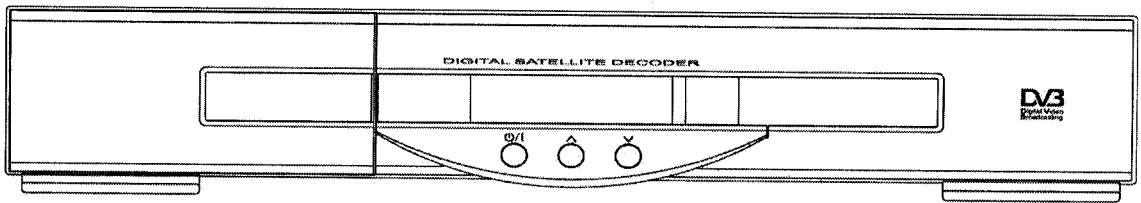


User's Manual



Important Safety Instructions

WARNING

To prevent fire or electric shock, Do not expose this appliance to rain or moisture.

CAUTION

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

- **Read Instructions** - All the safety and operating instructions should be read before the product is operated.
- **Retain Instructions** - The safety and operating instructions should be retained for future reference.
- **Heed Warnings** - All warning on the product in the operating instructions should be adhered to.
- **Follow Instructions** - All operating and use instructions should be followed.
- **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- **Water and Moisture** - Do not use this product near water – for example, near bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- **Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
- **Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other source, refer to the operating instructions.



Portable cart warning



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

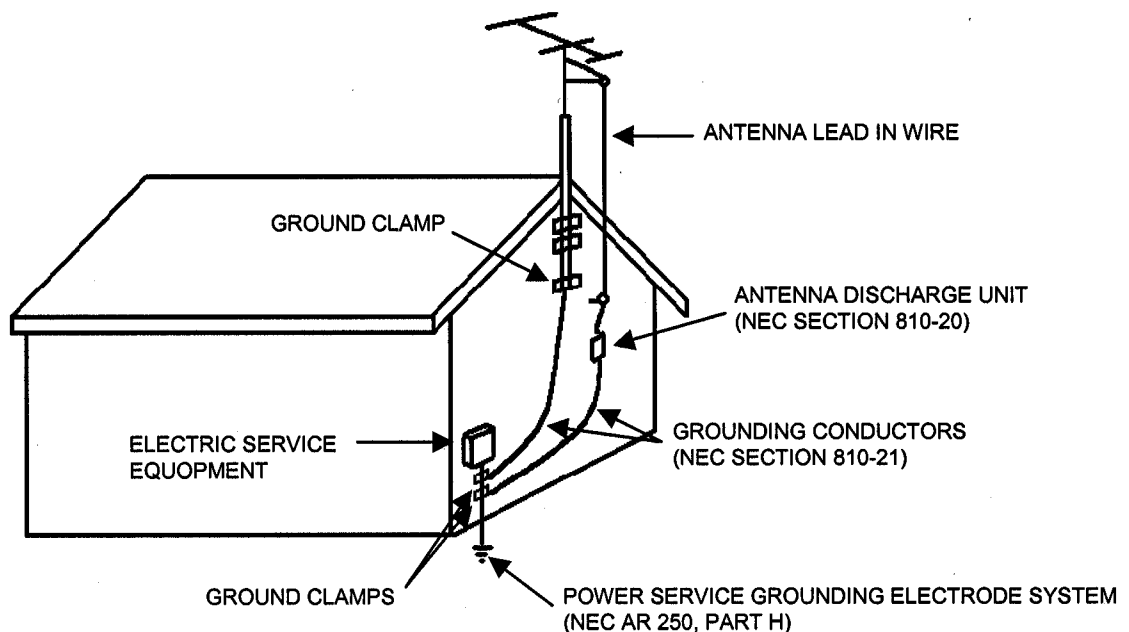


The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within a equilateral triangle is intended to alert the user to the presence of important operating and maintenance (Servicing) instruction in the literature accompanying the appliance.

