

Warning! Important Safety Instructions

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



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

CAUTION-To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

- Attention: pour éviter les chocs électriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.
- Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.
- Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

WARNING-To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

CAUTION-Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Important Safety Information

Always be careful when using your product. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Read all safety and operating instructions before operating your product.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the product receiver and in the operating instructions.
- Follow all operating and use instructions.
- The socket outlet shall be installed near the equipment and shall be easily accessible.
- Unplug the product from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.

Important Safety Information con'd

- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the product where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product.
Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the product and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the product. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the product on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your product only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this product is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.
- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the product from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the product.

Important Safety Information con'd

- Do not attempt to service the product yourself. Refer all servicing to qualified service personnel.

Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - when the power-supply cord or plug is damaged
 - if liquid has been spilled on the unit or if objects have fallen into the unit
 - if the product has been exposed to rain or water
 - if the product does not operate normally by following the operating instructions
 - if the product has been dropped or the cabinet has been damaged
 - when the product exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in a safe operating condition.

FCC Statement

Caution: FCC regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

NOTES

This equipment 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 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:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

TABLE OF CONTENTS

SAFETY INFORMATION	1	5. WATCHING TV	26
1. INTRODUCTION	5	• INFO BAR	26
FEATURES & SPECIFICATIONS	5	• CHANNEL LIST	26
ACCESSORIES	5	FAVORITE	27
2. HARDWARE DESCRIPTION	6	LOCK	27
REMOTE CONTROL UNIT	6	SKIP	28
FRONT AND REAR PANEL	7	MOVE	28
3. HARDWARE INSTALLATION	8	EDIT SUBMENU	29
CONNECTING THE POWER CORD	8	• SPECIAL FEATURES	29
CONNECTING THE SATELLITE DISH	8	MOSAIC	29
CONNECTING TO A TV	9	ZOOM	30
4. SETUP AND MAINTENANCE		FAVORITE LIST	30
• MAIN MENU	12	SATELLITE LIST	31
INSTALLATION	13	FIND CHANNELS	31
SATELLITE LIST	13	AUDIO TRACK	32
ANTENNA SETUP	14	6. TROUBLESHOOTING	33
SINGLE SATELLITE SEARCH	15	7. DETAILED SPECIFICATIONS	34
MULTI SATELLITE SEARCH	16		
TP LIST	17		
• SYSTEM SETUP	17		
LANGUAGE	18		
TV SYSTEM	18		
LOCAL TIME SETTING	19		
TIMER	19		
PARENTAL LOCK	20		
OSD SETTING	20		
FAVORITE	21		
OTHER	21		
• TOOLS	22		
INFORMATION	22		
FACTORY SETTING	23		
UPGRADE BY USB	24		
USB	24		
• GAMES	25		

1. INTRODUCTION

Features & Specifications

- Receives all digital Free-To-Air TV and Radio programs via satellite
- Up to 2500 channel memory
- 8 favorite channel groups for TV and Radio
- User-friendly menus. 256 colors
- Electronic Program Guide for present & following event information
- Multi-language subtitle and audio support
- Multi-language On-Screen Display support
- Powerful channel management functions
- Software via USB or RS232
- Visual signal strength meter
- Quick, NIT, and Detail scanning modes
- Timer function to power on the receiver or change channels at a certain time
- 3 Games-Tetris, Sudoku, Othello
- Ergonomic remote control with colored hot-keys for easy menu navigation
- Mosaic function allows you to see 9 channels on the screen at the same time
- Automatic clock set with GMT offset.
- Fastest Blind-scanning speed
- 7-segment LED display showing channel number or time
- Fast 216MHz CPU
- Front panel USB host port
- Ergonomic remote control

Accessories

Please make sure the following items are included with your receiver. If any items are missing, contact your dealer.

