

For Your Protection...

FCC WARNING

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.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

To meet FCC requirements, shielded cables are required to connect the device to a personal computer or other Class B certified device.

WARNING

To reduce the risk of fire or electric shock, do not expose this television to rain or moisture. Do not open the cabinet; dangerous high voltage is present. Refer servicing to qualified personnel only. This television should only be used with 120V, 60Hz (standard U.S. household) current.

CAUTION

To prevent fire, shock hazard, or annoying interference, use only the recommended accessories. To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure. To reduce the risk of electric shock, do not remove the unit cover or back. There are no serviceable parts inside. Refer servicing to qualified personnel only.

For Your Protection...

CLOSED CAPTIONING

This television receiver provides display of television closed captioning in accordance with Part 15.119 of the FCC rules

WET LOCATION MARKING : C-UL

WORDED : "Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus." or equivalent.

OUTDOOR USE MARKING - UL

WARNING : TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THE SET TO RAIN OR MOISTURE." or equivalent.

CAUTION

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



This symbol 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 risk of fire or electric shock.



This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying this product.

DISCONNECT DEVICE

WORDED : " The socket-outlet shall be installed near the equipment and shall be easily accessible."



Important Safety Information

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 A DRY CLOTH**
7. **DO NOT BLOCK ANY OF THE 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 is provided for your safety. When 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 WITH A 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.

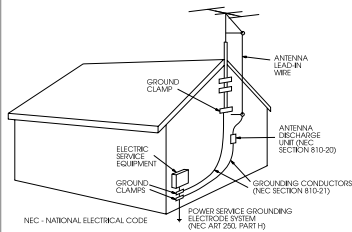


**Portable Cart
Warning**

Symbol provided by RETAC



Important Safety Information



POWER SOURCES - This unit 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 dealer or local power company.

OUTDOOR ANTENNA GROUNDING - If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect 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. See figure at left.

POWER LINES - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, 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 and extension cords as this can result in the risk of fire or electric shock.

OBJECTS AND LIQUIDS - Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquids of any kind onto the unit. Should spillage occur, unplug the unit and have it checked by a technician before use.

SERVICING - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

REPLACEMENT PARTS - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or those having 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 unit, ask the service technician to perform safety checks to determine that the unit is in safe operating order.

OPERATION

2 INSTALLATION

Press MENU button and select "Installation".

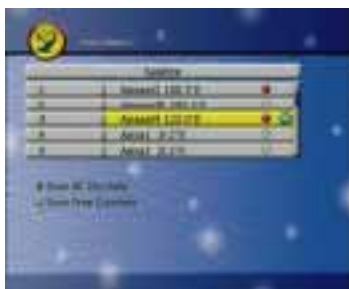


Antenna Setup

Set up the antenna to get the proper signal and then, search the channels.

- ♦ Satellite : You can select a satellite which you want to get the signal.
- ♦ LNB Type : You can select a LNB frequency among Universal LNB1 (controlled by 22KHz), Universal LNB2 (controlled by 14/18V), C Band Single (controlled by 5150/5750MHz), C Band Normal (5150MHz), LNB 5750, 9750 and etc.
- ♦ Transponder : Select the desired TP (transponder).
- ♦ LNB Power : You can select LNB Power On or Off.
- ♦ 0/22KHz : You can select 22KHz On or Off.
- ♦ Switch : You can select the available switch mode, according to your DiSEqC.
 - None : no DiSEqC switch is used.
 - DiSEqC : You can select one among DiSEqC A/B/C/D
 - DiSEqC 1.1 : You can select DiSEqC Switch Type, Port and Repeat.
- ♦ Type : You can select one among DiSEqC A/B/C/D
- ♦ Port : : If you select DiSEqC 1.1 for "Switch", you can select port No.
- ♦ Repeats : If you select DiSEqC 1.2 for "Switch", you can select one among No, One, Two repeats.
- ♦ Network Search : If you select "On", it will search TP including newly created one. If "Off", it will search the designated TP only.
- ♦ Mode : If you select "Scan All", it will search all the channels on the selected satellite. If you select "Scan Free", it will search only the free channels.
- ♦ Start : Press OK button to start searching the channels once the signal gets high sensitivity. If you select DiSEqC 1.0 or 1.1 for "Switch"

OPERATION



Auto Search

- ♦ Select desired Satellite on the Satellite List.
- ♦ Start auto channel searching per satellite by pressing the Green or Yellow button.
 - Green Button : Scan All Channels.
It will search all the channels on the selected satellites.
 - Yellow Button : Scan Free Channels.
It will search only the free channels on the selected satellites.



