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1.1 Overview

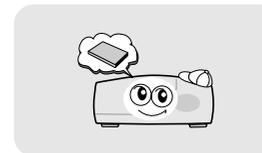
This common interface digital satellite receiver with installed 80GB hard drive digital video recorder is your "Window to the World" giving you the opportunity to view and record free to air and scrambled programs. Enjoy the rich choice of thousands of available channels, broadcasting a large range of culture, sports, cinema, news, events, etc. This receiver is assembled with the highest qualified electronic parts to provide unsurpassed performance. This receiver is a technical masterpiece, assembled with the highest qualified electronic parts.

1.2 Main Features

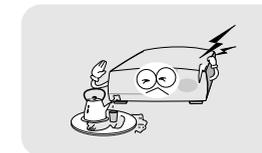
- ▶ Fully compliant with MPEG-2 and DVB standards
- ▶ 2MB Flash Memory for faster channel changes
- ▶ Integrated COMMON INTERFACE
- ▶ Digital recording and playback function
- ▶ Multi-access with twin card reader for Common Interface
- ▶ Multi-lingual user friendly operating Menu and On-Screen Graphic menu
- ▶ Easy to use EPG (Electronic Program Guide) for program and recording reservations
- ▶ Age protection lock function
- ▶ Renameable Channel groups
- ▶ Automatic satellite and transponder search
- ▶ Firmware updating and satellite, transponder and channels management via RS-232
- ▶ DiSEqC 1.0, 1.1, 1.2 and USALS compatible
- ▶ Powerful channel control and sorting functions
- ▶ On Air Download or OTA (Over The Air) updating of the Glorystar channel list and firmware

2.1 Safety

Be sure to read the user's manual before starting the operation of the unit.



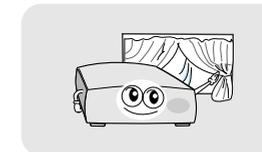
Do not touch the power cord with wet hands as it may cause electric shock.



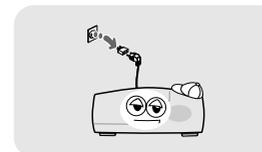
Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.



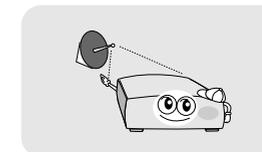
Place the unit in a well ventilated and no-heat environment.



When you do not use this unit for a long time, make sure that power cord is pulled out from the outlet. Also do not use a damaged power cord as it may cause fire or electric shock.



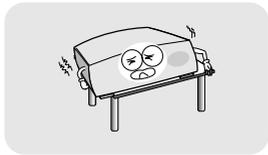
A professional installation is suggested. If reception is interrupted, contact your local service centre.



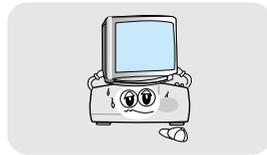
2.2 Precautions

When installing the unit

Install the unit horizontally. An uneven installation may cause the unit to be damaged.

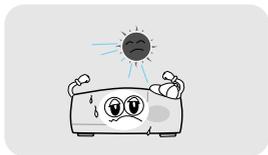


Do not put heavy items such as a TV on the unit. That may cause the unit to be damaged.



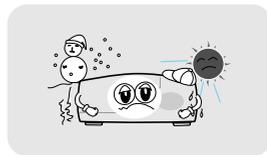
Do not install the unit:

- Where it is subject to vibrations
- Where it is exposed to direct sunlight
- Where there is humidity
- Where the temperature is too high or too low
- Where there is no ventilation



Moving the unit to a hot area from a cold one will cause condensation.

Do not operate the unit for one or two hours or until it has dried completely.



3.1 Accessories

Accessories of the Unit

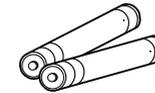
User's manual : 1



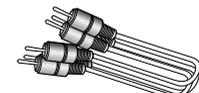
Remote control : 1



Batteries (AAA type) : 2



RCA Cable : 1



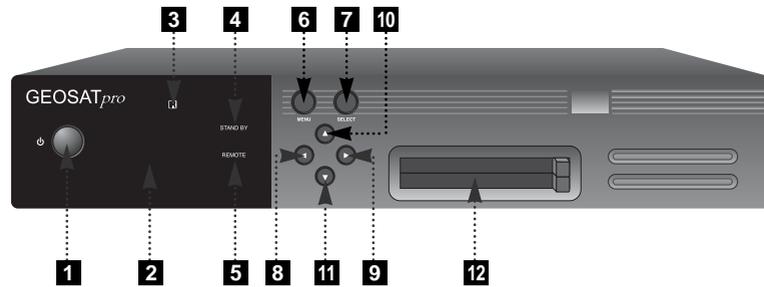
▶ If any accessories listed above are missing, contact the sales representative where you purchased this unit.

3.2 The Satellite dish

Your dish should be properly installed and azimuth and elevation must be precisely set up.

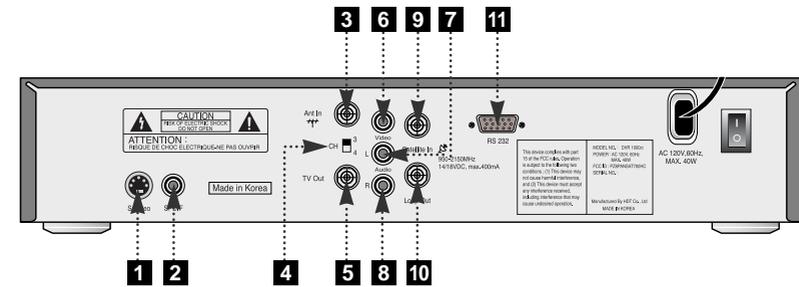
▶ This unit is compatible with DiSEqC 1.2 or USALS compatible antenna positioners. Ask your dealer for information on how to receive hundreds of additional channels on dozens of available satellites

