time (one month or more), remove the batteries to prevent any possibility of battery leakage in the compartment.
- Never use old and new batteries together. When replacing batteries, always replace all of the batteries at the same time.
- Do not lay books or other objects on the top of the remote control unit. The operation keys may be depressed causing a continuous depletion of battery power.

## Channel Selection

### To Change channels

#### 1. Using the CH ▲ and ▼ Buttons

- ① Press the "▲" (channel up) or "▼" (channel down) button on the front panel or on the remote control unit to change the channel.

##### Example :

To change from channel 7 to channel 9, press the ▲ button twice.

- ② "Speed Scan" : For quick access, press and hold the button until the desired channel appears.

#### 2. Using the numeric Buttons

To select channels directly on the remote control unit, press the appropriate numeric buttons.

##### Example :

To select channel 4, press 4; to select channel 13, press 1 and then 3.

To select channel 110, press 1, 1, and 0.

##### Note

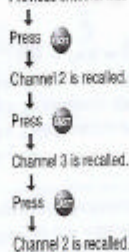
1. When an undefined channel (e.g., number 0) has been selected, the unit will return to the previously selected channel, and the tuning frequency does not change.

## Last Channel Recall

When the LAST button is pressed, the converter recalls and tunes in the last channel received before the current channel was selected.

##### Example :

Previous channel was channel 2, and current channel is channel 3.



##### Note

1. Undefined channels, such as 0, are not stored in the last channel memory.

## Volume Control

The Volume level is controlled by the Vol ▲ and ▼ buttons. To give you full control over the range of volume, first follow these setup steps.

### *1. Volume Control Set-up*

- ① Using the VOL ▲ and ▼ buttons on the front panel or on the remote control unit, set the converter's volume level. The volume setting value appears on the display.
- ② Then adjust the TV's volume control to a comfortable listening level.

### *2. VOL ▲ and ▼ Buttons*

- ① The volume level changes by one step every time you press the button on the front panel or on the remote control unit. Or, press and hold the button to change the volume level continuously.
- ② "32" is maximum volume level and "0" is the minimum volume level.

### *3. Muting Function*

- ① Press the mute button to activate the muting function, and set the volume to the minimum level.
- ② To cancel the muting function, press the mute, VOL ▲ or ▼ buttons, or turn the power off and then back on. This restores the volume to its previous level.

## Sleep Timer Operation

Sleep Timer automatically turns off the Converter and TV at a predetermined length of time. Maximum sleep time is 120 minute.

### *1. Activation*

- ① Press the "SLEEP" button once to display 120 minute.  
: 120→90→60→50→40→30→20→10→00
- ② Each successive press will decrease time by 10 minutes.

### *2. Time Remaining*

Time remaining on the sleep timer, which counts down in one minute increments, may be viewed by pressing the "SLEEP" button once.

- ① Press the "SLEEP" button once.
- ② The LED display will resume after 2 second.

### *3. Turn off*

If the timer is allowed to automatically reach "00", the converter and TV (if plugged into the switched outlet) will turn off.

- ① Press the "SLEEP" button until "00" is display will reactivate the sleep timer.

## Output Channel Selection

If your cable operator broadcasts on channel 3 (represents 80% of the country), then leave the channel 3 and set to channel 4. If your cable operator broadcasts on channel 4, then leave the channel 3 and set to channel 3. (If your cable operator broadcasts on a channel other than 3 or 4 use whichever setting brings in the sharpest picture). Your TV/VTR must be set to the same channel as this setting.

### 1. Channel 3

- ① Press the "CH3/4" button on the remote control unit for 5 seconds will switch the output channel to the television to "CH 3" for channel 3.

*Example :* Current output channel was channel 4.



### 2. Channel 4

- ① Press the "CH3/4" button on the remote control unit for 5 seconds will switch the output channel to the television to "CH 4" for channel 4.

*Example :* Current output channel was channel 3.