Manual Search

- ♦ Satellite : Select a Satellite which you want to get the signal.
- ♦ Frequency : Enter TP Frequency by pressing the numeric button or ◀VOL▶ button.
- ♦ Polarity : Choose Vertical or Horizontal frequency.
- ♦ Symbol rate : Enter TP symbol rate value by pressing the numeric button.
- ♦ Network Search : If you select "On", it will search TP including newly created one.
If "Off", it will search the designated TP only.
- ♦ Save Edit : You can save (or add) the edited TP by selecting "Store" or you can delete the TP by selecting "Delete".
- ♦ Mode : If you select "Scan All", it will search all channels on the selected satellite.
If you select "Scan Free", it will search only free channels.
- ♦ Start : Press OK button to start searching the channels.

OPERATION



Motorized Dish Setup

- ♦ Satellite : Select a Satellite which you want to get the signal.
- ♦ Transponder : Select the desired TP (transponder)
- ♦ Positioner : Select "DiSEqC 1.2" or "USALS" for setting up the positioner.

// HOW TO SET-UP THE DiSEqC 1.2 Positioner or USALS //

Select "DiSEqC 1.2" or "USALS" and then follow the instruction.

- Move / Save : You can adjust antenna position to EAST or WEST by pressing ◀VOL ▶ buttons.
- Set Limit : You can set or clear the limits of antenna position by ◀VOL ▶ buttons. Press OK button to save/clear.
- Goto Center : If you press OK button, it will go to the center position of the positioner.
- Latitude : You can set the latitude of the present location in USALS menu.
- Longitude : You can set the longitude of the present location in USALS menu.
- ♦ Network Search : If you select "On", it will search TP including newly created one. If "Off", it will search designated TP only.
- ♦ Mode : If you select "Scan All", it will search all the channels on the selected satellite. If you select "Scan Free", it will search only free channels.
- ♦ Start : Press OK button to start searching the channels.



Factory Reset

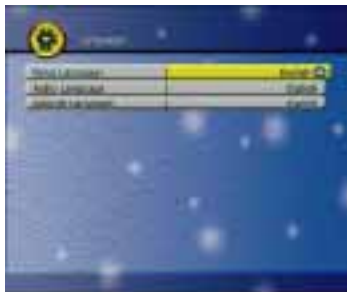
You can clear all the setup data value of the Receiver to the factory default condition.

- ♦ Factory Reset : It recovers all the setup data to the factory default stage.
- ♦ Channel Backup : If press OK, it backs up the currently searched channel data.
- ♦ Channel Recovery : If press OK, all the current channel data is erased and then, it recovers the backup channel data.
- ♦ Delete All Channels : It deletes all the currently searched channel data.

OPERATION

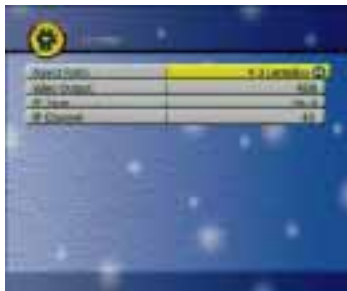
3 SYSTEM SETUP

Press MENU button and select "System Setup" for the following sub menus.



Language

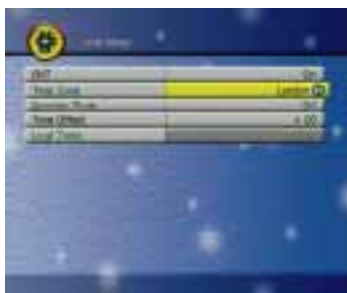
You can select the desired language for Menu, Audio and Subtitle.



TV Setup

You can setup the system for your TV.

- ♦ Aspect Ratio : You can select 16:9, 4:3 or 4:3 Letter Box.
- ♦ Video Output : You can select RGB or CVBS.
- ♦ RF Type : You can select PAL G, PAL I or PAL K.
- ♦ RF Channel : You can select RF modulator channel between Ch 21 ~ 69.
(The factory default channel is Ch 40.)

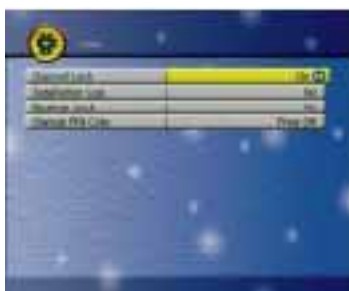


Time Setup

You can setup the Local Time for this receiver.