4.1 Front Panel



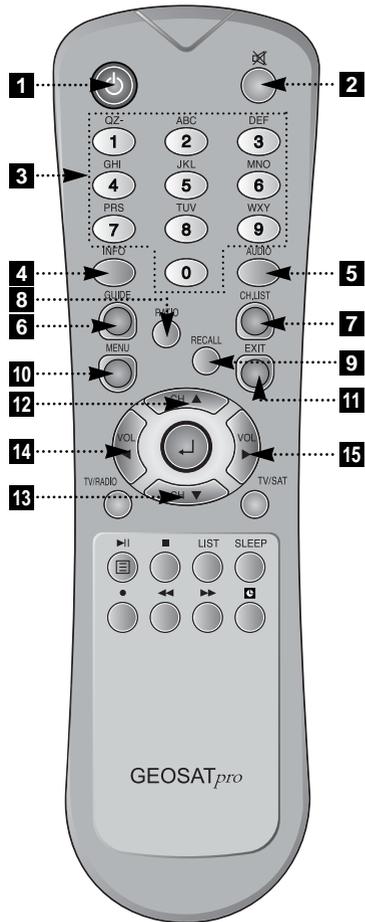
- 1** Power : To switch the receiver between "standby" or "power on" modes.
- 2** Channel Display (4 Digit)
 - When you connect the power line of the receiver, the current time is displayed.
 - After programming, the program number or name is displayed.
- 3** Remote indication light : Indicates reception of the infrared signal from remote control.
- 4** Standby : Flashing red in "standby" and no light in power on mode.
- 5** Remote : Flashing orange while the receiver is receiving data from remote control unit.
- 6** Menu : To launch or terminate the menu application.
- 7** Select : To activate a highlighted item or go to next level on hypertext menu or confirm the user's action.
- 8** - **9** Vol. (◀/▶) : To adjust the volume level or change the value of an item with preprogrammed values. The Key Vol. ◀ can be used as a backspace to cancel the numerical input.
- 10** - **11** CH. (▲/▼) : To change channel or cursor position on the application screen.
- 12** Slot A, B
PCMCIA-module : Provided by a broadcaster for viewing scrambled programming.

4.2 Rear Panel



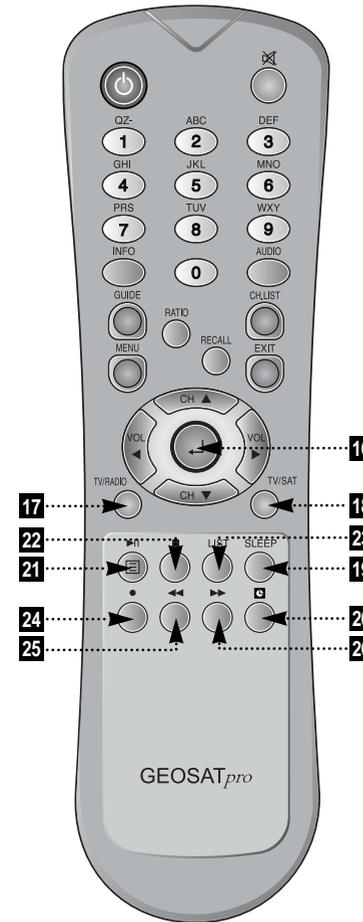
No.	Name	Connector	Function
1	S-Video	S-Video jack	S-Video output
2	Digital Audio	RCA cinch	Digital Audio Output
3	ANT IN	"F" Female	Connect outside terrestrial antenna or cable television cable
4	CH 3/4	Select switch	Set the output channel to unused TV channel
5	TV OUT	"F" Female	Connect to the television receiver or VCR antenna input
6	VIDEO	RCA cinch	Composite video output
7	AUDIO L	RCA cinch	Left audio output
8	AUDIO R	RCA cinch	Right audio output
9	Satellite in	"F" Female	Input from the LNBF on satellite dish
10	LOOP OUT	"F" Female,	IF LOOP-through output from digital tuner
11	RS-232C	DB-9	Low speed serial port

4.3 Remote Control Unit



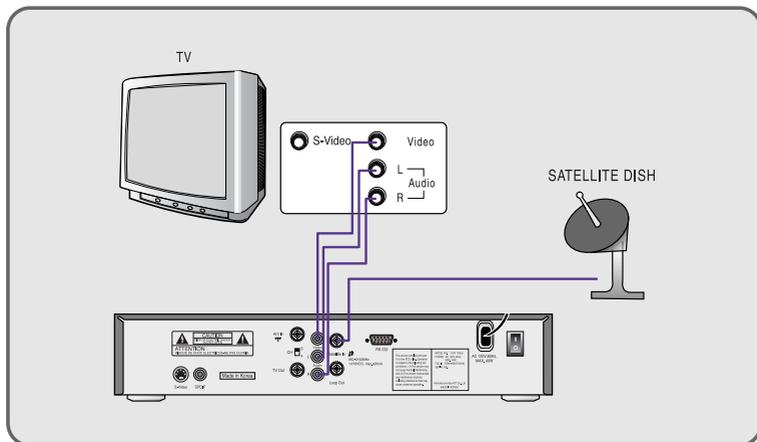
- 1** POWER : To switch into 'standby' or 'power on' mode.
- 2** MUTE : To turn the sound on/off.
- 3** Numeric Keys(0-9) : To select channels and input of channel numbers or characters.
- 4** INFO. : To display the information of the current channel.
- 5** AUDIO : To change the audio track, stereo-mono mode.
- 6** GUIDE:(EPG:Electronic Program Guide) To watch program information. Press once more to return to normal mode.
- 7** CH LIST : To watch the channel list. Press to confirm or press EXIT to return to previous chosen channel.
- 8** RATIO : This key allows you to select your TV aspect ratio to 4:3 or 16:9 according to your wishes.
- 9** RECALL : To return to the previous chosen channel.
- 10** MENU : To enter/exit the main menu.
- 11** EXIT : To return to previous status or menu.
- 12 - 13** Up & Down : To change channels up / down also used to change the value of a selected item with pre-programmed values in menu.
- 14 - 15** Left & Right : To increase or decrease the volume also used to move the cursor up and down in the menu. can be used as a back-space to cancel the numerical input.