- **Grounding or Polarization** - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- **Alternate Warnings** - This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
- **Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
- **Productive Attachment Plug** - The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
- **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



Example of Antenna grounding as per National Electric Code, ANSI/NFPA 70
(NEC – National Electrical Code)

Note to CATV System Installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

- **Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
- **Power Lines** - An outside antenna system should not be located 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, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- **Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- **Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
 - a) When the power-supply cord or plug is damaged.
 - b) If liquid has been spilled, or objects have fallen into the product.
 - c) If the product has been exposed to rain or water.
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e) If the product has been dropped or damaged in any way, and
 - f) When the product exhibits a distinct change in performance - this indicates a need for service
- **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- **Safety Check** - 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 proper operating condition.
- **Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

FCC NOTICE

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND

**(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED OPERATION.**

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 communication. 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 :

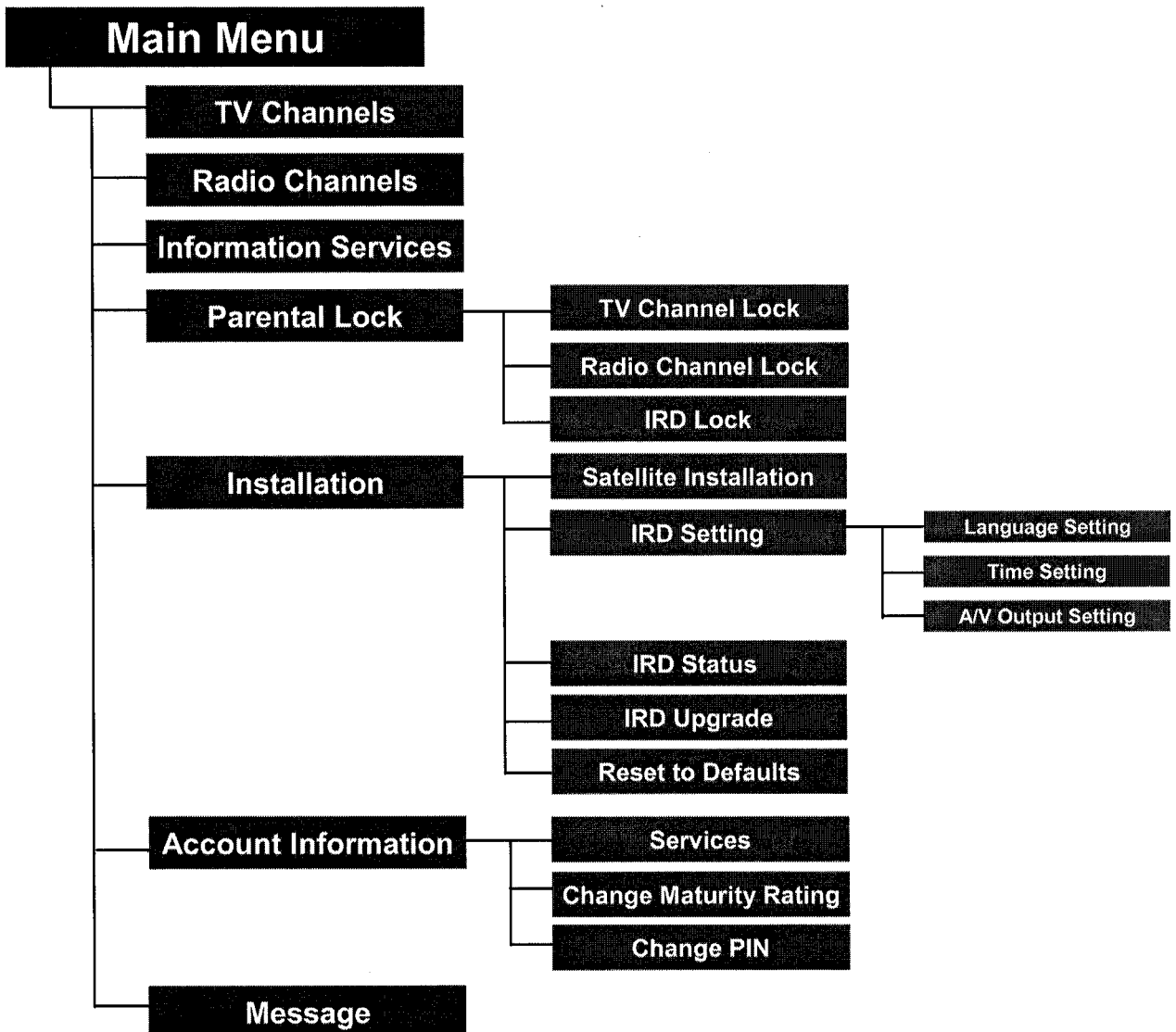
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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4.	Connecting the Receiver	7
5.	Main Menu and Installation	9

Menu Map



Remote Control Unit(RCU)



The **Power** key turns the receiver on and off.



