The User's Manual

Digital Satellite Receiver
YE-9000 Ultra PVR

Please, read this manual before you use this product.
The menu structure and specification can be changed without any notice in advance.

CONTENTS

1. SAFETY PRECAUTION
PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY FOR YOUR OWN SAFETY.

- **MAIN POWER SUPPLY :**
  ~AC 95-250V, 50/60Hz, Max 30W, SMPS

- **OVER LOADING :**
  Do not overload wall outlets, extension cords or adapters as these can result in fire or electric shock.

- **LIQUIDS :**
  Keep liquids away from the STB. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

- **SMALL OBJECTS:**
  coins or other small objects must be kept away from the STB as they can fall through the ventilation slots of the STB and cause serious damage.

- **CLEANING THE STB :**
  Disconnect the STB from the wall socket before cleaning it. Use a dry cloth lightly dampened (no solvents) to clean the exterior of the STB.

- **VENTILATION :**
  Do not block the decoder's ventilation slots. Ensure that a free air flow is maintained around the STB. NEVER stand the STB on soft furnishings or carpets. Do not use or store the STB where it is exposed to direct sunlight or near a heater. NEVER stack other electronic equipment on top of the STB.

- **ATTACHMENTS :**
  Do not use any attachments that are not recommended as these may cause hazards or damage the STB.

- **CONNECTION TO THE SATELLITE DISH LNB :**
  Disconnect the STB from the main power before connecting the cable from the satellite dish. Failure to do so can damage the LNB.

- **SERVICING :**
  Do not attempt to serve this product by yourself. Refer all servicing to qualified service agents.

- **LIGHTENING :**
  Do not attempt to service this product by yourself. Refer all times to the mains supply and satellite dish (Except when working on the LNB). However, the manufacture's instructions for safeguarding other equipment connected to the STB, TV set, must be followed during lightning storms.

- **EARTHING :**
  The LNB cable MUST BE EARTHED to the system earth for the satellite dish.

- **LOCATION :**
  Locate the STB indoor, place properly to prevent lightening, raining and direct sunlight.

2. COPYRIGHT & GLOSSARY

COPYRIGHT

• **VIACCESS™** is a trademark of France Telecom.

• **CryptoWorks™** is a trademark of Philips Electronics N.V.

• **Irdeto** is a trademark of Mindport BV.

• **Nagravision** is a trademark of Kudelski S.A.

• **Conax** is a trademark of Telenor Conax AS.

• **Mediaguard** is a trademark of Canal+ Technologies.

• **Stab-USAL** is a trademark of STAB, Italy.

• **DiSEqC™** is a trademark of EUTELSAT.

• **DVB™** is a registered trademark of DVB Project.

WARNING

MANUFACTURE cannot be held responsible for any kind of problems caused by the use software.
The use of software versions other than the OFFICIAL software will void our warranty.
It is strongly advised that only the formal software version should be used at all time.

GLOSSARY

• **ANTENNA**
A device that collects and radiates electromagnetic waves. Includes satellite dish and broadband antenna.

• **FORWARD ERROR CORRECTION (FEC)**
A system of error control for data transmission.

• **FREQUENCY**
The number of cycles or events per one second, which is expressed in the unit of Hertz(Hz).

• **INTERMEDIATE FREQUENCY (IF)**
A frequency to which a carrier frequency is shifted as an intermediate step in transmission or reception.

• **LOW NOISE BLOCK (LNB) DOWN CONVERTER**
A low noise microwave amplifier and converter which down converts a range of frequencies of If range

• **PACKET IDENTIFIER (PID)**
A set of numbers that identifies transport stream packets containing data from a single data from a single data stream.

• **POLARIZATION** Characteristic of an electromagnetic wave determined by the orientation of the electric field vector.

• **QUADRATURE PHASE SHIFT KEYING (QPSK)**
Phase shift keying in which four different phase angles are used.

• **TRANSPONDER**
An automatic device that receives, amplifies and retransmits a signal on a different frequency.

3. CONTENTS OF PRODUCTION

Please check and ensure that the following items are included within this product.
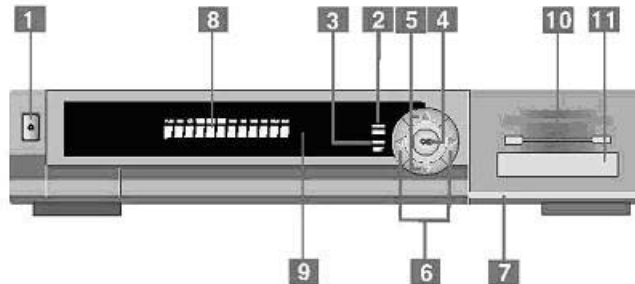
- **IRD SET TOP BOX**
- **REMOTE CONTROL UNIT**
- **BATTERIES for RCU (size AA)**
- **USER'S MANUAL**
- **Fully compliant to DVB standards**
- **Antenna / LNB control**

4. MAIN FEATURES

- 22KHz mode on/off
- 0/12V mode selection
- Automatic FEC detection
- DiSEqC 1.0 & 1.2 / USALS Compatible

- **Satellite / Channel support**

- 6000 TV channels and 2000 Radio channels storable. (Max. of 300 satellites & 6000 transponders are supported)

- **Video / Audio**

  - PAL / NTSC / Automatic selection
  - Multi-lingual audio support
  - Automatic channel search

- **OSD (On Screen Display) support**
  - 256 color User Interface
  - Multi-Language OSD menu (English /German / Turkish / Arabic / French / Italian / Romanian / Albanian / Russian / Bulgarian / Serbian / Persian / Swedish / Macedonian / Spanish)
  - GMT and Time setting
  - 8 Favorite channel group support
  - Page Up/Down function on the channel list
  - Various edit functions for User's channel Edit
  - PIG (Picture In Graphic) support in various menus
  - Zoom function support for desired location of the screen