4.3 Remote Control Unit

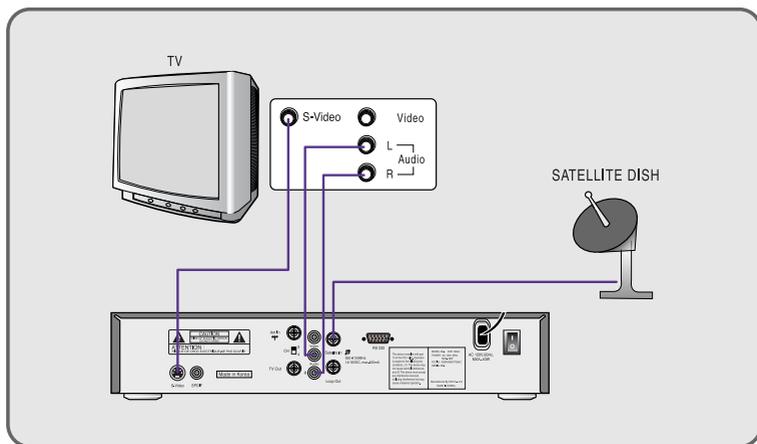


- 16** (ENTER) : To select an item or to confirm a menu. Pause function.
- 17** TV/RADIO : To switch between the TV and radio channels.
- 18** TV/SAT : To toggle the TV output source between the satellite tuner and UHF/VHF antenna input.
- 19** SLEEP : To switch off the receiver automatically after between 30 and 150 minutes.
- 20** TIMER : To display the timer menu.
- 21** BLUE : To delete a channel from the Channel List menu. To show extended program information in the EPG menu. To see Teletext Service Data. To play or pause the stored programs on HD.
- 22** WHITE : To add a new channel to the Channel List menu. To stop the played programs on HD.
- 23** ORANGE (LIST) : To see variant channel lists for user's convenience in the Channel List menu. To watch the list of stored programs on HD.
- 24** RED : To setup favorite channel lists in the Channel List menu. To record the program on to HD. To delete the stored programs on HD or set skip points.
- 25** GREEN : To lock channel in the Channel List menu. To show current/next program information in the EPG menu. To play the stored programs on HD with fast forward mode.
- 26** YELLOW : To move a channel to other position in the Channel List menu. To show program schedule information in the EPG menu. To play the stored programs on HD with fast reverse mode.

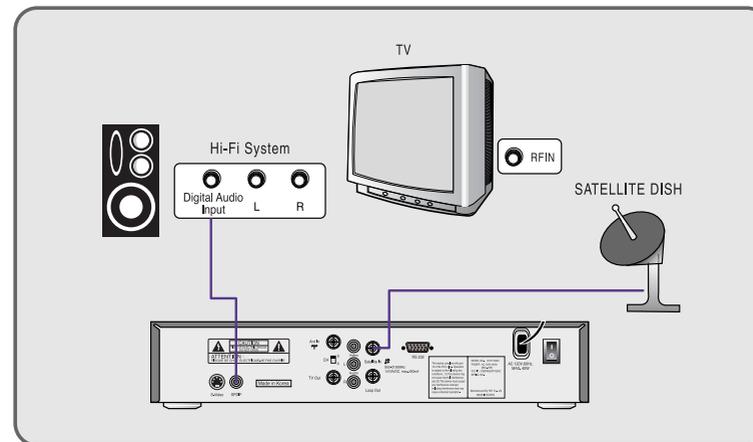
5.1 Connecting Set Top Box to TV with RCA AV connectors



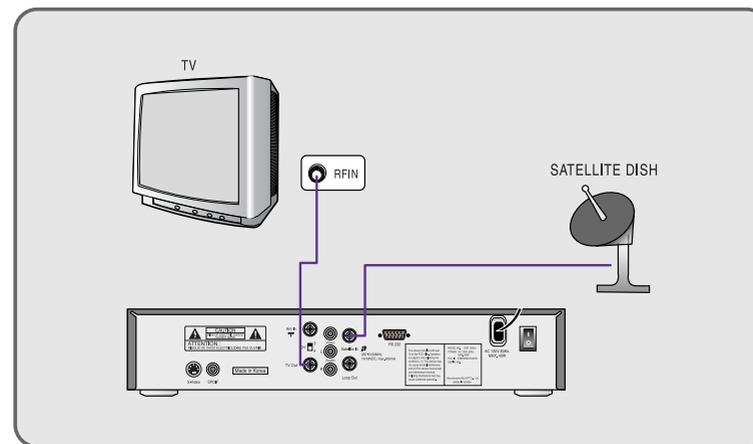
5.2 Connecting Set Top Box to TV with S-Video and RCA audio connectors



5.3 Connecting Set Top Box to Stereo amplifier or TV with Digital Audio



5.4 Connecting Set Top Box to VCR and TV with FF antenna coax cables

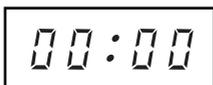


6.1 Getting Started

After your receiver is powered up, proceed with installation as follows:

1. Menu Language Setting

- 1 When you plug in AC power, the following will be displayed on the front.



- 2 Press POWER on remote, the LED number will be displayed as follows;



- 3 Press MENU key and position cursor on 'Language' column with or .
- 4 Select language you want with or .



2. Help

If you want to know how to use current part in the menu, use 'help' function.

- 1 Select a content in the menu.
For example, if you want to know about the installation menu, select installation.
- 2 Press INFO. Then you can see the help window of the selected content.



6.1 Getting Started

3. Satellite Setting

Since your receiver has the basic data of most satellites and channels, you can receive programs just by plugging in. But, according to the status of your antenna setup, you may have to modify the basic data of satellites and / or channels.

When you need to modify the data, proceed as follows ;

- 1 Press MENU key and position the cursor on Installation column with or and press .
- 2 By using or , select 'LNB Configuration' and press .



* Note : Enter 4-Digit password if need arise. The default password is '0000'.

- 3 Select the Satellite you want to add with or and press or .
- 4 If you press , the selected Satellite will be added and the cursor will move to right window for detailed installation.



6.1 Getting Started

4. Antenna Setup

You need to position your antenna correctly for reception of the best signal.

- ① Press MENU key.
- ② Select 'Installation' with  or , and press .
- ③ Select 'Antenna Setup' with  or  and press .



Level	Indicating selected satellite signal strength level
Quality	Indicating signal to noise ratio

- ④ Select the satellite you want with  or .
- ⑤ Press  to move to TP section and select the TP you want with  or .
- ⑥ When the satellite and the TP are selected, you can check the reception status of the satellite signal. If the reception signal status is bad, adjust antenna to get the following result.