#### Note

The Converter output channel is set channel 3 up when shipped.

## STD/HRC/IRC Selection

The factory sets each unit the standard tuning frequency(STD). If your cable operator provides HRC tuning, hold the MODE button in for 5 seconds or until the display registers a change to the tuning frequency. Repeat above process to switch back.

### 1. Changing Tuning Mode

- ① Press the "MODE" button on the face of the remote unit for 5 seconds will switch the tuning frequency from input signal to "STD" for standard tuning frequency or "HRC" for HRC tuning frequency or "IRC" for IRC tuning.

*Example :* Current Tuning mode was IRC.



## Favorite Channel Operation

This converter incorporates a non-volatile memory for activation your favorite channels. If power is ever lost, your favorite channels will be saved for when power is regained.

### **1. Favorite Channel Activation**

- ① Turn to the channel desired.
- ② Press "Fav+/-" button.
- ③ Turn on the right of the first digit of the LED and the channel has been saved to memory.

**Example :** If you would like to save favorite channel on CH12.

Press 1 and then 2 of numeric button on the remote control unit,

↓ CH ▲ and ▼ buttons

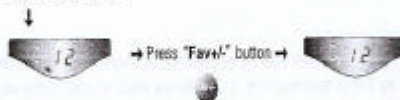


### **2. Favorite Channel Deletion**

- ① Tune the channel which is to be deleted from favorite channel memory. It should have a right of the first digit of the LED Dots will be on.
- ② Press "Fav+/-" to delete the channel for favorite channel.
- ③ The favorite channel indicator will go out.

**Example :** If you would like to delete favorite channel on CH12.

Turn the Channel 12.



### **3. Favorite Channel Recall(RCL)**

After placing the channels in favorite channel memory, they can be recalled by pressing the "RCL" button. Channels not programmed in memory will be skipped.

- ① Press "RCL" button. And then the converter will be go to the next higher channel in memory.
- ② When the highest channel in memory is reached, scanning will be start over with the lowest channel in memory.

**Example :** Recall favorite channels(12, 15, 16) as follow.

Press "RCL" button



## Parental Control

This Converter is used to restrict viewing to selected channels. The converter's intelligent memory is nonvolatile, allowing your locked channels and secret code to remain intact even if power is lost.

### 1. Parental Channel Selection

- ① Turn to the channel desired.
- ② Press "PG+/-" button add channel to parental control, and turn on the the right of third digit of display.

*Example :* If you would like to select parental channel on CH12.

Press 1 and then 2 of numeric button on the remote control unit. OR,

↓ CH ▲ and ▼ buttons



### 2. Parental Control Activating

- ① After selecting the channels to be controlled, and press "PG LOCK" button, The LED display will be "PGCL", and change to "....".
- ② Enter your parental control secret code 4 digit (Factory Default is 1234). The LED display will show "1,2,3,4" during secret code entry to maintain confidentiality. Once the proper secret code is entered, all selected channels are locked and do not available for viewing.
- ③ After entering the secret-code, the LED will display a "PGon" for 1 second and then return to normal channel display.

*Example :* If you would like to save parental channel on CH12 in memory.

Press



### 3. Parental Control Deactivating

- ① Press "PG LOCK" button, The LED display will be "PGCL", and change to "....".
- ② Enter your parental control secret code 4 digit (Factory Default is 1234).
- ③ All parental control channels are deactivated and available for viewing

*Example :* If you would like to unlock parental control

Press



## 4. Parental Channel Deletion

- ① After Parental Channel Deactivating, select the channel you wish to remove from memory
- ② Press "PG +/-" button and the parental control channel indicator will go out.

Example : If you would like to delete parental channel.

Press



### Note

Don't need to have a Parental Control Lock channel selected to deactivate Parental Control Lock. To indicate which channels are in Parental Control Lock memory, a period to the middle of the LED will appear. If the incorrect secret-code is entered, Parental Control Lock will not be activated, deactivated and will display "Err" message and then display the current channel number.