- **Common Interface for Viaccess / Irdeto / Crypto Works / Nagravision / Mediaguard / Conax PCMCIA CAM 2 Slots**
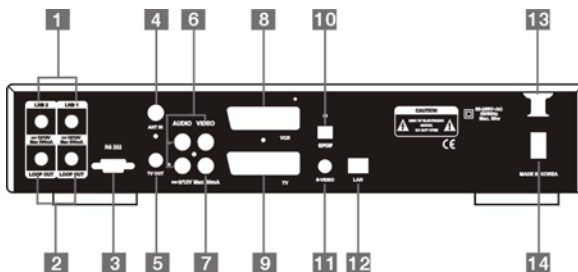- **Teletext supported with internal software**
- **Embedded Conax (1slot)**
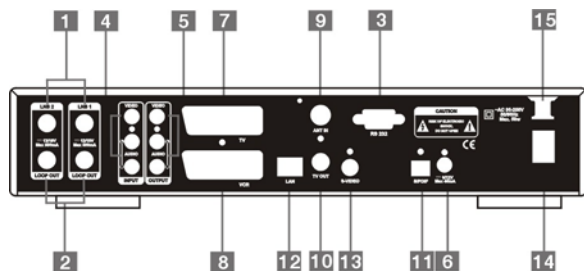
5. FRONT / REAR PANELS

Front Panel

1. Power ON / Standby mode
2. Menu / Select button
3. Exit button
4. OK button
5. Channel ▲ / ▼ button
6. Volume ◀ / ▶ button
7. Front door : Open
8. Front numeric display (VFD)
9. Remote IR sensor
10. Embedded CONAX : 1slot
11. Common Interface : 2 slots

Rear Panel

1. LNB1, LNB2 : Connects the satellite antenna
2. LOOP : Use it to connect with another set top box (Loop through)
3. RS232 : Uses for STB's program and software upgrade
4. ANT. IN : Connect with TV RF antenna
5. TV OUT : Connect with TV RF feed
6. VIDEO & AUDIO : Video/Audio output
7. 0/12V : 0 / 12volt output
8. VCR : Scart connector for VCR
9. TV : Scart connector for TV
10. S/PDIF : Digital Audio Output
11. S-VIDEO : S-VIDEO Connect for TV
12. LAN : Connect Lan port of PC or HUB
13. Main Power : ~AC 95-250V 50/60Hz, Max 50W
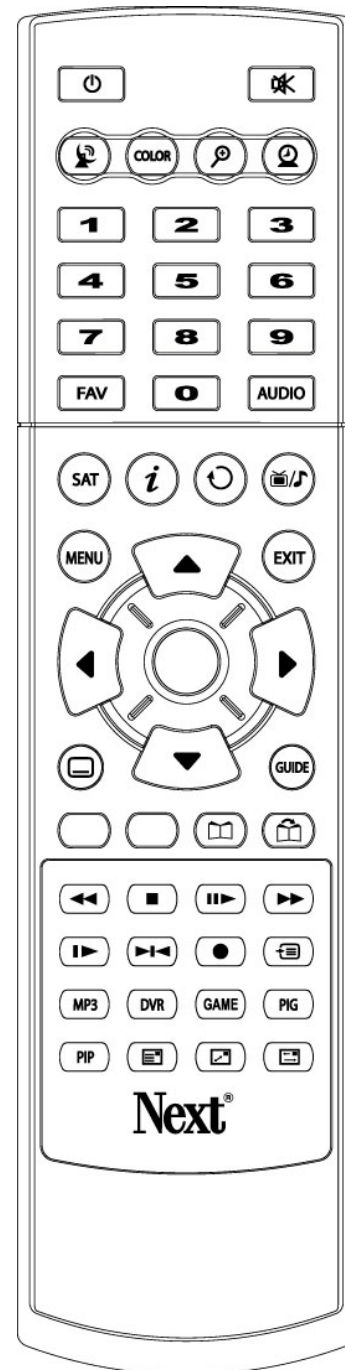14. Main Power Switch : On/Off

1. LNB1, LNB2 : Connects the satellite antenna
2. LOOP : Use it to connect with another
                 set top box (Loop through)
3. RS232 : Uses for STB's program and
                software upgrade
4. VIDEO / AUDIO Input : Video/Audio input
      connector for Camcorder or CCTV Camera
5. VIDEO & AUDIO : Video/Audio output
6. 0/12V : 0 / 12volt output
7. TV : Scart connector for TV
8. VCR : Scart connector for VCR
9. ANT. IN : Connect with TV RF antenna
10. TV OUT : Connect with TV RF feed
11. S/PDIF : Digital Audio Output
12. LAN : Connect Lan port of PC or HUB
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14. Main Power Switch : On/Off
15. Main Power : ~AC 95-250V
                     50/60Hz, Max 50W

6. REMOTE CONTROL UNIT

1. POWER : Standby / On
2. MUTE : Audio mute On/Off
3. SIGNAL : To view signal strength bar
4. COLOR : PAL/ NTSC/ AUTO Selection
5. PAUSE(II) : Press to pause current screen
6. NUMERIC Keys (1~0) : Numeric input
7. FAV : To see Favorite channel list
8. RCL : Press to recall last channel
9. MENU : To access main manu
10. SAT : To view Satellite list
11. CHANNEL▲/▼ : Channel Down / Up
12. VOLUME ◄/► : Volume Down/Up

13. OK/LIST : To view channel list (Enter)

14. EXIT : To exit from the menus
15. TV/RADIO : TV↔Radio mode select
16. AUDIO : For audio mode selection
17. INFO key : Press to view Information Box
18. EPG : To access EPG menu
19. TTX : To view teletext on TV Screen
20. RADIO : For radio mode selection
21. MP3 : To view MP3 data
22. DVR : To start DVR function
23. PIG : To view multi channels
24. PIP : To view other channel in PIP screen
25. PIP / List : To view PIP List
26. PIP / Live : To exchange live screen
27. ●POSI : To move PIP screen
28. ◀◀ : For fast rewinding
29. ▶▶ : For fast forwarding
30. ▶PLAY/ List : To view PVR list / play

31. SLOW : For slow playback

32. STOP : To stop function

33. TS(TIMESHIFT) : For timeshift function

34. REC : To view recording box

NOTE : The physical figure of RCU can be changed without notice in advance.
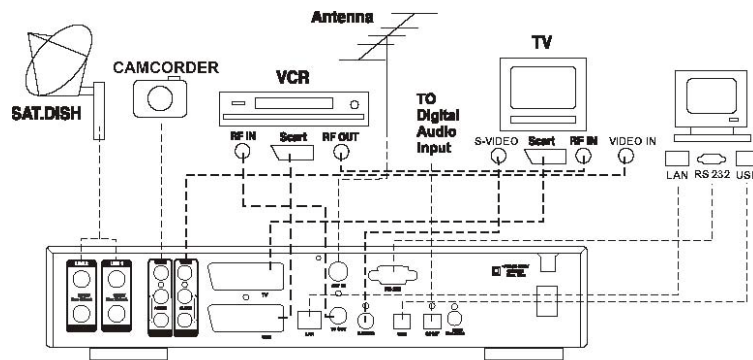
7. SET TOP BOX CONNECTION

CHECK POINT

• There are various ways of connecting the STB to your TV/Audio System. Certain methods will enable you to listen to the music in stereo sound of CD level quality.