Tuner	LOCK	FEC	1/2, 2/3, 3/4, 5/6, or 7/8
Level	over 30%	Quality	over 10%

⑦ DiSEqC 1.2 Positioner Setting

- Motor / Goto 0

Determine the kind of Motor & whether or not controlling it by using  or .

6.1 Getting Started

DiSEqC 1.2	Using DiSEqC 1.2 compatible motor
OFF	Not using DiSEqC Motor.
USALS	Using USALS compatible Horizon motor. input the install location longitude and latitude. the receiver will drive the satellite dish to the position calculated from the site location.

If you press , DiSEqC Motor will move toward Zero Equator.

- Move / Save

Motor moves to West & East direction.

- Set Limit

Determine the value of Limit of Motor.

If you select , the value of Limit will be changed.

- My longitude / My latitude

You can use this item when USALS is selected 'Motor/Goto 0'.

Determine you site longitude and latitude

'East/West' is changed by using  or .

5. Satellite Scan

After finishing 'Antenna Setup', execute a 'Satellite Scan'.

Then you can get all channels in the pre-programmed TPs. This function can also be used to get the latest channel data while receiver is in use. Through this function, the receiver searches for all the available channels and saves them in the memory.

- ① Press MENU key.
- ② Select 'Installation' with  or , and press .
- ③ Select 'Satellite Scan' with  or , and press .
- ④ Select 'Scan Mode' with  or .
- ⑤ Select the scan mode you want with  or .

6.1 Getting Started

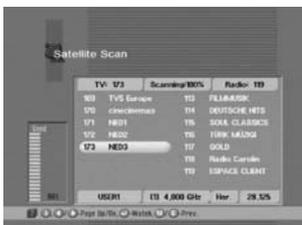
- Select the satellite name you want with or .



- If you press , the selected satellites will be scanned.



- While scanning, you can see the following menu on the screen.
- After the scanning process, the first channel of the last scanned TP will be displayed on the back screen.



- Press to finish the process. Then select a channel and press to watch a program or press MENU key or EXIT key.

* Note : Now you have completed all steps needed for watching programs. If you could not see the program after finishing these procedures, please contact your engineer or representative.

6.1 Getting Started

6. Select Channel

You can change the current channel to any other channel you want.



- In the right section, detailed information of the selected channel will be displayed. (Name of satellite, frequency, symbol rate, etc.)
- Select the channel you want with / (scroll up/down) or / (page up/down).
- When the scroll bar is positioned on the channel you want to see, press .

7. Volume Control

- While you are watching a program, press or to control volume of the current channel.



- When necessary, press MUTE key to remove the sound of the program temporarily. Then, your receiver goes into mute condition and the volume bar will become red. Press MUTE key again to turn the sound on.

6.2 Channel Editing

2. Channel List Mode

Using this function, you can see variant channel lists which may enable you to edit and select channels more conveniently.

Favorite Mode

If you have set up favorite channel lists as the previous section, you can use them as following.

- ① Press CH.LIST.
- ② Press ORANGE.
- ③ You can see 'Channel List Mode' window. Select 'Favorite' with or and select 'Favorite1' with or .



- ④ Press .



- ⑤ You can see only favorite1 channels are listed. With similar way, you can see favorite2 ~ favorite5 channel list.
- ⑥ If you want to return to all channel list (all channels of the selected Satellite), press ORANGE and select 'Satellite' with or and press .

6.2 Channel Editing

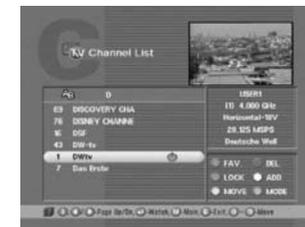
Alphabet Mode

Using this function, you can see the channel list which have same initial. This function is useful when you search specific channel among the list of thousands channels. For example, if you want to see the channel lists which start with 'D'.

- ① Press ORANGE in the channel list and select 'Alphabet' with or .
- ② Select 'D' with or .



- ③ Press .



- ④ You can see the channel list where all channels have initial 'D'.

6.2 Channel Editing

Free only Mode

- 1 Press ORANGE in the channel list and select first line with or . Select 'Free only' with or .



- 2 Select 'Favorite' or 'Satellite' or 'Alphabet' and press . You can see only the selected 'free' channel list.

Free + Scrambled Mode

- 1 Press ORANGE in the channel list and select first line with or . Select 'Free+ Scrambled' with or .



- 2 Select 'Favorite' or 'Satellite' or 'Alphabet' and press . You can see the selected free and scrambled channel list.

6.2 Channel Editing

Satellite Mode

By using this function, you can see all channel list of the selected satellite.

- 1 Press ORANGE and select 'Satellite' item with or .



- 2 Press or to select a satellite and press .

3. Lock Channel

This menu enables you to prevent children from viewing programs unsuitable for their age.

- 1 Press CH.LIST and Select the channel you want to lock with / or / and press GREEN.

Then the selected channel is locked.



* Note : If 'password' window is risen as following picture, enter password with numeric keys (default password is '0000'). Then you can lock the channel. If you don't want this window, change 'Parental Control' set up in the 'System Parameters' menu. Refer to the 'Parental control' in 'System parameters' in this manual for detail.

6.2 Channel Editing

- ② Press MENU, EXIT or to finish the process.
- ③ Without entering your password, you cannot watch a locked channel's program.



- ④ If you want to cancel the channel lock, go to the channel list and select the channel and press GREEN.

4. Channel Order Setting

You can organize the number or sequence of the channels.

- ① Press CH.LIST.
- ② Select the channel you want to move with / or / and press YELLOW.



- ③ Move the selected channel with / or / to the position you want.



6.2 Channel Editing

- ④ Press YELLOW.
- ⑤ Press MENU, EXIT or to finish the process.

5. Delete Channel

You can delete channels from the channel list.

- ① Press CH.LIST and select the channel you want to remove with / or / .
- ② Press BLUE.

* Note : If 'password' window is risen as following picture, enter password with numeric keys (default password is '0000'). Then you can delete the channel. If you don't want this window, change 'Parental Control' set up in the 'System Parameters' menu. Refer to the 'Parental control' in System parameters' in this manual for detail.



- ③ Then, you need to confirm the deletion. If you definitely want to delete, press . If not, press EXIT.