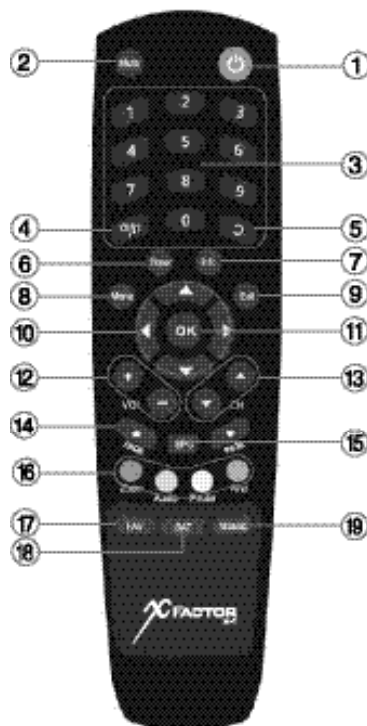
- 1 Remote Control Unit
- 1 User Manual
- 2 Batteries (AAA Type)
- A/V Cable



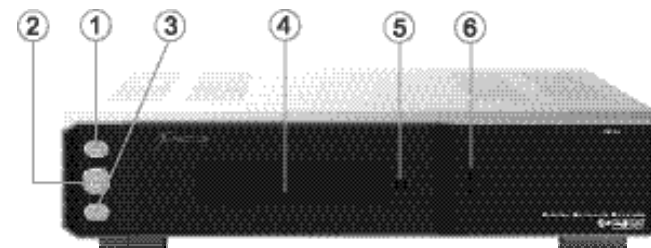
2. HARDWARE DESCRIPTION

Remote Control Unit

- ① **POWER:** Turns the receiver ON/OFF
- ② **MUTE:** Mutes the receiver's audio outputs
- ③ **0-9:** Changes channels and used for direct numeric entry
- ④ **TV/RADIO:** Toggles between TV and Radio channels
- ⑤ **RECALL:** Switches to previous channel
- ⑥ **TIMER:** Sets the sleep timer interval
- ⑦ **INFO:** Displays detailed information for the current channel
- ⑧ **MENU:** Displays the Main Menu
- ⑨ **EXIT:** Exits the current menu or cancels the current action
- ⑩ **4-WAY ARROWS:** Moves cursor to navigate menus.
- ⑪ **OK:** Selects the highlighted menu item.
Displays Channel List
- ⑫ **CH UP/DOWN:** Changes the Channel
- ⑬ **VOL UP/DOWN:** Changes the Volume
- ⑭ **PGUP/PGDN:** Page up and Page down
- ⑮ **EPG:** Displays the Electronic Program Guide
- ⑯ **HOTKEYS:** Functions depend on current menu/ mode
- ⑰ **FAV:** Displays the Favorite Channels list
- ⑱ **SAT:** Displays the Satellite list
- ⑲ **MOSAIC:** Displays 9-channel preview grid

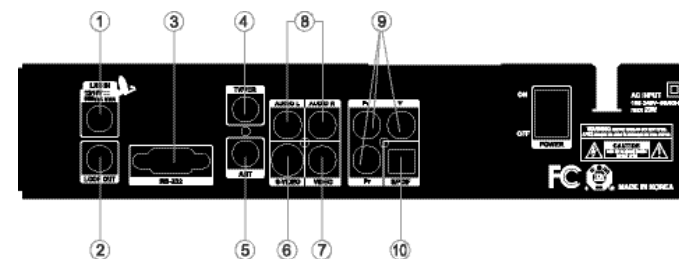


Front Panel



- ① **CHANNEL UP:** Increases channel number
- ② **STANDBY:** Toggle the receiver between Standby and On modes
- ③ **CHANNEL DOWN:** Decreases channel number
- ④ **LED DISPLAY:** Displays TIME or CHANNEL NUMBER
- ⑤ **IR SENSOR:** Receives IR signals from the RCU
- ⑥ **USB PORT:** Connect a USB Drive

Rear Panel

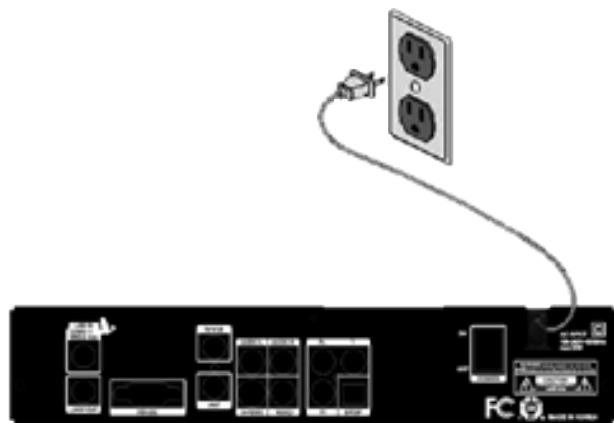


- ① **LNB INPUT:** Connects to the LNB on your satellite dish
- ② **LOOP OUT:** Connects to another receiver
- ③ **RS-232:** Serial data port for software updates
- ④ **TV/VCR:** Connects to TV/VCR RF Input jack
- ⑤ **ANT:** Connect your terrestrial antenna if looping to the TV
- ⑥ **S-VIDEO:** Connects to the TV S-Video jack
- ⑦ **VIDEO:** Connects to the TV Composite Video jack
- ⑧ **AUDIO L/R:** Connects to the L/R Audio input on the TV
- ⑨ **YPbPr:** Connects to the Component Video input on the TV
- ⑩ **S/PDIF:** Connects to the digital amplifier