• So ask your local distributor for assistance in setting up an Video / Audio configuration which will be best suitable to your unique requirements.

• Connect cables via Audio/ Video Outputs/ Inputs or Scart connector instead of RF cable, where possible.

• Make sure your Antenna system is correctly installed according to your environment.
• Connect the STB to high quality stereo TV and Hi-Fi equipment you have.

CONNECTION

1. **Turn off the main power supply** of the STB before **connecting or disconnecting the LNB1 or LNB2**.
2. Connect the TV's RF antenna connector to the **ANT IN** socket of the STB.
3. Use the RF cable with the STB to connect the **TV OUT** socket of the STB to the RF IN connector on the VCR.
4. Use other RF cable with the VCR to connect the RF OUT socket of the VCR to the RF IN socket of the TV.
5. Connect the coaxial cable from the LNB into the **LNB1, LNB2** socket of the STB and ensure the connection is tightened.
6. Use **LOOP** socket of the STB to connect it with input of the other STB.
7. Use the **VCR / TV Scart** socket to make the alternate connection with the scart socket of TV and VCR.
8. Use the **AUDIO L, R / VIDEO** socket to make the alternate connection with the Line socket of the TV and VCR.
9. Use the **0/12 Volt** socket to connect it with the 0/12 volt switch.
10. **RS232** socket can be used to download and upgrade the software of the STB. (Refer to your local agent)
11. Connect the main power plug of the STB to the mains wall socket.   (~**AC 95-250V 50/60Hz, Max 50 watts**)
12. Connect the S/PDIF output with the input connector of the device which is capable of receiving the optical digital Audio input.
13. Use the LAN socket to see broadcasting screen of STB on PC.
14. Use the VIDEO input to connect it with CCTV camera or camcorder for recording or play.

8. BASIC OPERATION

NOTICE :
If you are not a very skilled user, it is important that you carefully read this operating manual to get used to some of the essential technical settings required.

First, press the POWER button to turn on the STB from the Standby mode. Then, the Information Box will appear for a short time and disappear. By pressing the ⓘ button, the Info Box will remain on the screen. The display time of the Info Box is adjustable under the - System setting / OSD control / display menu. If the current channel has EPG (Electronic Program Guide) information with it, press the GUIDE button to see not only the current channel's, but also the other channels' EPG as well.

• Press the MENU button on the RCU to make the Main menu appear.
• Go to the LNB setting menu under the Installation menu and press OK button.
• **The default PIN code is 0000**
• Choose the right parameters for Satellite name, LNB frequency, 0/12V, 22KHz and DiSEqC 1.0 according to your LNB and satellite settings. If the desired satellite name and LNB frequency is not found in the given list, ask your local dealer for further information.
• When all the parameters are correctly chosen, you will be able to see the **blue level of the signal quality** from the incoming LNB signal.
• Then, choose the Channel search mode in the same OSD page and press OK button.
• And select the Search mode as you desire by using the ◀ / ▶ keys.
• Then, choose the **Start searching** mode and press OK button.
• The complete searching procedure will take a while. When the searching process is done (100%), press the OK button **to Confirm and Save** the new channel list.
• **For further guide of operations, please refer to the following details of this User's manual**.
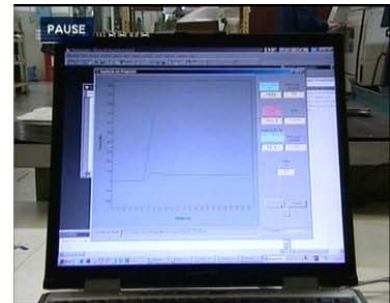
9. GUIDE OF FUNCTIONS

1. ⓘ button of the RCU once, then the information of the current channel (channel number, name, associated satellite, time and etc.) will appear. By pressing
2. ⓘ button twice, you will be able to see the further details of the program information and its running time. When you press this button for the third time, you will see the Encryption type of current channel.

• **Zoom function :** Press the Green color key to open the menu. You are able to zoom in the normal size of screen upto x2.
• **Volume control :** Use this volume lest ◀ / ▶ right keys to control the audio Volume level.
• **Teletext Subtitle :** Press the teletext key to view the teletext and subtitle information provided.
• **Video format control by COLOR key :** Press this key to choose the TV format. You can select the desired TV mode between Multi/ PAL/ NTSC.
• **Channel move by numeric key :** While viewing the channel, use the numeric buttons to move directly to your next desired channel. For example, just press 1 2 0 then the channel 120 will be displayed.
• **Pause screen :** Press the _____ key, when you want to stop doing something before continuing.

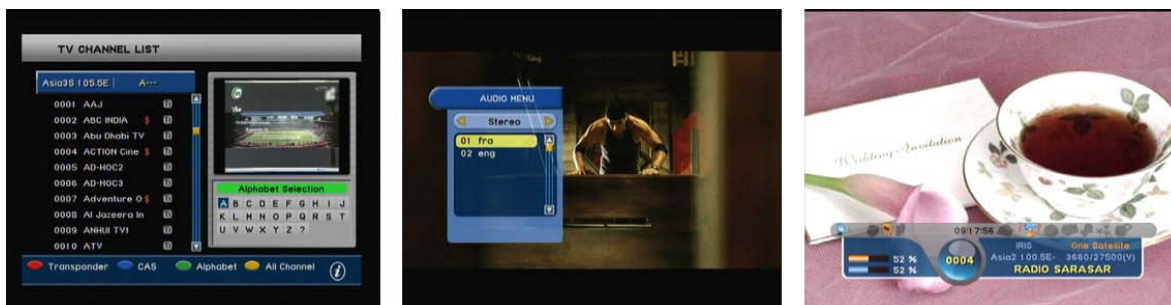* You can move this PIG live screen by using the ▲ / ▼ and ◀ / ▶ keys.