- ♦ GMT : You can select On or Off.
 - If you select GMT Off you can adjust the current Date / Hour / Minute.
 - If you select GMT On, you can adjust the followings.
- ♦ Time Zone : You can select a city where you belong to.
- ♦ Summer Time : In case of summer time period, you may select On.
- ♦ Time Offset : You may adjust the time by a minute.
- ♦ Local Time : You can set the local time of your location.

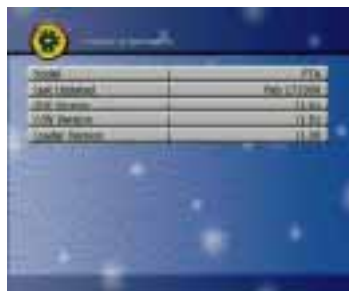
OPERATION



Lock

You can set up or change Password for Receiver and each Menu as follows.

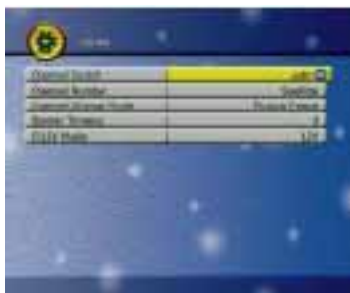
- ♦ Channel Lock : You can select On, Off or Once for locking the current channel.
(If you choose Once, it will not ask Password again when you return to the channel again.)
- ♦ Installation Lock : You can lock the Installation Menu by selecting Yes.
- ♦ Receiver Lock : You can lock the receiver by selecting Yes. In order to enter to the channel or menu, you should enter password, first.
- ♦ Change PIN Code : You can change the current password with new one.



Product Information

It informs you the product's version and other information.

OPERATION



Others

- ◆ Channel Switch : You can select the channel movement method among Auto, Direct or Delayed when you are watching small screen in the channel list.
 - * If you Press OK button in the Current channel.
You can see "Channel List" (page 18)
 - Delayed : If you select Delayed, the small screen of the channel List shows the Current channel.
by changing the channels in the channel list mode.
 - Direct : If you select Direct, the small screen is changed
by changing the channels in the channel list mode.
 - Auto : In the positioner mode, it is automatically changed to the delayed mode.
In the normal procedure, the small screen is changed as direct mode.
- ◆ Channel Number : You can select the Channel numbering mode between Satellite or All Channels.
- ◆ Channel Change Mode : You can select the channel changing mode among Picture Freeze, Picture Hide or Fade In / Out.
- ◆ Banner Timeout : You can select the banner bar appearing time.
- ◆ 0/12V Mode : You can switch 12V or 0V.

OPERATION

3 EPG (Electronic Program Guide)



You can check the information of the current channels by using EGP button if the channel has the EPG information such as story, time table, etc.

- ♦ Current / Next : by pressing Red button, you can see the current or next program schedule.
- ♦ Extended : by pressing Green button, you can see the detailed information as the program story, the program's starting / ending time and etc. If the channel has the EPG information.

OPERATION

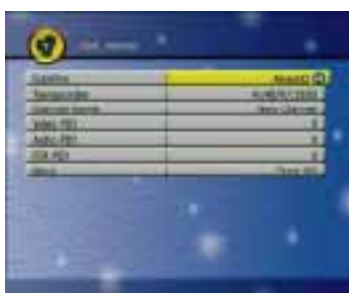
4 UTILITY



Edit Satellite

You can edit or delete the Satellite information

- ♦ Satellite : You can select a satellite to edit.
- ♦ LNB Type : You can select LNB frequency among Universal LNB1, Universal LNB2, C Band Single, C Band Normal, 5750, 9750 and etc.
- ♦ East/West : You can select the angle and East or West of satellite position.
- ♦ Angle : You can input the angle of satellite by pressing the numeric buttons.
- ♦ Sort : You can sort the satellite name on the sat list by Default, Degree (SAT position), A to Z (Alphabetical).
- ♦ Store (Modify/Add) : You can save the new setting for satellite by pressing OK button.
- ♦ Delete : You can delete the selected satellite by pressing OK button.



Add Channel

You can add TP or channels by adjusting TP or PID.

- ♦ Satellite : You can select a satellite of which channel will be added or modified.
- ♦ Transponder : You can select a TP of which channel will be added or modified.
- ♦ Channel Name : It can be added by pressing the numeric button.
- ♦ Video/Audio/PCR PID : Each PID can be input by pressing the numeric button.
- ♦ Store : You can save the changed data by pressing OK button.