* Note : Please be careful when you delete channel(s).

- ④ Press MENU, EXIT or to finish the process.

6.2 Channel Editing

6. Add Channel

- ① Press CH.LIST.
- ② Press Ivory.



- ③ Move to 'CH. Number' section (column) by pressing and change CH. Number with .

* Note : You can only select satellites which you set in 'Installation' menu.

- ④ Move to 'CH. Name' by pressing and enter the alphabetic characters with numeric keys.

* Note : TP frequency consists of 5 digits ending with GHz.

* For example : TP Frequency 4.000GHz is

- ⑤ Move to 'Polarization' by pressing and select Horizontal or Vertical with .

* Note : Please check whether LNB Power is ON in 'Installation' menu.

- ⑥ Move to 'Symbol Rate' by pressing and enter the Symbol Rate value with numeric keys.

- ⑦ Move to 'CH. Name' by pressing and enter the alphabetic characters with numeric keys.

* For example : if you want to enter SAT-1,

* Note : Press for space

- ⑧ Move to 'VIDEO PID' by pressing key and enter the proper value with numeric keys.

- ⑨ Move to 'AUDIO PID' by pressing key and enter the proper value with numeric keys.

- ⑩ Move to 'PCR PID' by pressing key and enter the value between 0000 ~ 8192 with numeric keys.

6.3 System Parameter

1. Setting Age Restrictions

This sub-menu allows you to set the age for parental locking and protect children from viewing programs unsuitable for their age.

- ① Press MENU key.
- ② Press or to select 'System Parameters' and press .
- ③ Press or to select 'Parental Control' and press .



- ④ Enter 4-digit password.

* Note : The default password is '0000'.

- ⑤ Press or to select 'Age Limit'.



- ⑥ Press or to select age you want.

None	No age limit
8	Without entering password, programs are restricted to those who are over 8 years old.
12	over 12 years old.
15	over 15 years old.
18	over 18 years old.

* Note : 'Age limit' can be applicable only for the signal which carries age limit information.

6.3 System Parameter

2. Security Check

You can set SECURITY CHECK to protect your current installation from being changed (location shift, deletion, adding etc.) or modifying of installed data.

- ① Press or to select 'Lock channel Editing', or 'Lock Installation'.
- ② Press or to select 'Yes', or 'No'.

Yes	When you process with 'Channel Editing' or 'Installation' of Main Menu, your receiver will ask for password. If you enter wrong password, you cannot proceed further.
No	You do not enter password during your processing.

3. Password Changing

You can change your password.

- ① Press or to select 'New Password'.
 - ② Press 0 ~ 9 numeric numbers to enter new password.
 - ③ Press 0 ~ 9 numeric numbers again to verify the new password.
- * Note : When you forget your new password, please consult the shop where you bought the receiver or the nearest dealer.

6.3 System Parameter

4. Personal Information Setting

You can enter your personal information, such as your name and address, etc.

- ① Press or to select 'Personal'.
- ② Press 0 ~ 9 numeric numbers to enter new personal information.

* For example : If you want to enter 'WELCOME',



- * Note :
1. Maximum 32 letters can be entered.
 2. Your entered personal information will be displayed on the TV screen as Welcome Window when you power on your receiver.
 3. Initial information is '*****'.
 4. After purchasing the receiver, if information other than that which you entered is displayed, please consult the shop where you bought it.
 5. Personal Information does not affect your viewing in any way.

5. System Information

You can check the current information about your receiver such as receiver's software and hardware version or manufacturing date.

- ① Press MENU key.
- ② Press or to select 'System Parameters' and press .
- ③ Press or to select 'System Information' and press .



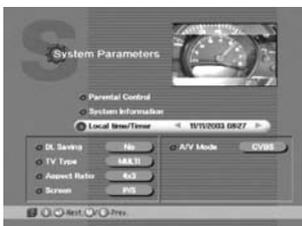
- * Note : This information is necessary when you download new software or you need to repair the receiver.

6.3 System Parameter

6. Setting Timer (Automatic power On/Off)

You can pre-set the receiver to automatically to change channels, turn on and off the receiver and record TV or radio on the built-in hard disk drive with 14 event timers.

- ① Press MENU key.
- ② Press or to select 'System Parameters', and press .



- ③ Press or to select 'Local Time/Timer', and press .

* Note : Without the local time setting, this 'TIMER' function does not work.



- ④ Press or to select 'Timer #(number)' you want to set and press .
- ⑤ Determine 'CH. Type' by selecting 'TV' or 'RADIO' with or .
- ⑥ Select 'CH. Number' with or and enter channel number with numeric keys or with or .
- ⑦ Select 'Start Time' for your receiver power-on.
 - * For example : For 1st of February in the year of 2000, 7:30 P.M.,
Enter in sequence.
- ⑧ Select 'Stop Time' by pressing .
- ⑨ Enter power off time in the same way as you entered 'Start Time'.

6.3 System Parameter

- ⑩ Select 'Status' and set 'Once/Daily/Weekly/No' with or .
- ⑪ Select 'HD record' and set 'ON' with or if you want to record auto matically.
 - * Note : 1. Without 'STATUS' being actuated (ON), Timer does not work
 - 2. If Prior time than current is entered, Timer does not work.
 - 3. You can pre-set 14 TIMERS simultaneously. Regardless of number of TIMER, Timer will work in sequence of time sequence.

7. Setting Day Light Saving Time (Summer Time)

You can adjust current local time when summer time is applicable.

- ① Press or to select 'DL Saving'.
- ② Press or to select 'Yes' or 'No'.

Yes	Set for daylight saving function activated. The current time automatically moves one hour ahead.
No	Set for daylight saving function deactivated. The current time automatically moves on hour behind.

* Note : Without current local time setting, this menu cannot be processed.

8. Setting TV Type

You can set your TV display mode with this sub-menu.

- ① Press or to select 'TV Type'.
- ② Press or to select 'Multi', 'PAL', or 'NTSC'.

Multi	When your TV is compatible with NTSC/PAL dual mode.
PAL	When your TV is only for PAL reception. Regardless of satellite input signal, the display will be done in PAL format.
NTSC	When your TV is only for NTSC reception. Regardless of satellite input signal, the display will be done in NTSC format.