• **Channel list access (by OK/list button) :** Press OK/LIST Button to view the all TV/Radio channel list and use
    ▲ / ▼ keys to choose the channel, then press OK button to view that selected channel in the PIG screen.

•**Favorite channel list view (by FAV key) :** Press FAV key to view your reserved favorite channel lists. By pressing FAV key once, the first favorite channel list will be shown. If you press FAV key once more, the favorite group selection list will be shown where you can choose the desired favorite group.

•**EPG (Electronic Program Guide) access by GUIDE key :** To see the information of current showing TV/Radio services as well as the next program schedules, press GUIDE button of the RCU. If any EPG is available on that program, you will see the details such as description, start/end time and schedules etc. To see the extended information of that program, press ⓘ button of the RCU.

• VARIOUS SORTING functions in channel list menu : In this menu, use the ▲ / ▼ and ◀ / ▶ keys to move & select the desired channel, and then press OK key to view the live channel in PIG screen.

To see the list of channels in various sorting, use the color keys in the bottom of the RCU as follows; -RED for satellite / GREEN for CAS types / YELLOW for Alphabet / BLUE for All channels sorted list In the each chosen list above, use ▲ / ▼ keys to select and view the sorted lists as desired.

* **Sorting for combination of two or more condition is possible**. For example, choosing a Hotbird by using RED key and choosing a Conax by GREEN key then choosing Alphabet P through Yellow key will give you the complete list of channel names starting with letter P, encrypted with Conax receiving from the satellite Hotbird.
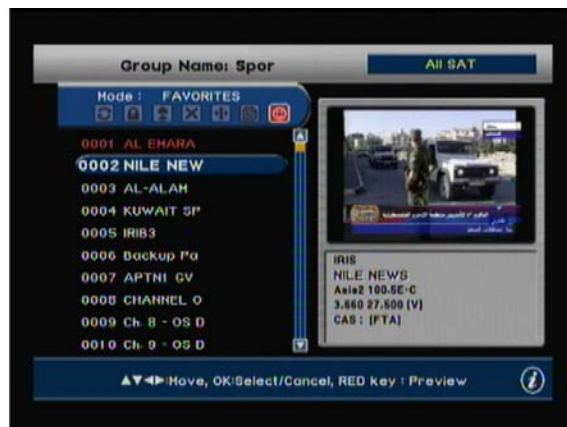
• **Audio selection menu (by AUDIO key) :** You can choose the audio language of the channel, by pressing AUDIO key of the RCU when a current program supports the various soundtrack. First, you can choose the STEREO, LEFT and RIGHT by using ◀ / ▶ keys. And use ▲ / ▼ keys to select the desired audio track.

• **Radio channel mode:** Use this TV/Radio button to toggle between the TV and Radio channel mode.

10. OPERATION OF MENU

10.1 CHANNEL ORGANIZE

10.1.1 TV / Radio channel edit

In this menu you can edit the TV/Radio channels in various ways. To edit the Radio channels, press TV/Radio button to change to Radio CH edit mode. Use ▲ / ▼ keys to select the desired edit mode and press OK button.

* While editing the channels, press RED key of the RCU to view the selected channel in the PIG screen.

• **MENU** : Select the channel you want to rename and press OK key, then the KEY PAD window will appear. Use the given keys from the pad to rename the new CH name. Press the BLUE key of the RCU to delete, and press RED key to Save & Quit when you are done with renaming.

• **LOCK** : Select the channel you want to be locked and press OK button to LOCK. If you press OK button twice
the selected channel will be UNLOCKED. Use EXIT key to get out from the menu when you are done.

* When you select the LOCKED channel while viewing, you will be asked for a password in order to access the channel. So, use this feature to **KEEP THE CERTAIN CHANNELS AWAY FROM YOUR CHILDRENS VIEW.**
• **SKIP** : Select the channel you want to be skipped and press OK button to skip. If you press OK button twice the selected channel will be UN-skipped again. Use the EXIT key to get out from the menu when you are done.
• **DELETE** : Select the channels which you want to be deleted and press OK key. And you will see the delete marking' indicated next to the channel names. The selected channels will be deleted when you exit the channel edit menu.

* Deleting is different from skipping function as it removes the channel completely and permanently from the memory of the STB. The ONLY way of recovering the deleted channels are performing a new CH Search.
• **MOVE** : Select the channel you want to be moved with OK key, and use ▲ / ▼ keys to relocate them.
• **SORT** : By pressing OK key, the list of sorting types will appear.   Select the desired one and press OK to perform it.

• **FAVORITES** : Press the GREEN button to add or delete the channels from that favorite group. The YELLOW button is provided for deleting the selected group.

10.2 INSTALLATION

10.2.1 LNB Setting

In this menu, you are asked to set the proper conditions for LNB and other switches such as DiSEqC, 0/12V, and 22KHz tone. Especially if you want to perform a multi-satellite search, it is required that you complete the settings for corresponding satellites in this menu.

• **Satellite Name** : Select a satellite which you want to set the conditions for. And **if want to add a new satellite name**, select the '**APPEND**' from the bottom of the given satellite list then press **BLUE button** of the RCU to name this new satellite.
•**Tuner Index** : Select & Tuner connected to a satellite antenna line.
• **LNB Frequency** : Select a desired LNB frequency from the list given, or add a new one by numeric key of RCU.
• **0 / 12 Volt control** : Select 'ON', if you are using a 0/12V switch for selected satellite. Otherwise choose 'OFF'.
• **13 / 18 Volt control** : Select 'AUTO', then this voltage control will apply automatically for the selected satellite.
• **22KHz Tone Control** : Select 'AUTO', then this tone control will apply automatically for the selected satellite.
• **DiSEqC 1.0 Selection** : Press OK key to display the list and choose the proper selection for your DiSEqC switch. When you choose **AUTO**, the satellite connected to the DiSEqc switch automatically called up.
• **Transponder** : Select the desired transponder from the given TP list. If the desired TP frequency is not shown in the given list, then press GREEN button to go to SAT/TP Edit menu and edit a new TP frequency. **Refer to SAT/TP Edit menu for further details.**

* If all of the above parameters are set correctly, you will be able to see both of the Signal (RED bar) and Quality (Blue bar) level at the bottom of the menu.

Notice : A minimum level of stable signal Quality is required to be able to search and view the channels.

