









The User's Manual **Digital Satellite Reciever**



YE-9000XCAM Ultra/

CI/FTA

Embedded CONAX Embedded DVB Common Interface Ethernet port built-in



Please read this manual carefully The menu structure and specification can be changed without notice in advance

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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 round 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 service 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.

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- DVB™ is a registered trademark of DVB Project.
- RPN™ is a registered trademark of NescoLogic

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)

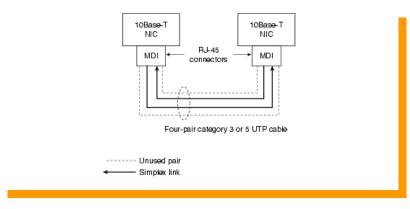
Phase shift keying in which four different phase angles are used.

TRANSPONDER

An automatic device that receives amplifies and retransmits a signal on a different frequency.

• **Ethernet** (10/100base-T)

A type of Network connection being used in this product for accessing Internet.



CONTENTS OF PRODUCT

- IRD SET TOP BOX
- REMOTE CONTROL UNIT
- BATTERIES for RCU (size AAA)
- USER'S MANUAL

MAIN FEATURES

- Fully compliant to DVB standards
- Antenna / LNB control
 - 22KHz mode on/off
 - 0/12V mode selection
 - Automatic FEC detection
 - DiSEqC 1.0 & 1.2 / USALS Compatible
- Satellite / Channel support
 - Up to 6000 TV channels and 2000 Radio channels storable.
 (Max. of 300 satellites & 4000 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 / Makedonian / 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
 - Game: Picture Puzzle, Chess
 - (Ref. : It is possible to play the puzzle after executing Live Image Capture.

The puzzle can be only played by a captured image)

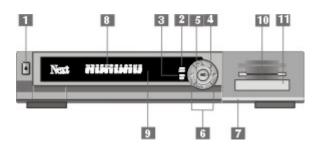
- Live Image Capture : A function setting up a watching channel into a background image

(* How to use)

- 1. Press pause key for capture of image while watching a channel
- 2. Press Blue key for saving the captured image
 - Recapture : Red key on RCU
 - Save : Blue key on RCU
- 3. Captured image is set up into a background
- Embedded Conax (1slot / Bottom) (for Next9000 Ultra model)
- 2 x Common Interface for Viaccess / Irdeto / CryptoWorks / Nagravision / Mediaguard / Conax
 - PCMCIA CAM 2 Slots (for Next9000 Ultra and CI models)
- Teletext supported with internal software
- Advanced Entertainment Functions
 - CHESS
 - Picture Puzzle™
- Network functions
 - RJ-45 connector
 - S/W update via Internet
 - RPN™(Remote PC Navigation): Streaming MPEG-2 stream to PC via LAN (for Next9000 Ultra model)
 - POP3 EMAIL reception (for Next9000 Ultra model)
 - Other network specific applications (for Next9000 Ultra model)

FRONT / REAR PANELS

■ Front Panel



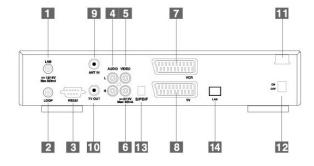
- 1. Power ON / Standby mode
- 2. Menu/Select button
- 3. Exit button
- 4. OK button
- 5. Volume ▼/▲ button
- 6. Channel ▼/▲ button
- 7. Front door : Open
- 8. Front numeric display(VFD)
- 9. Remote IR sensor
- *Option
- 10. Embedded CONAX: 1slot (Bottom) (for Next9000

Ultra model)

11. Common Interface: 2 slots (for Next9000 Ultra

and CI models)

■ Rear Panel



- 1. LNB: 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. Audio L/R: Left & Right audio output

5. VIDEO: Video output

6.0/12V:0/12voltoutput

7. VCR: Scart connector for VCR

8. TV: Scart connector for TV

9. ANT. IN: Connect with TVRF antenna

10. TV OUT: Connect with TV RF feed

11. Main Power: ~AC 95-250V, 50/60Hz, Max 30W

12. Main Power Switch: On/Off

13. S/PDIF: Digital Audio Output

14. RJ-45: LAN port (Ethernet) (for Next9000 Ultra

model)

REMOTE CONTROL UNIT

1. POWER: Standby / On

2. MUTE: Audio mute On/Off

3. SIGNAL: To view signal strength bar

4. COLOR: Sleep Time Setting

5. PAUSE: 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 menu

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. ① key: Press to view Information Box

18. GUIDE: To access EPG menu

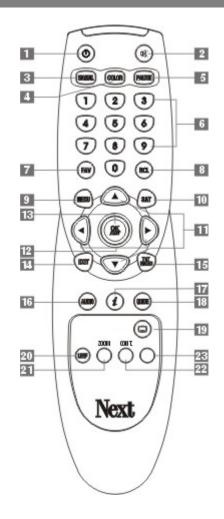
 Teletext Key : To view teletext on TV Screen

20. RED Key(UHF): Equalizer

21. GREEN Key: Zoom function

22. YELLOW Key: Entertainment

23. BLUE Key: Multi PIG



NOTE: The physical figure of RCU can be changed without notice in advance.