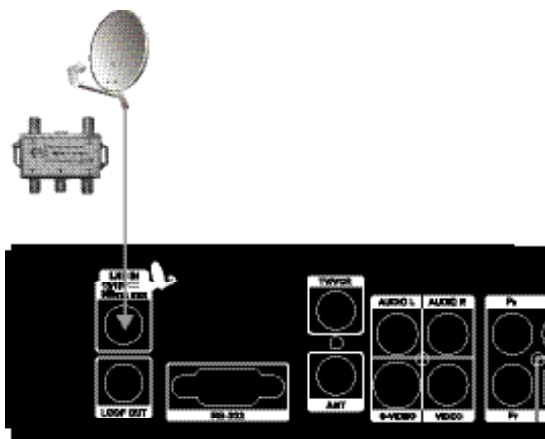
X FACTOR x-1

3. HARDWARE INSTALLATION

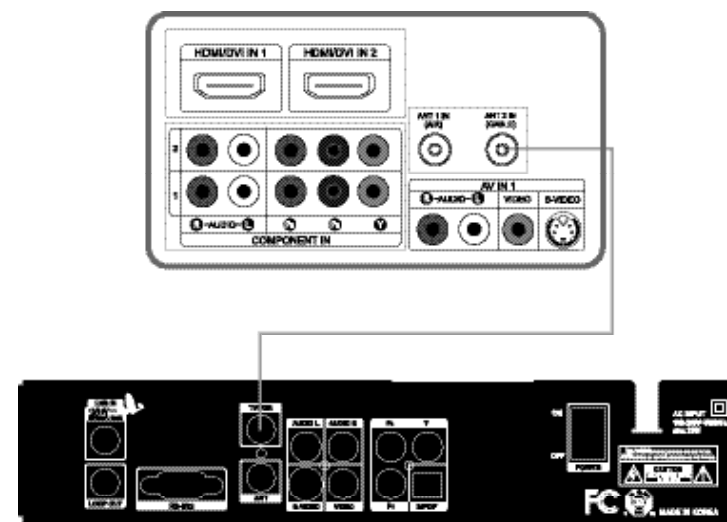
Connecting the Power Cord



Connecting the Satellite Dish

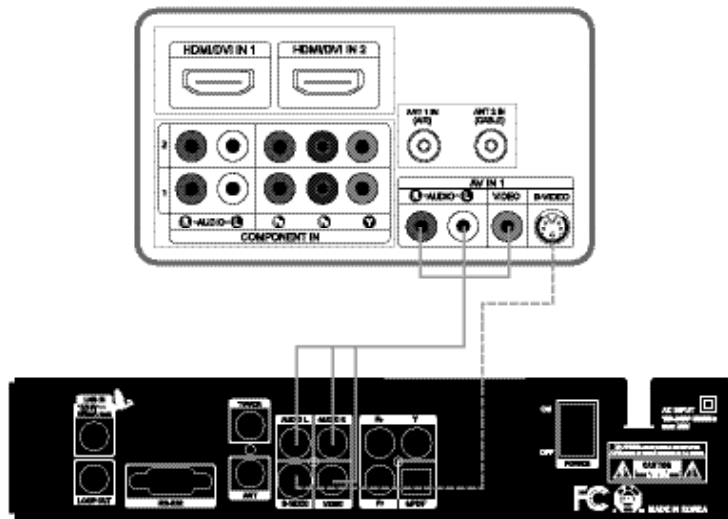


Connecting to a TV



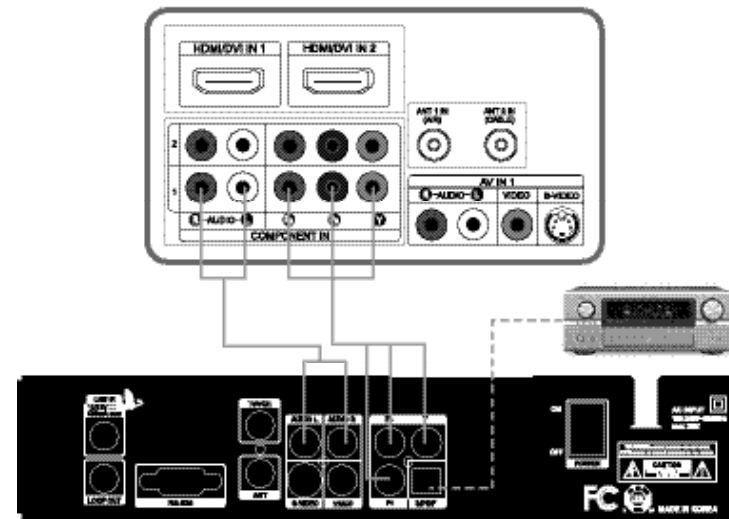
For normal picture quality, use an RF cable and connect the TV/VCR output from the receiver to the ANT INPUT on your TV.

Connecting to a TV



For better picture quality, use the supplied A/V cable and connect the VIDEO and L/R AUDIO outputs from the receiver to the INPUTS on your TV. For higher-quality video, use an S-Video cable.

Connecting to a TV



For the best picture quality, use a component video cable and connect the YPbPr outputs from the receiver to the COMPONENT VIDEO INPUTS on your TV. For digital audio and multi-channel audio, connect an optical cable from the S/PDIF jack on the receiver to your digital amplifier.

Before starting

Make sure your dish is properly aimed at the correct satellite. Verify you have connected your STB to your TV in the proper manner. Set your TV to the correct input mode according to how you have connected the STB. Plug the receiver into the AC outlet and use the switch on the back to turn it on.

4. SETUP AND MAINTENANCE

Main Menu

Press the **MENU** button to access the Main Menu. All the important settings and features of your receiver can be accessed from the Main Menu. The Main Menu consists of four sub-menus which are:

- **Installation**
- **System Setting**
- **Tools**
- **Game**



Installation



The Installation Menu can be used to modify the list of active satellites, modify antenna settings, scan for channels, and edit the transponder list.

Satellite list



Use the **UP/DOWN** arrows to highlight the satellite(s) to be scanned. Then press the **OK** button to select it- a check mark will appear next to the selected satellite(s). Use the colored **Hotkeys** to Edit, Add, or Delete satellites.

Antenna Setup



The Antenna Setup menu is used to setup the LNB and switch settings for each active satellite. Use the **ARROWS** and the **OK** buttons to toggle the correct settings for your antenna.