## Parental Code Change

### 1. Parental Code Change

- ① Press "PG CODE" button, the LED display will be "PGCd", and change to "PdIn" and "....".

- ② Enter your Parental Control previous secret - code (Factory Default is 1234) and then enter the new Parental Control secret-code, will be display and then return to normal channel display.

Example : If you would like to change parental code as "4321".

Press



Press New secret-code "4,3,2,1"



### Warning

Make sure you write your new secret code down and secure it in a safe place. If you forget your secret code, please call us for master reset.

## Fine Tuning (Ft+/Ft-/CFt)

When you first install your converter, you may need to adjust the fine tuning. Make sure your converter is installed correctly and set on the proper STD/HRC/IAC setting. If the equipment is not hooked up correctly, fine tuning will not produce the desired picture.

### 1. Find Tuning Up

- ① Press the "Ft+" button and hold it down until the desired picture quality is reached, then release it.

### 2. Find Tuning Down

- ① Press the "Ft-" button and hold it down until the desired picture quality is reached, then release it.

### 3. Center Fine Tuning a channel

The center fine tuning circuitry is set up to bring the picture to the center of the cable channel tuning band. This feature is automatic when changing channels or can be activated manually by pressing the center fine tuning button on the remote unit.

- ① Point the remote unit toward the converter and press the "CFt" (Center Fine Tuning) button.

#### Note

In some case the Center Fine Tuning button may not bring the picture in correctly. This is usually caused by the misalignment of your cable companies signals. If this is the case, additional tuning is required, read Ft+, Ft-

## TV/CATV Selection

If your cable operator broadcasts by CATV Frequency band, sets to CATV. If your cable operator broadcasts by TV Frequency band, sets to TV.

### 1. TV Band

- ① Press the "TVCATV" button on the face of the remote unit for 5 seconds will switch the to TV and the LED display will be "OnAir".

**Example :** Current Frequency Table was TV.



### 2. CATV Band

- ① Press the "TVCATV" button again on the face of the remote unit for 5 seconds will switch the to CATV and the LED display will be "CABL".

**Example :** Current Frequency Table was CATV.



#### Note

The Converter frequency band is set CATV when shipped.

## Stereo Sound Selection

When the stereo sound is broadcasted, the converter detects the stereo sound automatically and flashes Stereo LED on the front of converter.

### 1. Select Stereo Sound

① When the stereo sound was detected, Stereo LED flashed.

Press "STEREO" button, the LED display will be "Stereo".

Example :



### 2. Deselect Stereo Sound

① Press "STEREO" button again, the LED display will be "SPOF".

Example :



#### Note

If the converter and TV did not connect with base band, the stereo sound was not heard.

If the converter and TV connected with RF and TV have the stereo function, the stereo sound was heard.

## Separate Audio Program (SAP) Selection

If your cable operator broadcasts by SAP, you can select a language which you want to hear.

### 1. Select SAP

① Press "SAP" button, the LED display will be "SPOn".

Example :



### 2. Deselect SAP

① Press "SAP" button again, the LED display will be "SPoF".

Example :



## Clock Time Setting

### 1. AM/PM Selection

- ① Press "CLOCK" button for 5 seconds and display will be "CLoC" and "SEt" and flash AM dot on the front of converter. (Factory Default : AM 1:00)
- ② Select AM/PM by using channel up/down buttons of remote unit.

Example : Press



### 2. Time Selection

- ① After selecting AM/PM and press volume up/down buttons to select time.

Select the time by using channel up/down buttons of remote unit.

Example : (PM 12 : 35)



### 3. Minute Selection

- ① After selecting Time and press volume up/down buttons to minute.

Select the minute by using channel up/down buttons of remote unit.

Example : (PM 12 : 35)



### 4. Finish Time Selection

- ① After setting on time and minute, press "CHECK" button.

Example : (PM 12 : 35)