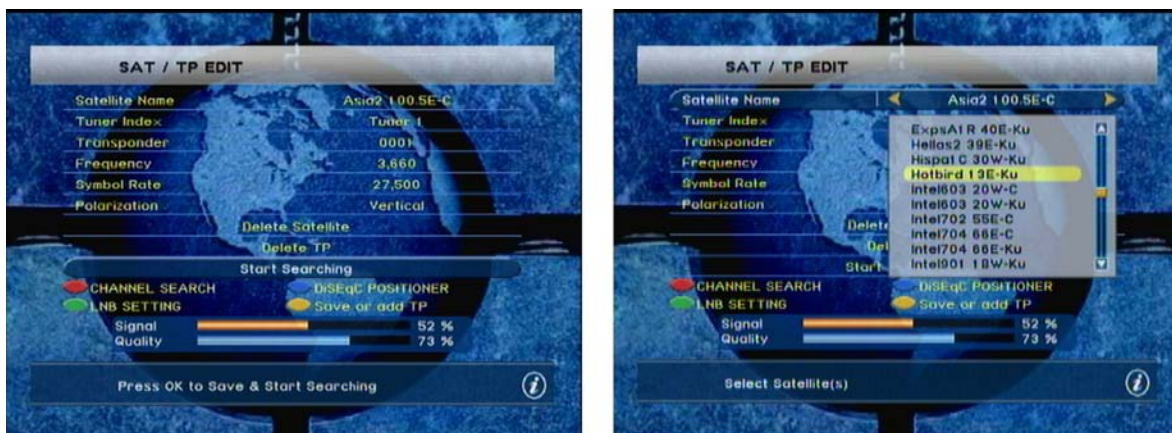*** Use the RED / GREEN / YELLOW / BLUE keys of the RCU to directly access the followings from this menu ;**
- RED key : Channel search menu
- GREEN key : SAT/TP Edit menu
- YELLOW key : SAVE or ADD satellite menu
- BLUE key : SAT Name Edit menu

10.2.2 Channel search

- **Search Mode** : Press ◀ / ▶ keys or OK key to view and select the desired search mode
  One satellite : Will search only one selected satellite.
  Multi satellites : Will search more than two selected satellites by one searching procedure.
  One transponder : Will search only one selected transponder.
  Multi transponders : Will search more than two selected TPs within the same satellite.
  PID search : Will search a certain channel with known Video, Audio, PCR PIDs.

- **Satellite Name** : Press OK button to display the complete list of satellites and choose the one which you want to perform the search. If the desired satellite name is not in the list, press the RED button to move to the LNB setting menu then **ADD a new satellite name**. **Refer to LNB setting menu for further details.**
- **LNB Frequency** : Press OK button to see the frequency list given and select the proper frequency according to the current LNB being used for the selected satellite. You can also enter the frequency by using the numeric keys of RCU.
- **DiSEqC 1.0 selection** : Press OK key to display the list and choose the proper selection for your DiSEqC switch.
- **Transponder** : Press OK button to view the transponders list of the selected satellite then again use OK button to select the desired one. If the desired TP frequency is not shown in the given list, then press GREEN button to go to SAT/TP Edit menu and edit a new TP frequency. **Refer to SAT/TP Edit menu for further details.**
- **Network Search** : Some of the new transponders being broadcasted in the satellite could be missing in the given TP list. In this case, there is a good chance that the information of those new transponders are being sent through   the given TP.   So, if you set the Network Search to 'ON' status and search that TP, then you will be able to catch the channels in those new transponders.
- **FTA/Scrambled** : Select 'FTA Only' to search the Free To Air channels only. Otherwise, select 'ALL' to perform the   search for all the encrypted + FTA channels.
- **Start Searching** : If all of the above parameters are set correctly, you will be able to see both of the **Signal (RED bar) and Quality (Blue bar) level** at the bottom of the menu. Now, press OK button(Blue key) to start searching.

10.2.3 SAT/TP Edit

In this menu, you can delete the existing satellites and you can also add/delete the transponders.

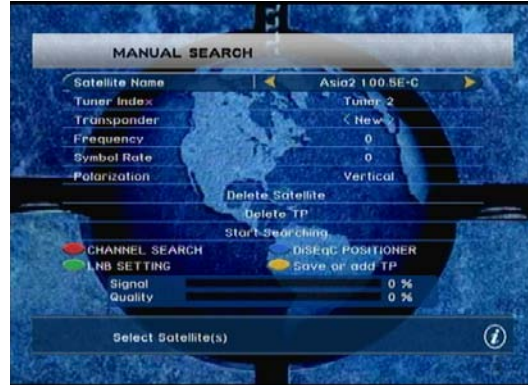(If you want to ADD new satellites, Go to the LNB setting menu).

• **Satellite Name** : Select a satellite which includes the transponders you wish to edit (Add/Delete).
• **Transponder** : Select a transponder which you want to edit, and you will be able to edit its Frequency, Symbol Rate and a Polarization.

* If you want to **ADD a new TP** for the selected satellite, choose the '**NEW TP**' from the end of the given transponder list. Input the correct frequency, symbol rate and polarization then **press the BLUE key of the RCU to add this new TP.**

• **Frequency** : Input the desired new TP frequency by using the numeric buttons of RCU.
• **Symbol Rate** : Input the desired new Symbol rate by using the numeric buttons of RCU.
• **Polarization** : Select either the Vertical or Horizontal polarity for selected transponder above. **After setting all the above parameters, press the BLUE key of the RCU to SAVE the current edited TP.**
• **Deleting Satellite** : First, press OK button to open the Delete Satellite window. Then use ▲ / ▼ & ◄ / ► keys to move and press OK to select the satellites which you want to delete. After selecting satellites, press RED button of the RCU to delete the satellites.

• **Deleting TPs** : Also, press OK button to open the Delete Transponder window. Then use ▲ / ▼ & ◄ /

► keys to move and press OK to select the TPs which you want to be deleted. After selecting transponders,

press RED button of the RCU to delete the transponders.

10.2.4 Manual Search

You can add transponder in this menu.

- **Satellite Name :** Select the satellite in which the transponder that you want to add.
- **Tuner Index :** You can select the number of Tuner.
- **Transponder :** The transponder you want to add, will be a New transponder. If you select any
  transponder within the current TP list you can also change its parameters such as frequency, symbol rate
  and polarization.