The **Mute** key switches the sound on and off.



The **EPG** key shows program information of the selected channel. (EPG; Electronic Program Guide)



The **FAV** key shows a list of your selected favorite channels



The **Information** key provides stock information.



Number / Input keys enable direct channel selection command using numeric keys.



The **MENU** key is used to see main menu or to return to the A/V output.



The **EXIT** key exits to the video viewing mode at any time.



The **Volume** and **Channel** keys control the two most frequently used functions of the receiver. The cursor keys are for channel **▲** and **▼** and volume **◀** and **▶**. The **OK** key is used to select a program, a highlighted line or parameter value.



The **Page UP/Down** key is used to move up or down a page in the channel list or stock information.



The **Recall** key selects the previously viewed channel.



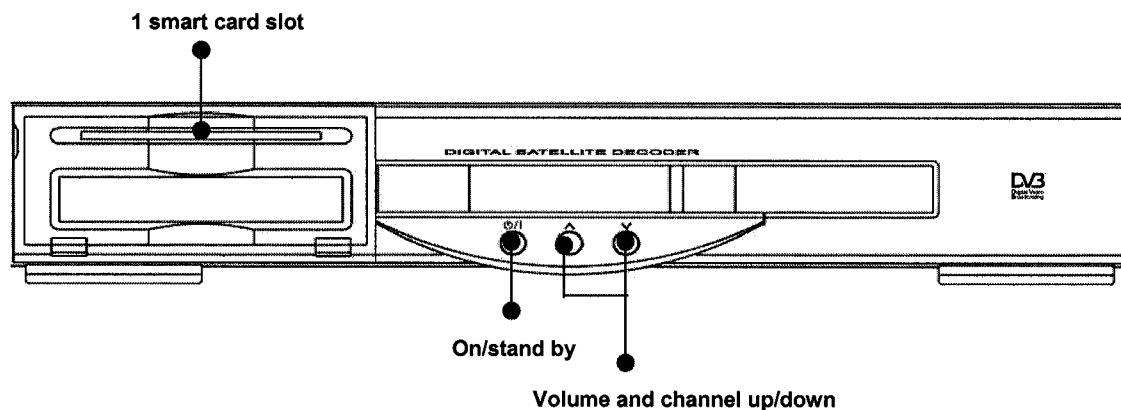
The **TV/RAD(Radio)** key switches between TV and radio mode.



Selects the **Audio Language or Soundtrack** from among the data transmitted for the current channel.



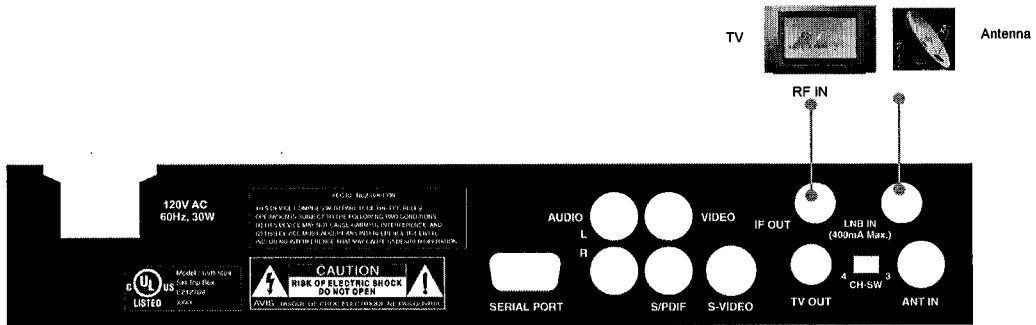
Front Panel



Connecting the Receiver

Receiver to TV

1. Connect the LNB IN connector of the receiver to LNB of your dish.
2. Connect the IF OUT connector of the receiver to the RF IN of the TV set.