Satellite: Toggles between the active satellites

LNB Freq: Set the LNB frequency for the selected satellite

Transponder: Toggle through the list to check signal strength and quality for each TP

DiSEqC: Set the DiSEqC switch port

22K: Set the 22KHz tone

Polarity: Set the Polarity for the selected TP

Single Satellite Search



The Single Satellite Search menu is used to scan one satellite at a time. Use the **ARROWS** and the **OK** buttons to toggle the correct settings for your search criteria.

Satellite: Toggles between the active satellites

FTA Only: Toggles between scanning for FTA channels only or both scrambled and FTA

Scan Channel: Toggles between scanning for TV, Radio, or both types of channels

Network Search: Use this option to find new TPs from the same provider

Scan Mode: Toggle between Auto Scan (Blind Scan) and Preset Scan

Search: Highlight and press OK to search

Multi Satellite Search



The Antenna Setup menu is used to setup the LNB and switch settings for each active satellite. Use the **ARROWS** and the **OK** buttons to toggle the correct settings for your antenna.

Satellite: Toggles between the active satellites

FTA Only: Toggles between scanning for FTA or Scrambled channels

Scan Channel: Toggles between scanning for TV, Radio, or both types of channels

Network Search: Use this option to find new TPs from the same provider

Scan Mode: Toggle between Auto Scan (Blind Scan) and Preset Scan

Search: Highlight and press OK to search all satellites

TP List



The Transponder List menu is used to view, scan, or edit the TPs for the currently selected satellite. Use the **ARROWS** and the **OK** button to navigate through the menu. The **Hotkeys** can be used to perform advanced functions like Add, Edit, Delete, and Scan.

System Setup

From the Main Menu, highlight System Setup and press OK.



The System Setup Menu can be used to modify global system settings.

Language



The Language menu is used to adjust the OSD language, audio, and text according to your personal preferences. Use the **ARROWS** to adjust the settings.