Now enter the frequency, symbol rate and polarization values and add new TP.
- Frequency : Enter the new TP frequency value by using number keys of the RCU.
- Symbol rate : Enter the new TP symbol rate value by using number keys of the RCU.
- Polarisation : Define the new TP's polarization.
  Save the new TP parameter by pressing the YELLOW hot color key if you are save about the parameters
  entered correctly.

10.2.5 DiSEqC Positioner

If you have a DiSEqC 1.2 motorized system, you can use this DiSEqC 1.2 positioner functions.

- **Satellite Name** : A selection of this satellite names will be used to identify a motor antenna position.
- **Tuner Index :** You can select the number of Tuner.
- **Mode** : Choose 'DiSEqC Motor' to use this motorized system.
- **Transponder Frequency** : This selected frequency will be used to catch the strong level of signal.
- **Command Mode** : Choose between the User and Installer modes. **User** : This mode is used to fine-tune
  the position of the motor antenna for better signal reception **Installer** : This mode is used to search for
  the position of a selected satellite manually.
- **Movement**
 In User mode : The movement will be adjustable by fine tuning.
 In Installer mode : The movement will be adjustable by East / West going command.
- **Motor Control** : Go to - To select motor control
- **Store Position** : To store a new position, or Overwrite a position

10.2.6 USALS

• In order to use this USALS function, you need to have the Rotor installed to your Dish mount
• Select the desired satellite which you wish to preform the search, then the Sat Longitude will be automatically changed.
• Now, just put in the numeric data for your Longitude and Latitude of your Dish location.
• And wait for a short time,until the Dish automatically finds the desired satellite.
• Once you find the 1 satellite position, the others will also follow automatically.

To use this USALS function, please refer to your local installer or distributor of our STB.

10.3 SYSTEM SETTING

10.3.1 OSD Control

In this menu, you can set the preferences regarding the On Screen Display of your choice ;

• Volume Bar Time out : If set for 5 seconds, the corresponding display will disappear after 5 seconds.

• Menu language : Select the language which you want the OSD to be displayed in.
• Subtitle language : Select a subtitle language serviced.
• Audio language :
• Text Color Type :
• Back ground Image :
• Transparency : Higher the OSD transparency, you will be able to see the live picture more clearly on the back screen.
• Info Box Display :
• Logo Display :

10.3.2 A/V Output Setting

Choose the TV type between PAL/NTSC/Multi and if you have the TV supporting RGB, select RGB mode to get the **best picture quality**. Also, if you have a TV which supports the 16:9 format, choose the Letter Box. AUX mode is provided for a case when you connect the other IRD to a VCR scart of this STB, choose the IRD to view the video of the other IRD connected. Finally, choose required RF settings. The default is set for RF channel number 38.

10.3.3 Local Time setting

Select the GMT Usage as you desire. If you set the GMT Usage 'ON', this means you will get the time reference from the broadcasted stream of the satellite. Also, set the proper GMT time offset as you require. When you don't want to use the GMT time as a reference clock, use the Manual time by setting the Hour and Minute according to your local time.

10.3.4 Set on/off Timer

In this menu, you can set 8 event timers for selected channels. Choose the event number first, and select the status for Usage of the timer. On/Off Mode means whether you will turn On or Off the STB with the timer. Input the parameters of desired channel and the Time which you want the timer to start operate.

10.3.5 Parental control

In this menu you can set the Locking status of several menus which will prohibit the accessing of those menus from the unwanted person (ex. Your children). And you can also set the desired age rating for

channel accessing here. If you wish to change the password, input the current PIN then new PIN, and verify to complete.
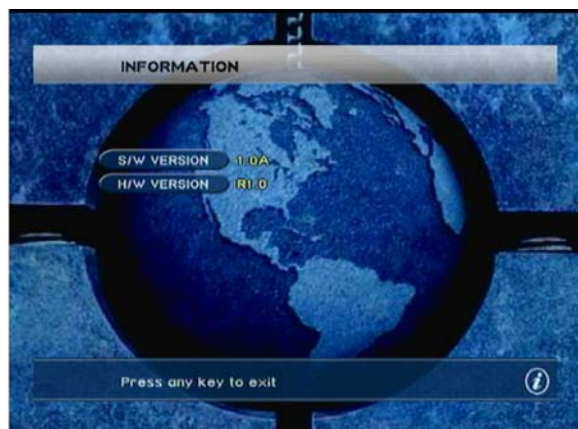
10.3.6 Memory Management

Factory setting is required after a certain upgrade of the STB's software. In this case, you will be notified by your local installer or distributor in advance. And **Performing a factory setting will DELETE ALL THE CHANNEL related data, so DO NOT perform this factory setting if you are not asked to do so**.

10.3.7 STB upgrade
We would like to recommend NOT to use this function in the End User side. So, please kindly contact your authorized service person or installer.
□.* **Program** : Operating software of the STB / **Data** : Satellites, TP, Channel relating data   will be transferred.
□.**H/W Version** In this menu, you will be able to **check the version of the lasted software** installed in your set top box.

10.4 PVR + Network

10.4.1 Hard Disk Information

 You can see the information of Hard Disk which is attached in the STB.

• Model Name : The name of Hard Disk
• Firmware Version : The Version of Hard Disk
• Hard Disk Size : The size of Hard Disk and it is related to the time which you can record
• Free Space : The remaining space after you use Hard Disk

10.4.2 Hard Disk Format

The setting of Hard Disk will be back to the beginning.

* Caution : All the broadcasting which is recording will be deleted.

10.4.3. Hard Disk Standby Time

You can set up the time which turns the Hard Disk to 'Standby mode' when you don't use the HDD functions (Recording, Playback, Timeshift).

10.4.4 Set Record Timer

You can set up the timer for channel recording
• Event number : The number of recording timer. You can set up the 32 recording timer.
• Usage : Unuse / Use
  Select whether you will use the recording timer or not.
• Record Source : Tuner / DVR
  Select the source for storing.
• Satellite Name : Select the satellite of channel for recording.
• Channel Name : Select the channel for recording.
• Date : Set up the date of recording.
• Time : Set up the time for recording.
• Duration : Set up the recording time.
• Timer Control : Once / Daily / Weekly Select the 'once', 'daily', or 'weekly' as you want to record.

10.4.5 Network Address Setting

Using VLC Media Player, stream can be played on the PC through TCP/IP.