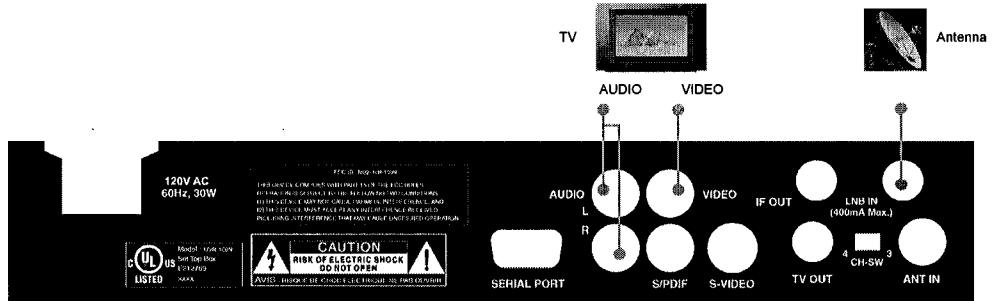
Receiver to TV with RF Modulator

1. Connect the ANT IN connector of the receiver to the Off-air TV antenna or cable .
2. Connect the TV OUT connector of the receiver to the RF IN of the TV set.



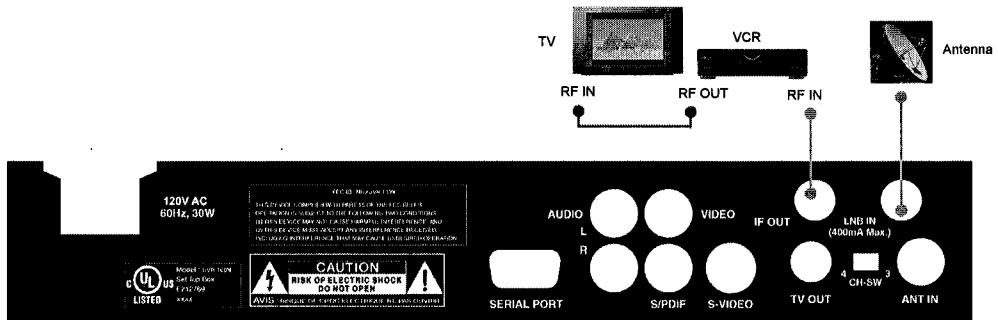
Receiver to TV with Audio and Video RCAs

1. Connect the LNB IN connector of the receiver to LNB of your dish.
2. Connect the IF OUT connector of the receiver to the RF IN of the TV set.
3. Connect the Audio and Video RCAs of the receiver to the Audio and Video RCAs of the TV set.

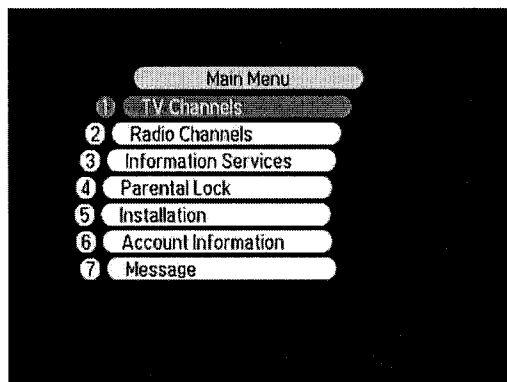


Receiver to VCR and then to TV with RF

1. Connect the LNB IN connector of the receiver to LNB of your dish.
2. Connect the IF OUT connector of the receiver to the RF IN of the TV set.
3. Connect the RF IN of the TV set to the RF OUT of the VCR.



Main Menu and Installation



Press the **MENU** key to display the “Main Menu” on the screen.

Using the **▲**, **▼** keys , you can select the menu.

After selecting the menu you want to choose, press **OK** key to confirm.

To return to the previous menu, press the **EXIT** key.

To return to the A/V Output, press the **MENU** key.