TV System



The TV System menu is used to adjust the video output settings to best match your TV system.

- Display Mode:** Toggle between NTSC, PAL, and AUTO
- Aspect Mode:** Toggle between 4:3 Pan&Scan, 4:3 Letterbox, and 16:9
- Video Output:** Toggle between S-Video and Component Video output
- RF Channel:** Toggle between Channel 3 or 4 for the RF modulated output

Local Time Setting



The Local Time Setting menu can be used to change the time zone settings and to setup Summer time compensation. If GMT Usage is set to OFF, then the date and time can be manually adjusted.

Timer



- 8 unique timers available
- Set frequency:
 - Once
 - Daily
 - Weekly
 - Monthly
 - Yearly

The Timer menu is used to setup a reservation so the receiver will tune to a specified channel on a certain date and time. If the receiver is in Standby mode, it will turn on for the duration of the reservation. If the receiver is tuned to a different channel, it will automatically switch to the channel specified in the reservation.

Parental Lock



• The default system password is: 0000

The Parental Lock menu is used to control the menu locking and channel locking features.

Menu Lock: Toggle the menu locking option

Channel Lock: When set to ON, the channels marked as Locked in the channel list will require a password to view

New/Confirm Password: Change the system password.

OSD Setting

Highlight "OSD Setting" and press **OK** to enter the OSD Setting Menu.



The OSD Setting menu is used to modify various On-Screen Display options.

Subtitle Display: Toggles subtitle decoding if available from the broadcast

OSD Timeout: Change the number of seconds that pass before on.screen messages automatically disappear.

OSD Transparency: Change the opacity of the OSD windows

Favorite



The Favorite menu is used to rename your favorite channel groups. Press the **RIGHT** button to edit the name.

Other



The Other menu is used to toggle advanced features.

LNB Power: Toggle power ON/OFF for the LNB(s)

Channel Play Type: Toggle between watching only FTA, Scrambled, or both types of channels

X FACTOR x-1

Tools

From the Main Menu, highlight Tools and press **OK**.



Using the Tools menu, you can perform software upgrades and view the contents of a USB drive.

Information



Use the Information menu to check the current software version details.

Factory Setting

WARNING: This function will ERASE all the user data and parameters that were set previously.



Use this function to restore the receiver back to factory defaults. Follow the on-screen prompts.

You will lose any customizations during this process. Ex. Channel Lists, Favorites, etc.

NOTE: System Password will be reset to the default value.

Upgrade by USB



Use this menu to update the software in your receiver. There are several upgrade modes:

- ALL:** Update all software
- MAIN:** Update only the main software
- LOGO:** Update the custom logo file
- DEFAULT:** Update the default settings

USB



The USB menu is used to display JPG files stored on the USB drive. It is also possible to playback MP3 files using this menu. Use the **Hotkeys** and follow the on-screen help to play your files.

Games



Tetris

Use the **ARROW** keys to move and rotate your pieces.

Othello

Use the **ARROW** keys to move the cursor and press OK to place your piece on the game board.

Sudoku

Use the **ARROW** keys to move the cursor and the numeric buttons.

5. WATCHING TV

Info Bar

Press the **INFO** button once to show the info bar. Press it again to show detailed technical channel information.



- Info bar icons (left to right):**
- Scrambled
 - Teletext available
 - Locked channel
 - Favorite channel
 - TV/Radio channel
 - Dolby audio available

Channel List

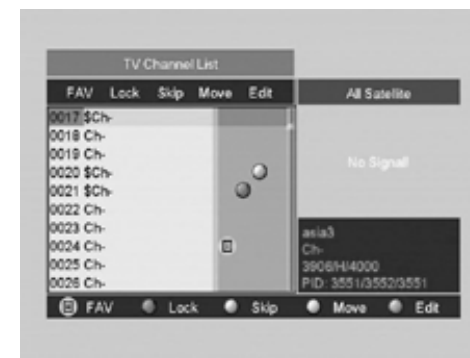
To access the Channel List menu, press the **OK** key during normal TV viewing.



- HOTKEYS:**
- **FAV:** Favorite
 - **RED:** Lock
 - **GREEN:** Skip
 - **YELLOW:** Move
 - **BLUE:** Edit

Favorite

Press the **FAV** button to set the favorite channels.