You need to input IP Address, Network Mask, Gateway Address, and Mac Address.

* Refer to the below for more details about Network Setup and VLC Media Player.

10.4.5.1 IP setting Instruction for PVR model (with VLC program)
* Pls refer to below instruction to set the **PVR's IP configuration** with your **VLC viewer program** installed in your PC.
 * Important Notice : about the PVR connection with your PC.
 a. If your PVR is directly (not through network) connected with your PC : **use the direct** LAN cable.
 b. If your PVR is indirectly (through the network) connected with your PC : **use the twisted** LAN cable.

10.4.5.2 PVR receiver Network IP configuration

IP Address setting
   In order to set the proper and unique IP address for your PVR connected in your Network (or directly connected with your
   PC) connection, you have to know the IP address which is not being used at the moment. And to find the IP address
   which is not being used, you can use the DOS commands (ipconfing / ping) under the Window environment of your PC.
       Follow the below instruction on your PC.

   Start menu   Execute   type in the command '**cmd**' and press enter or
   Start menu   Program   Assistant program   Command prompt and type in the command '**ipconfig**' and
   press enter

Like above picture, Window will show the IP information of your current PC.
For above case, the current IP address of 192.168.1.80 is being used by your PC. So, you will have to find the other IP
 address which is not being used. And you can do this by using the 'ping' command.

▶ Type in the 'ping 192.168.1.81' on your command prompt and press enter.
Then, you will see the result like below picture. Since there is a reply like above, from the
current IP address of 192.168.1.81, this means the current IP address of 192.168.1.81 is
being used.
So, you have to find the other IP address which is not being used, by trying another IP address with ping command.

▶   Now, type in the 'ping 192.168.1.12' for example, on your command prompt and press enter. Then, you will see the result
like below picture.
In above case, there is no reply but there is a 'Requested timed out'. This means the current IP address of 192.168.1.12 is

not being used. So, you can use this IP address for your PVR connection.

▶**For Network Mask and Gateway Address** : You can use the same address which appears on your ipconfig command result. And type in the same address in your PVR.
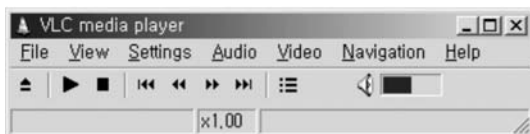

10.4.5.3 VLC Program User Instruction

Notice : While the VLC program is playing the Video and audio, the Remote control & Buttons on the front panel of PVR will **NOT** be in operation.

■ Features available in VLC media player with PVR
▶**Play** and view the **main channel** screen.
a. ▶ Channel **Up** & **Down** of main channel screen.
b. ▶ Play and view the **DVR** channel input.

1. Install the VLC Media program and execute. Then, you will see the below VLC player on your PC screen
2. Choose File Open Network Stream and click

(**The more features will be upgraded later**).

▶ To view the **Main** channel, input : **http://ip** address/main
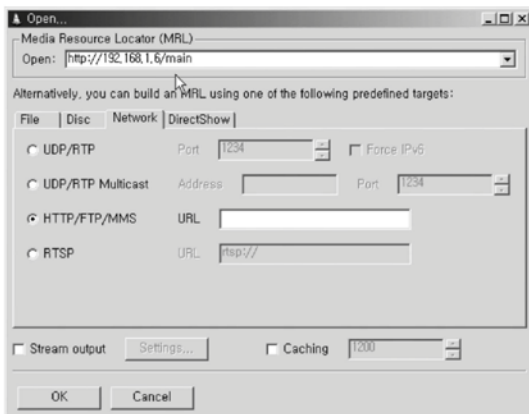▶ To move to **Up** channel , input : **http://ip** address/up
▶ To move to **Down** channel , input : **http://ip** address/down
▶ To view the **DVR** channel, input : **http://ip** address/dvr

[Example] for below picture case, the **ip address** is **http://192.168.1.6/main**

■Recording the channel with VLC Medial Player
　　▶You are able to record the channel stream received from the PVR with your VLC media player on your PC.

Recording Instruction

2. Choose File Open Network Stream and click
3. Input your 'IP address/command' to open the channel from PVR.Then, **check (V) the Stream output** like below picture and **press the Setting button** to enter the setting menu.

4. Now, **check(V) the File** menu box, then define the file name and your desired **location for the file to be saved**. You can also use the browse button to locate the saved (recorded) file location on your PC.

a. ▶ Use of **Play locally** menu
b. ● To **View and record** the channel with VLC player : **Tick** the Play locally menu
c. ● To **just record** the channel without viewing : **Do NOT Tick** the Play locally menu Now, just **press the OK button** on the bottom and the Recording process will start.

You will be informed, when there is more features available with this VLC medial Player with our PVR receiver. Thank you.

▶ You can always **download your free VLC media player** at the following website : **http://www.videolan.net/**

10.5. PIP

10.5.1 PIP

• PIP On / Off : Press [PIP] button to watch other broadcasting in the PIP screen while watching LIVE.
Press [PIP] button repeatedly to remove the PIP screen.

• PIP Position : Press [POSI] button to move the position of PIP screen.
• PIP List : Press [PIP / LIST] button to display the list of PIP and you can select the channel which you want to watch in the PIP screen.

* Exception: If the transponder of PIP channel is different from that of LIVE channel, it can not be displayed.

• PIP / LIVE Toggle : Press [PIP / LIVE] button to exchange Live screen with PIP screen.

10.5.2 Recording

a. LIVE Recording: Press [REC] button while watching screen to display the recording box. Press [MAIN] button to start recording. Then, you can check the status and process time of recording at the right side of screen.

b. PIP Recording: Press [REC] button while watching screen to display the recording box. Press [PIP] button to start recording. Then, recording time will be displayed at the upper side of PIP screen.

c. Stop LIVE & PIP Recording: Press [STOP] button to quit the recording. Select the screen (MAIN or PIP) you want to stop recording. Then, the recording icon and time will disappear.