TV Channels



You can select the channel you would like to watch by moving to highlighted bar to the channel of your choice using the **▲**, **▼** keys.

Press the **OK** key to select the channel.

<<< Favorite >>>

To make a channel as your favorite one, you can go to the channel on the channel list and press the **Green** key. Before making a favorite channel, you first input the correct PIN code.

All the favorite channels will show the “♥” display on the right side of the channel bar.

You can see the Favorite channel list by pressing **FAV** key on the RCU.

<<< Move >>>

By pressing the **Yellow** key, you can move the channel to the channel number you want to move.



Radio Channels

You can select the channel you would like to watch by moving to highlighted bar to the channel of your choice using the ▲, ▼ keys.

Press the **OK** key to select the channel.

<<< Favorite >>>

To make a channel as your favorite one, you can go to the channel on the channel list and press the **Green** key. Before making a favorite channel, you first input the correct PIN code.

All the favorite channels will show the “♥” display on the right side of the channel bar.

You can see the Favorite channel list by pressing **FAV** key on the RCU.

<<< Move >>>

By pressing the **Yellow** key, you can move the channel to the channel number you want to move.



Parental Lock

With the parental control, you can prevent a TV channel from being watched, a Radio channel from being heard and IRD setting from being changed.

The pre-programmed code is set as [1234].

If you want to change PIN code, go to the “Change PIN” in the “Account Information” menu.

If you input the incorrect PIN code repeatedly over 16 times, you can't operate the receiver in 24 hours.





TV Channel Lock

You can lock a channel for certain period by setting the “Channel Lock Setting” menu.

In the “Channel Lock Setting” box, you set up the “Start Time”, “End Time” and “Lock” to “On”.

And then press the **Menu** key to confirm.

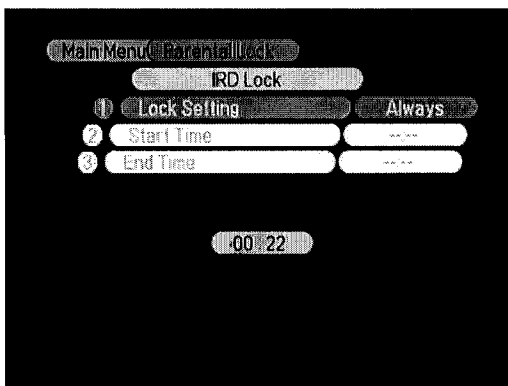


Radio Channel Lock

You can lock a channel for certain period by setting the “Channel Lock Setting” menu.

In the “Channel Lock Setting” box, you set up the “Start Time”, “End Time” and “Lock” to “On”.

And then press the **Menu** key to confirm.



IRD Lock

The “IRD Lock” is to set the receiver not to operate without inputting of the correct PIN code.

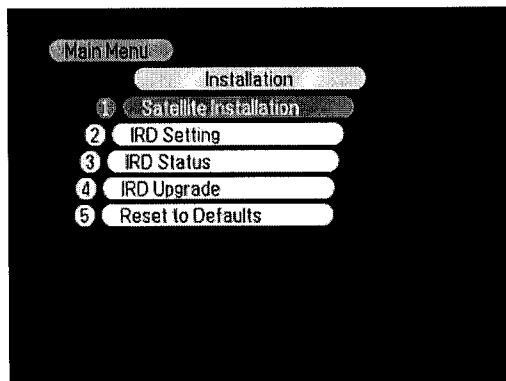
If you want to set the receiver not to operate at any time, you can choose the “Always”.

If you want to set the receiver not to operate for certain period of time and one time only, you can choose the “Limited” and then set the “Start time” and “End Time”.

If you don't want to set the receiver to be locked, you can choose the “Off”.

Installation

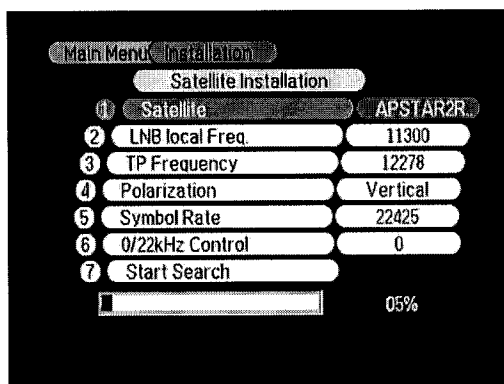
In the "Installation" menu, you can set the "Satellite Installation", "IRD Setting", the "IRD Upgrade" and the "Reset to Defaults", also you can see the "IRD Status".