Use the **UP/DOWN** buttons to select the channel you want to set as a Favorite. Press **OK** to put the current channel into one of the eight favorite groups. When finished, press **EXIT** to return to the Channel list.

Lock

Press the **RED** hotkey to lock channels.



Use the **UP/DOWN** buttons to select the channel you want to Lock. Press **OK** to lock the channel. The system password will now be required to view this channel. When finished, press **EXIT** to return to the Channel list.

Skip

Press the **GREEN** hotkey to skip channels when channel surfing.



Use the **UP/DOWN** buttons to select the channel you want to Skip.
 Press **OK** to Skip the channel.
 When finished, press **EXIT** to return to the Channel list.

Move

Press the **YELLOW** hotkey to move channels and change the order.



Use the **UP/DOWN** buttons to select the channel you want to Move.
 Press **OK** to pick-up the channel, then use the **UP/DOWN** arrows to move it.
 Press **OK** again to drop-off the channel in its new position.
 When finished, press **EXIT** to return to the Channel list.

Edit Submenu

Press the **BLUE** hotkey to enter the Edit Submenu.



The Edit Submenu is used to Sort, Edit, or Delete channels.

SPECIAL FEATURES

Mosaic (Nine Channel View)

While watching TV, press the **MOSAIC** button.



Nine adjacent channels will be shown on the screen at the same time.

Use the **ARROW** keys to select the channel you want to watch. Then press **OK** to return to full screen mode.

X FACTOR x-1

Zoom

While watching TV, press the **RED** hotkey.



If you continue to press the **ZOOM** key, the magnification level will increase up to 16X.

Press **EXIT** to return to normal TV viewing.

Favorite List

While watching TV, press the **FAV** button.



You can access your eight favorite channel groups by using the **LEFT/RIGHT** keys.

Use the **UP/DOWN** keys to select the channel you want to watch. Then press **OK**.

NOTE: In order to exit Favorite Mode and view all channels, select **All Satellite** from the **Satellite** hotkey menu.

Satellite List

While watching TV, press the **SAT** button.



NOTE: This function also serves to remove the Favorite Channel filter so all channels can be viewed again.

If you are tuning multiple satellites, the Satellite List is used to filter your channel list. Only channels from the selected satellite will be accessible in the channel list.

Use the **UP/DOWN** keys to select the satellite. Then press **OK**.

Find Channels

While watching TV, press the **BLUE** hotkey.



Find channels based on the channel name.

Use the **ARROW** and **OK** to enter the channel name. Positive matches will be listed in the window to the left. Select "OK" and choose the desired channel.

Audio Track

While watching TV, press the **GREEN** hotkey.



Use the **ARROW** buttons to select the desired audio track if available.

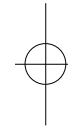
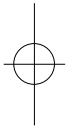
6. TROUBLESHOOTING

If you have difficulty with your digital Set Top Box, there are several possibilities you should investigate before contacting the dealer.

WARNING!
Never open the receiver. High-voltage parts inside.

Symptom	Possible Causes	Remedy
The LED display does not light up. There is no indication of power.	<ul style="list-style-type: none"> The power cord is not plugged in. The power switch on the back of the receiver is not turned on. 	<ul style="list-style-type: none"> Check to see if the receiver is properly plugged into the wall. Check to see if the power switch on the back is set to the "ON" position
No picture or sound	<ul style="list-style-type: none"> Improper connection of the A/V cables between STB and TV. Improper connection of satellite antenna cable Satellite dish is not aimed properly No signal or weak signal Improper antenna setup parameters TV is turned OFF 	<ul style="list-style-type: none"> Verify all A/V connections are secure. Make sure the cables are in good condition. Verify the cable is in good condition and make sure the connection at the LNB INPUT port is secure. Also verify connection at LNB is secure. Adjust the position of the satellite dish. Adjust the position of the satellite dish and make sure there are no obstruction blocking the satellite signals. (Trees, buildings, snow) Input the correct satellite or switch parameters. Turn TV on.
No sound	<ul style="list-style-type: none"> TV volume is MUTED STB volume is MUTED 	<ul style="list-style-type: none"> Un-Mute TV volume Un-Mute STB volume
The Remote Control Unit does not work.	<ul style="list-style-type: none"> The batteries are not inserted The batteries are not inserted correctly The batteries are exhausted 	<ul style="list-style-type: none"> Insert the batteries into the RCU. Verify the batteries are inserted in the proper orientation. Replace the batteries.

MEMO





USER'S MANUAL