10.5.3 Playback

a. PLAY / LIST : Press [PLAY / LIST] button to display the PVR LIST. Select the recorded channel at the list to
b. Slow : Press [Slow] button for slow motion playback. Slow motion speed (1/2X, 1/4X, and 1/8X) can be adjusted by pressing the [Slow] button repeatedly.
c. Pause : Press [Pause] button to stop playing.
d. Stop : Press [Stop] button to stop playback function. Then it will go back to the LIVE video.

watch.
You can see the information of selected channel at the right side.

  b. Forward : Press [   ] button for fast motion forwarding. Press [   ] button repeatedly to change the

speed (2X, 4X, 8X, and 16X).

  c. Backward : Press [   ] button for fast motion rewinding. Press [   ] button repeatedly to change the

speed (2X, 4X, 8X, and 16X).

10.5.4 Timeshift

a. Timeshift On: Press [TS] button while watching LIVE to use timeshift function. It stores current channel for a while and when the Playback is possible, you can see a LIVE video on the PIP screen and stored video on the MAIN screen.

b. Timeshift Off: To stop the Timeshift function and go back to the LIVE video, press [STOP] button.

10.5.5 Mp3

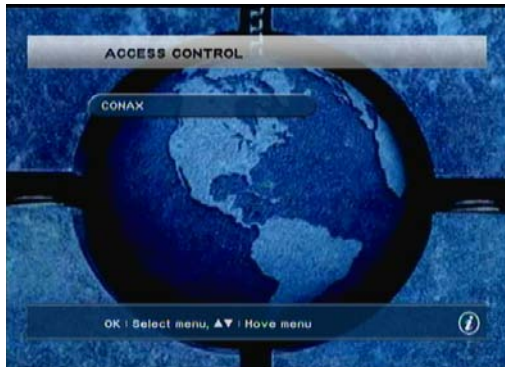a. MP3 LIST : Press [MP3] button to display the MP3 data downloaded from PC in the separate MP3 screen. If you cannot see the list, you should download MP3 files according to 'c' below. Move the MP3 files using [▲ ▼] button and to play the selected file, press [OK] button. Then, the list of selected MP3 files will be displayed at the left-bottom side.

b. MP3 Play List: Press [◄◄] [►►] to move MP3 file in the MP3 Play List. Select MP3 files you want to listen and press [▶] button to play the selected files. If you press [MP3] button again, a small screen which only shows the title of a song will appear. If you want to listen to other music, repeat the above process.

c. MP3 Data Download From PC: You can download and erase MP3 files in PVR by using Ethernet Explorer

10.5.6 DVR

a. DVR On / Off: When you press [DVR] button one time, DVR turns ON and press [DVR] button one more time, DVR turns Off. When it turns On, DVR icon will be displayed at the right side.

b. DVR Recording: Press [REC] button when DVR is On to record DVR. When you want to stop recording, press [STOP] button.

c. DVR Playback: You can use Playback function of DVR channel as same function as Playback of LIVE channel.

10.6 ACCESS CONTROL [Embedded CONAX] ※Option

If a valid CONAX smart card has been inserted in the embedded CAM, you will be able to see the below menus.

a. Ordering
b. Subscription status
c. Event status
d. Change card PIN
e. Maturity rating
**** The contents of the above menu can be varied according to the service provider.**

10.7. COMMON INTERFACE

10.7.1 Slot #1 / Slot #2
The Common Interface menu varies according to the each CAM inserted.
If the valid module has NOT been inserted yet, the message **'EMPTY'** will be displayed.

11. SPECIFICATION

11.1 IRD Specifications

Specification	Description
Power	~AC 95 - 265V SMPS
Input Frequency	950~2150 MHz
Data Transfer	RS 232C, Male type, 115Kbps
SCART	2 Scarts for TV / VCR
A/V Out	Video, Audio (left / right)
LNB Power	13 / 18 volt (500mA Max)
Modulation & FEC Type	QPSK / Multiple convolution coding
Digital Audio	S/PDIF Output (OPTION)
DiSEqC support	DiSEqC 1.0 / 1.2 Compatible
Tone Switching	22KHz tone
RF Modulator	UHF CH 21~69 with PAL I/G/K
Video Spec.	MPEG-2 / DVB Compliant
Video Compression	MP@ML in MPEG-2
Aspect Ratio	4:3 and 16:9
On Screen Display (OSD)	Full resolution with 256 Colors
Electronic Program Guide (EPG)	Supported with TV's VBI insertion mode
Common Interface	Viaccess / Irdeto / Cryptoworks Conax / Nagravision / Mediaguard

11.2 Hard Disk(HDD)

Specification	Description
MP3 Decording	MPEG-1, Layer3
HDD Storage & Recording tme	80G byte/ 44Hv in 4Mbps bit rate
Camera interface (DVR) ※Option	PAL/ NTSC, 720 x 480 pixels
Ethernet port	10 Base-T

11.3 Video Channel Process

Specification	Description
Input frequency range	950~2150 MHz
Channel capacity	6000 TV and 2000 Radio Channels
Tuning system	PLL digital synthesis channels
Tuning step	125KHz Max
Modulation	QPSK (DVB Compliant)
Inner FEC	FEC Rates : 1/2, 2/3, 3/4, 5/6, 7/8 (DVB specification)
Outer FEC	Input Symbol Rate
Input Symbol Rate	2 ~ 45M symbols/sec
IF Bandwidth	27MHz
Connector Type	F type (IEC 169-24 female)

11.4 MEPG Audio

Specification	Description
Operation mode	Stereo and Left/Right (Mono)
Sampling Rates	32, 44.1 and 48KHz
Resolution	18 bit digital to analogue Converters

11.5 Video Specification

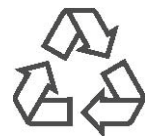| Specification	Description
Video spec.	Meets ETR 154 amended in ALM-95-021
TV System	PAL I/G/K
Video decoding	ISO / IEC 13818-2, MP@ML
Resolution - PAL	720 pixels x 576 lines x 25 frames /sec
Resolution - NTSC	720 pixels x 480 lines x 30 frames / sec

11.6 RF Modulator

Specification	Description
Connection	IEC coaxial female 9.5mm (IEC 168-2)
Features	Input RF bypass supported
Channel range	CCIR UHF E22-69 adjustable
Pre-set channel	Channel 38

11.7 Power Supply

Specification	Description
Input Voltage	~AC 95 - 250V, 50/60Hz
Type	SMPS
Power Consumption	Max. 50 Watt
Power protection	Internal fuse

11.8 Others

Specification	Description
Physical figure (WxHxD)	340 x 60 x 252mm
Weight (net)	Approx. 3.5 Kg
Operation Temp.	0 ~ 45

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