Satellite Installation

In this menu, you can set the Frequency of LNB and TP of the satellite you want.

Firstly, set the satellite name using the ◀, ▶ keys and change the Frequencies. Then, if the signal level is higher than the half of the signal level, press the OK key on the "Start Search" bar on the menu.

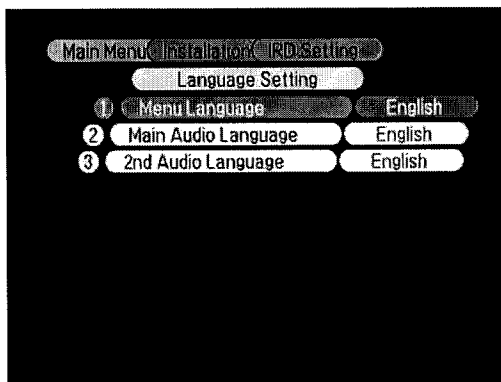


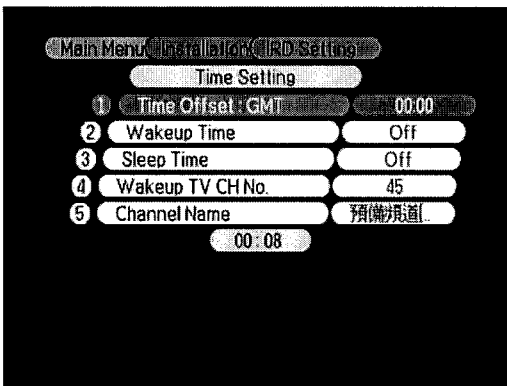
IRD Setting

Language Setting

You can select a language for the OSG(On-screen Graphic) menu display using the ◀, ▶ keys on the "Menu Language" bar.

Similarly, you can select a different audio channel when the "Main Audio Language" or "2nd Audio Language" option is selected. These options allow you to select a different language respectively to listen to if supported.





Time Setting

You can use GMT time as it is or adding the time gap between GMT and your local time which is segmented by 30-minute increase moving by ► key for +30 minutes, or ◀ key for -30 minutes.

<<< Wake up time >>>

You can set up the “Wakeup time” by selecting on the “Wakeup Time” option.

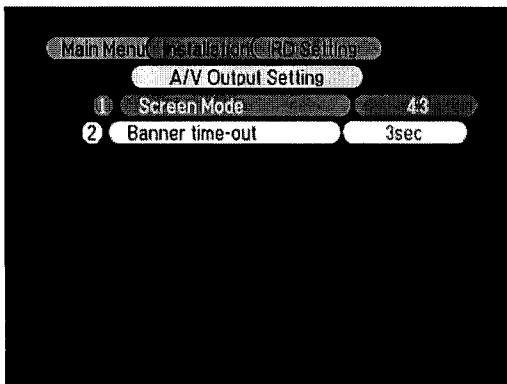
Also you can set the channel you want to watch when IRD turns on automatically.

The ◀, ► keys will turn this on and off respectively.

<<< Sleep Time >>>

You can set up the “Sleep Time” by selecting on the “Sleep Time” option and numeric key input of time.

The ◀, ► keys will turn this on and off respectively.



A/V Output Setting

<<< Screen Mode >>>

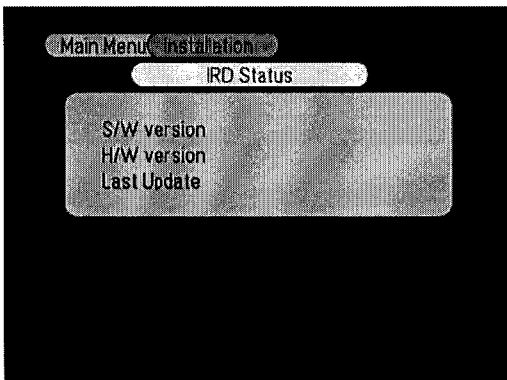
You can select the type of TV format.