6.3 System Parameter

- * *Note* : If the satellite input signal and your TV type are mismatched, the TV picture may be distorted. Even in this case, MENU will be displayed as normal. (e.g. When you receive PAL satellite input signal with NTSC TV type setting or vice versa)
- * *Warning* : Improper setting of the TV type will often result in the picture not being able to be viewed on your television. Picture will appear in black and white and roll rapidly.

9. Setting Aspect Ratio

This sub-menu allows you to select your TV aspect ratio to 4:3 or 16:9 according to your wishes.

- 1 Press or to select 'Aspect Ratio'.
- 2 Press or to select '4x3' or '16x9'.

4x3	When your TV is 4:3.
16x9	When your TV is 16:9.

- * *Note* : If you set 4 x 3 when the satellite input signal is 16 x 9, the right and the left parts of the original picture may not be seen.

10. Setting Screen

You can select the satellite input signal display mode.

- 1 Press or to select 'Screen'.
- 2 Press or to select 'P/S' or 'L. Box'.

P/S	When you set screen display boundary from Pan/Scan data of satellite input signal. (For signal for 16x9 program)
L.Box	You can watch 16 x 9 ratio screen by reducing original size vertically and horizontally.

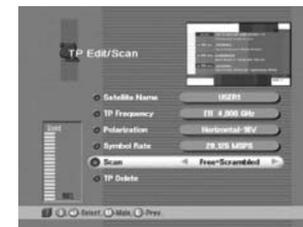
- * *Note* : 1. If you select 'L.Box', the screen might be distorted. Upper and lower part of the screen will be blocked with black stripes.
- 2. 'Screen' function is helpful when receiving 16x9 signal with TV of 4x3 format.

6.4 Transponder

1. TP Edit / Scan

After 'LNB Configuration' and 'Antenna Setup' procedure, when necessary, you can edit and/or add certain TPs (transponders)

- 1 Press MENU key.
- 2 Select 'Installation' with or , and press .
- 3 Select 'TP Edit/Scan' with or , and press .



- 4 Select the 'Satellite Name' which includes the TP you want to add/edit with or .
- 5 Move to 'TP Frequency' with and select the TP you want to edit with or .
- 6 If you want to add the new TP, enter the TP frequency with numeric keys.
- 7 Select 'Polarization' by pressing and the set the proper value for selected TP with or .
- 8 Select 'Symbol rate' by pressing and enter the symbol rate value for the selected TP with numeric keys.
- 9 After entering all values of the TP parameters, move to 'SCAN' section (column) with and press for storing all the entered TP data.
- 10 As a result, you can get the following menu showing the scanning process.
- 11 After scanning process, the first channel of scanned TP will be displayed.



6.4 Transponder

* Note : If the scan fails, please check whether your entered values are correct or not and the signal reception sensitivity is good or bad.

2. TP Delete

- 1 Press MENU key.
- 2 Select 'Installation' with or , and press .
- 3 Select 'TP Edit/Scan' with or , and press .
- 4 Move to TP section (column) with and select the TP you want to delete with or .
- 5 Move to 'TP Delete' section (column) by pressing and press .
- 6 When the menu asks you to confirm the deletion, press if you want to delete it or press EXIT key if you want to void the deletion.



6.5 Factory Set

The status of the receiver will return to factory default parameters by using this function.

- 1 Press MENU key.
- 2 Select 'Installation' with or , and press .
- 3 Select 'Factory Set' with or , and press .



- 4 When the menu asks you to confirm the reset, press if you want to reset or press EXIT key if you want to void the reset.

6.6 On Air Download

This receiver can be automatically updated via satellite OTA (Over The Air) with new channel lists and operational upgrades by selecting this function.

- 1 Press MENU key.
- 2 Select 'Installation' with or , and press .
- 3 Select 'On Air Download' with or , and press .
- 4 Select 'Start' with or , and press .
- 5 If you select 'Start', it starts downloading selected data.
On finishing the download, if necessary, Receiver is restarted.



* Note : Do not turn off Power, while upgrading Receiver.

6.7 Other Function on Remote Control Unit

1. TV / RADIO switching

You can use this menu when you change a TV channel to a Radio channel or vice versa.

- ① Press 'TV/RADIO'.
- ② When listening a radio channel, 'r001' will be displayed on the front panel.

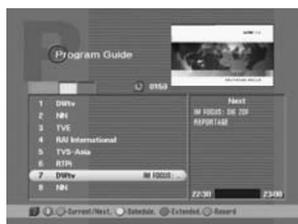
2. GUIDE(EPG:Electronic Program Guide)

You can check the channel information on the channels of the transponder you are watching.

- ① Press GUIDE key, then the following menu will be displayed.

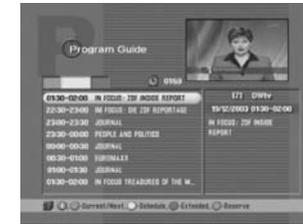


- * Note : 1. You can check local time, channel name, and other brief information on the current program.
 - 2. If you didn't set local time under 'System Parameters' section, the GUIDE function may not work properly.
 - 3. EPG information is delivered by Satellite from service providers. If the channel does not carry any signal on the guide data, this function may not work properly.
- ② Select Channel with or . Then you can see current or next program information of the selected channel.
 - ③ If you press GREEN, current or next program information would be converted to next or current program information respectively.



6.7 Other Function on Remote Control Unit

- ④ If you press YELLOW, you can see program schedule list of the selected channel.



- ⑤ If you want to see program information of a program in the program schedule list, select the program with or . Then you can see the program information in the right window.



- ⑥ If you press BLUE, you can see extended program information of the selected program.
- ⑦ You can set up automatic power on-off (Timer) or automatic recording on the program schedule list. After press YELLOW in the Guide(EPG) menu, select a program with / or / and press .
- ⑧ Select 'Once/Daily/Weekly/No' of 'Status' with or .
- ⑨ Select 'HD record' and set 'ON' with if you want to record automatically.



6.7 Other Function on Remote Control Unit

- ⑩ Press  to save the new 'Timer' setting.



- ⑪ Press MENU, EXIT or  to finish GUIDE menu.

- * Note : 1. Without 'STATUS' being actuated (Yes), 'Timer' does not work.
 2. If a program of prior time than current time ('Local Time' in 'System Parameters' menu) is selected, Timer does not work.
 3. Refer to 'Setting Timer' in 'System Parameters' in this manual.

3. Subtitle/Audio

You can adjust the subtitle and audio condition/status of the current channel.

- ① Press 'AUDIO' and subtitle and audio related window will be displayed on the screen.



- ② In this example, program spoken language is 'English' and user's selected subtitle language is 'Swedish'.



6.7 Other Function on Remote Control Unit

The contents of each parameter are as follows :

Subtitle Track	(Subtitle language #) of (all subtitle language available in this program) [Current selected subtitle language]
Audio Track	(Audio track #) of (all tracks available in this program) [spoken language in this program]
Audio Mode	Stereo → Mono-Left → Mono-Right
Dig. Output	Non-compressed / Compressed

- * Note : These subtitle and audio parameters are workable only when the receiving channel supports these functions.

4. Sleep Timer

Your receiver will automatically power-off when the time you set is passed. Press 'SLEEP' key until the right time you want appears.



- * Note : 1. You can set SLEEP TIMER in 30 minute steps up to 150 minutes.
 2. The SLEEP TIMER does not work while you are in 'MENU', 'GUIDE' or 'CHANNEL LIST'.

6.7 Other Function on Remote Control Unit

5. Teletext

Teletext Service is text data service from Service Provider. It is available only when the satellite signal carries teletext service data.

- Press BLUE key and wait.
If '*' sign pops up in the left corner of the screen as the following picture, the program provides teletext service.
In a moment the teletext service will be displayed.



- Teletext Service Data is displayed as following picture.



- Select your interesting item with numeric keys.
For example, if you want to see about 'CITY GUIDE', press 6 0 0 .



6.7 Other Function on Remote Control Unit

6. Channel / Information

Brief information is displayed, such as current channel type, name, local start/end time, guide information, current time, fav/normal mode, Audio mode and Audio ID.

- Press INFO, then the information bar will pop-up.



- * Note : If you have no information :
 - Check your local time setting is correct.
 - Information is not sent by the channel provider.

7.1 Recording

Your PVR is capable of recording 45+ hours with the installed 80GB hard disk drive. Channel bandwidth and complexity of programming will affect the total record time available.

You may install up to a 120GB hard disk to increase the record time to 80+ hours.

1. Start Recording

- ① Press RED(●) key to record current channel.
- ② In Program Guide menu, press RED(●) key to record after selecting a program you want. Then Record dialog menu will be displayed.



- ③ Some items can be edited in Record dialog menu.
 - * Note : Default recording duration time is setted for 2 hours or the duration time of scheduled program is setted for its scheduled time.
- ④ Press Ⓞ to start recording.



- * Note : When a program is being recorded, only programs stored on the HD can be played and the red R-icon is displayed.

7.1 Recording

2. Stop Recording

To stop recording manually, you must enter HD-Program Guide menu and press ORANGE(LIST) key.

- ① If any program has been played, press ORANGE(LIST) key to enter HD-Program Guide menu.
- ② If HD-Program Guide menu is displayed. Press ORANGE(LIST) key to stop recording.



- * Note : If there are any user inputs in HD-Program Guide for 5-minutes without any playing and recording, your receiver will go automatically to power-off.

7.2 Playing

1. Start Playing

You must select a program to play stored programs. For entering HD-Program Guide menu, press ORANGE(LIST) key.

- ① Press ORANGE(LIST) key.
- ② In HD-Program Guide, select a program by pressing  or .



- ③ Press  to start playing.

2. Trick Play Controls

For using trick play mode, you must press  or INFO key then HD-Information Bar will pop-up.



Trick Play Mode : Pause, Jump, Fast Forward, Fast Reverse, Resume.

	HD Playing	HD Paused
YELLOW 	Fast Forward	Jump Forward
GREEN 	Fast Reverse	Jump Backward
BLUE 	Pause	Resume
IVORY 	Stop	Stop
INFO or 	Info On/Off	Info On/Off

7.3 Delete Programs

You can delete any program in HD-Program Guide menu.

- ① Press ORANGE(LIST) key then HD-Program Guide menu will pop-up.
- ② In HD-Program Guide, select a program with  or .
- ③ Press RED() key to delete the program then Delete dialog menu will pop-up.



- ④ Press  to delete the program or EXIT key to void.

* Note : For deleting any stored program, you must stop both playing and recording.

7.4 Lock Programs

If you want to lock any program, enter the advanced menu by pressing MENU key with HD-Information Bar. After locking a program, you must enter the password for playing the program.

- ① Start playing a program.
- ② Press  then HD-Information Bar will pop-up.
- ③ Press MENU key, the advanced menu will pop-up.



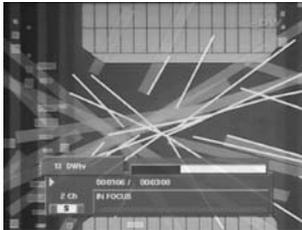
7.4 Lock Programs

- ④ Select 'LOCK' using  or .
 - ⑤ Press , LOCK enable or disable will be setted with Yes or No.
- * Note : The password for playing a stored program is the same password for any other lock operation.

7.5 Skip Play

You can set the part you don't want to play, such as advertisements. The skip part consists of start and end points. In all, 10 skip points are available.

- ① Select a program with  or , and press  to play in HD-Program Guide menu.
- ② Start playing and search the start point of skip play you want using trick play controls.
- ③ Press RED(●) key to set the start point.



- ④ Temporary start point will be displayed with a red pointer on the Bar.
- ⑤ Press RED(●) key to set the end point you want.
- ⑥ Then a proper pair of start and end points will be displayed with yellow pointers on the Bar.

7.5 Skip Play



* Note : To try setting on improper pair will be rejected.

- ⑦ Press RED(●) key at the position between start and end points, then the skip-point will be removed.
- ⑧ Press MENU key and select 'Clear skip points'.



- ⑨ Press , to remove all skip points.

7.6 Split Operation

You can split a single program recording into two segments. The operation takes a few minutes to complete splitting.

- ① Select a program with or , and press to play in HD-Program Guide menu.
- ② Search the split point you want using trick play controls.
- ③ Press MENU key, then the advanced menu will pop-up.