4:3 for normal screen TV

16:9 for wide screen TV

<<< Banner time-out >>>

You can select the display time of the banner information about the current channel and program using the ◀, ► keys. There are 2,3,4,5,6,8 and 10 seconds to choose.



IRD Status

Here you can find the information about the IRD version and latest update date.

IRD Upgrade

You can upgrade the receiver through the OTA(over-the- air) upgrade. Our receiver has two kinds of upgrade methods.

i) Automatic upgrade

When the “Automatic Upgrade” is selected “On”, if the receiver is on stand-by, the receiver will check the last software version of the receiver. And then if you turn on the receiver, the receiver will ask you whether you want to software upgrade or not.

If the receiver don't get the any answer from you in 10 seconds, the receiver will upgrade automatically.

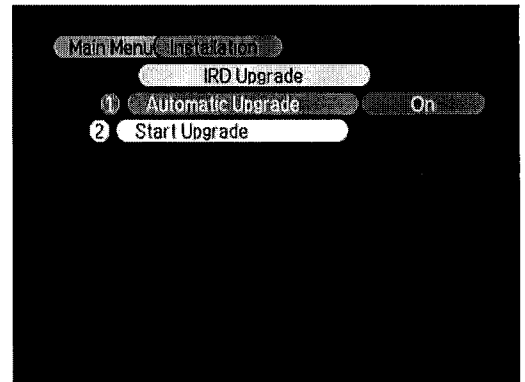
ii) Manual upgrade

If you want to upgrade the receiver, press **OK** key on the “Start Upgrade” bar. After checking the last software version of the receiver, the receiver will start to upgrade.

While the receiver is being upgraded, the front LED's will take turns blinking (Green ↔ Red).

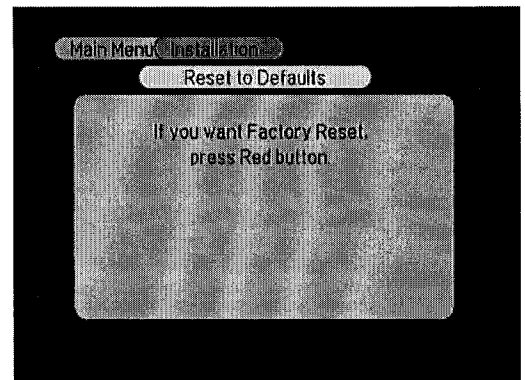
If the receiver don't need to upgrade or finish upgrading, the receiver return to the A/V output.

Note) Don't turn off the receiver during the upgrade.

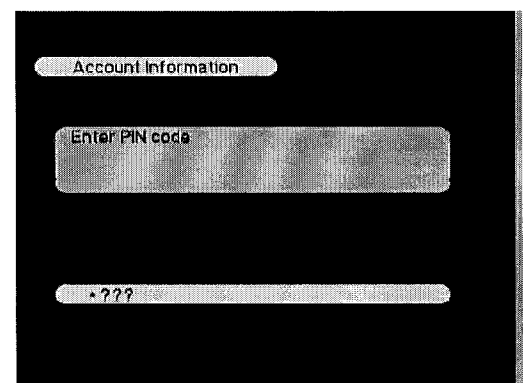
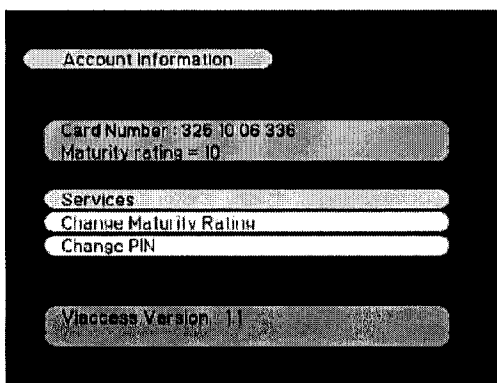


Reset to Defaults

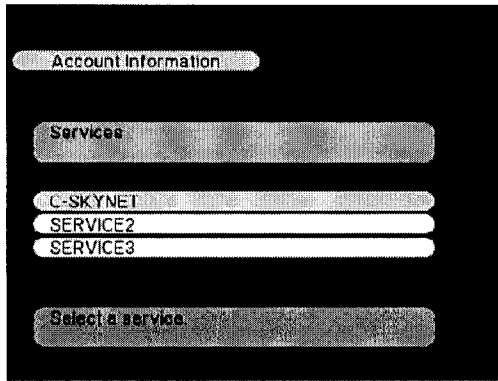
If you want to remove all the data edited by yourself, press **Red** button twice.