- ④ Select 'Split take' menu and press , then Split take dialog will pop-up.



- ⑤ Press to start splitting or EXIT key to void.
- ⑥ If split operation starts, the progress window will pop-up and you can see the status of process.



7.6 Split Operation

- ⑦ After splitting, HD-Program Guide menu will pop-up and split program will be selected.



7.7 Trick Play Controls Without OSD

You can use trick play controls without HD-Information Bar. Small yellow icon will be displayed for trick play controls. Additional play control is available in this mode. This function is activated at pause state using GREEN () / YELLOW (), and make the sequence played step by step.

- ① Select a program with or , and press to play in HD-Program Guide menu.
- ② Press INFO or to turn off HD-Information Bar.
- ③ Press BLUE (), GREEN () or YELLOW () to start controlling trick play without any OSD.
- ④ You can control trick play while yellow icons are displayed.
- ⑤ Besides, you can control step by step play with GREEN () / YELLOW () while pause state.

* Note : You can not control jump play without HD-Information Bar.

8.1 Insert CA Module(s) and Smart card(s)

To receive pay-TV channels you need a CA Module and a Smart card from the service provider (program distributor) of your preference. If you are subscribing to services from more than one service provider, you need to change different smart card or even different CA Modules.

Since a smart card is connected to a single service provider, a limited range of channels will be available. Without the CA Module and the smart card, you can watch only 'Free-to-Air' programs.

* PIN-Code

The card is loaded with a 4-digit code, a so-called PIN code (Personal Identification Number). Normally the PIN code is '0000' or '1234'. The PIN code is necessary for the future extra service offered by the service provider.

8.2 Receiving Scrambled Channels

With a DVB COMMON INTERFACE compatible CAM (Conditional Access Module) and a Smart card, you can receive relevant scrambled channels and/or encrypted channels. Viaccess, Conax, Cryptoworks, Nagravision, Irdeto and Mediaguard encryption platforms are compatible with DVB CI.

- 1 Insert a CAM into one slot of your receiver. (You can insert two CAMs at the same time)



8.2 Receiving Scrambled Channels

- * Note : 1. Insert the CAM fully into the slot so that the arrow marked on the CAM faces upwards and inwards.
2. Insert the smart card fully into the CAM so that the micro chip (gold color) faces upwards and inwards.

- 2 The message of 'CAM Initializing' will appear on the screen.
- 3 After the message 'CAM Initializing' has disappeared, you can select the channel you want.

8.3 Information about CAM and Smart Card

You can check the status of CAM and smart card inserted in their slots.

- 1 Press MENU key.
 - 2 Press or , and select the Common Interface you want, then press .
 - 3 Brief information on selected CAM will be displayed.
 - 4 If you want detailed information on the selected CAM select slot number 1 or slot number 2 with or and press .
 - 5 Proceed with further instructions displayed on the screen, depending on the CAMs in use.
- * Note : Further detailed information is not mentioned in this manual since the information depends on CAM and smart cards.

Specifications

LNB/Tuner Input	Connector	"F" Female
	Frequency range	950 ~ 2150 MHz
	Signal level	-65 ~ -25 dBm
	LNB Supply	14/18V - 400mA max
	LNB Control	22 KHz
	DiSEqC	1.0, 1.2 and USALS Compatible
Demodulator	Front End	QPSK
	Symbol Rate	1 ~ 45 Msps
	SCPC & MCPC	2Msps - 45Msps
	Spectral inversion	Automatic
System resource	Processor	list STi5518 with speed
	SDRAM	k4s641632d-7n
	FLASH	m29w160df-90n1
	EEPROM	24c16
Video Decoder	MPEG 2	Main Profile @ Main level
	Bit Rate	Up to 15 Mbit / S
	Resolution	720 x 576
	Standard Video	NTSC, PAL
	Aspect ratio	4:3, 16:9
Teletext	Compatible	OSD + VBI line insert
MPEG Audio	MPEG 1 layer 1 & 2	
	Type	Mono, Dual Mono, Stereo, Joint Stereo
	Sampling rates	32, 44.1, 48 KHz
Serial data interface	Connector	9PIN sub-male
	Data transfer	Max 115 Kbps

Specifications

Remote control unit	Code	NEC - IR
	Operation condition	7 meter
Power supply	Consumption	MAX. 40W
	Voltage	AC 120 V
	Supply frequency	60 Hz
Rear Panel Connector	Video out	1 x RCA
	Audio L/R	2 x RCA
	Dolby Digital Audio out	1 x RCA
	Serial data	9 pin sub D
	IF input	"F" Female
	IF Loopthrough out	"F" Female
	S-Video output	Y/C
RF modulator output	"F" Female	
Specification	Size	335 x 68 x 268
	Weight	3.2 Kg

Trouble Shooting

Problem	Possible causes	Remedy
LED on front panel does not light.	AC power cord disconnected.	Connect power cord properly into the power socket.
No Picture or sound.	Wrong connection of the video/audio output to TV input terminal. Wrong connection of satellite antenna cable. Wrong direction of satellite antenna. No signal or weak signal. Wrong setting of channel information in MENU screen.	Connect two terminals correctly with RCA or RF cable. Connect the antenna cable correctly. Adjust the direction of antenna. Check the cable connections, LNB and other equipment connected between the LNB and the receiver or adjust the antenna. Type the setting value correctly.
Black-and-white screen or V-Hold.	Your TV mode is different from satellite broadcasting mode.	Use TV of same mode or change the TV mode setting.
The remote controller is not working.	Battery exhausted. Fluorescent light interfering with the remote controller. Remote controller is incorrectly aimed.	Change the batteries. Switch off the light. Aim the remote control at the receiver.

GEOSAT pro warrants to the original purchaser that this shall be free of defects in WORKMANSHIP and materials for one year from the date of original purchase. During this period.

GEOSAT pro will provide free of charge both parts and labor necessary to correct defects in workmanship or material.

This warranty does not cover damage due to lightning, flood, fire or any other natural disaster, damage from accidental abnormal conditions, improper use, faulty installation, unauthorized service and any attempt to load or utilize third party firmware or software.

GEOSAT pro's liability under this warranty is limited to servicing or adjusting equipment returned to an authorized GEOSAT pro service center.

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