Account Information

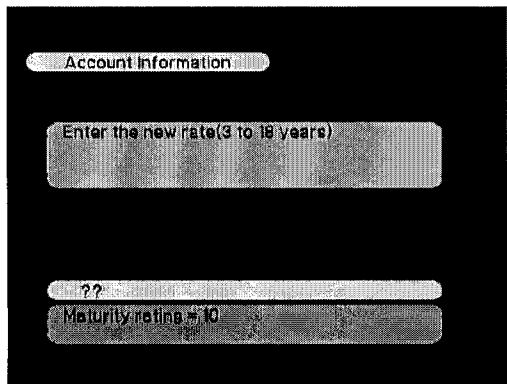


In the “Account Information” menu, you can see the information of the Smart card, change the Maturity Rating and change the PIN code.



Services

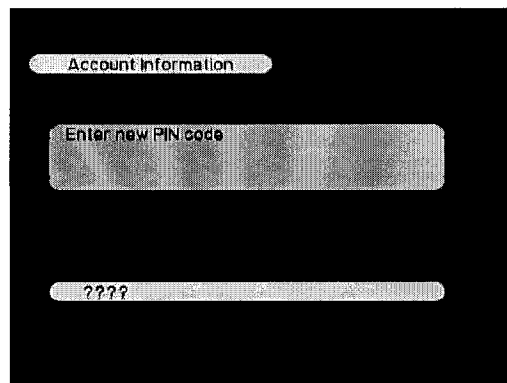
To see the service information, you can select a service using the ▲, ▼ keys and enter the correct PIN code.



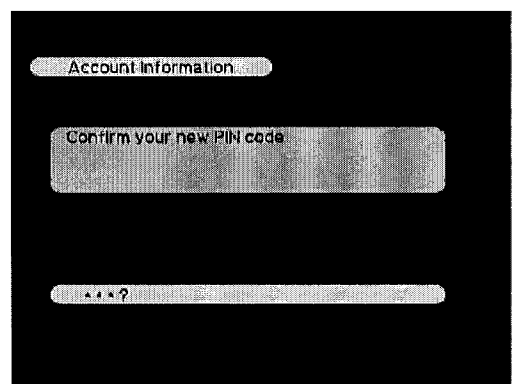
Change Maturity Rating

This option is for limiting the period to watch the TV channels.

You can set up the maturity rating from 3 to 18 years. Enter the period you want to limit, press the **OK** key.




Change PIN





To change the PIN code, you should input the present PIN code firstly, enter the new PIN code and then enter the new PIN code again to confirm.

Message

In this menu, you can get the message provided by broadcaster. If you receive the message from broadcaster, you can see the  in the information banner. The message memory capacity can save 50 messages.



In case of the general message, it will be shown on the Blue box and in case of the forced message it will be shown on the white box.

You can read the previous and next messages using the ,  keys.

You should all the forced messages, if you want to move the other menu. If you don't read all the forced message, you can't go the other menu.



EPG

While watching or listening to any channel if you want to know more information regarding the program shown, press the **EPG** key on the remote control to display the "TV Guide" or the "Radio Guide". This information may be provided by the broadcaster. You can move to another channel by pressing the ,  keys.


RED key : Switches the program guide of "Now",
and "Next".

Green key : Shows detailed information of the selected
channel.

Yellow key : Switches the "TV Guide" and the "Radio
Guide" by pressing this key.



Audio

If more than one audio channel is provided by the broadcaster on a specific channel, you can activate the audio mode display by pressing the  ? key.