SET TOP BOX CONNECTION

CHECK POINTS

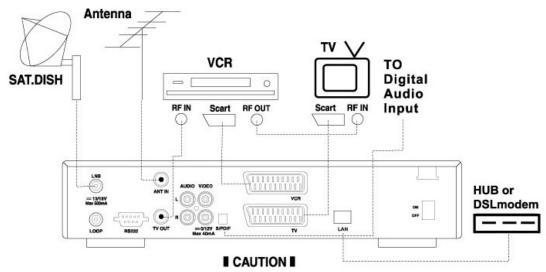
- There are various ways of connecting the STB to your TV/Audio System. Certain methods will enable you to listen to the music in stereo sound of CD level quality.
- So ask your local distributor for assistance in setting up an Video / Audio configuration which will be best suitable to your unique requirements.
- 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.
- Types of LAN Cable (for Next9000 Ultra model)
 - Cross Cable: Connection between DTE-DTE or DCE-DCE (ex., Router-Router, Switch-Switch, PC-PC)
 - **Direct Cable**: Connection between DTE-DCE (ex., Switch-Router, Switch-PC)
 - * DTE (Data Terminal Equipment): STB, PC, or Router
 - * DCE (Data Communication Equipment): Switch, HUB, Modem, etc.

■ CONNECTIONS

- A. Turn off the main power supply of the STB before connecting or disconnecting the LNB.

 Connect the TV's RF antenna connector to the ANT IN socket of the STB.
- B. Use the RF cable with the STB to connect the **TV OUT** socket of the STB to the RF IN connector on the VCR.
- C. Use other RF cable with the VCR to connect the RF OUT socket of the VCR to the RF IN socket of the TV.
- D. Connect the coaxial cable from the **LNB** into the LNB socket of the STB and ensure the connection is tightened.
- E. Use **LOOP** socket of the STB to connect it with input of the other STB.
- F. Use the VCR / TV Scart socket to make the alternate connection with the scart socket of TV and VCR.
- G. Use the **AUDIO L, R / VIDEO** socket to make the alternate connection with the Line socket of the TV and VCR.
- H. Use the **0/12 Volt** sockets to connect it with the 0/12 volt switch.
- RS232 socket can be used to download and upgrade the software of the STB. (Refer to your local agent)
- J. Connect the main power plug of the STB to the mains wall socket. (~AC 95-250V 50/60Hz, Max 30 watts)

- K. Connect the **S/PDIF** output with the input connector of the device which is capable of receiving the optical digital Audio input.
- L. Connect **LAN** port of the STB to HUB or xDSL Modem. **Direct LAN cable** is required to be connected to HUB or Modem.



DISCONNECT THE STB FROM THE MAINS BEFORE CONNECTING OR DISCONNECTING THE LNB

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.

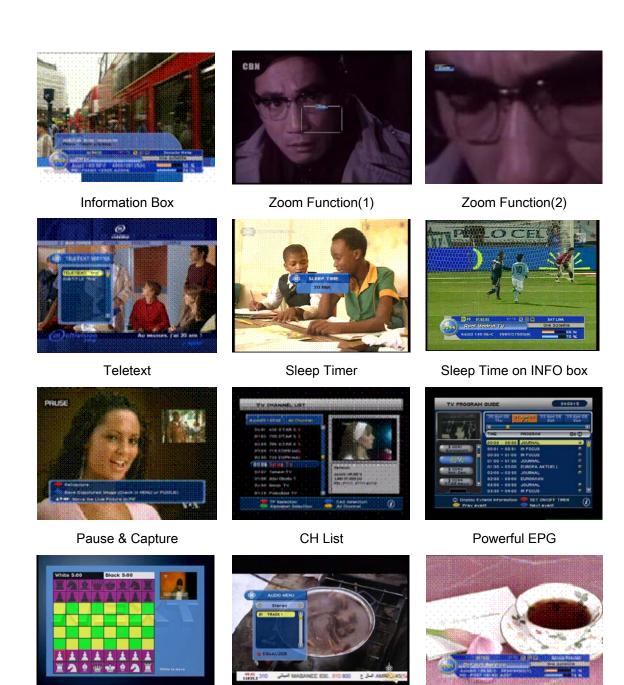
First, press the POWER button to turn on the STB from the Standby mode. Then, the Information Box will appear for a short time and disappear. By pressing the ① button, the Info Box will remain on the screen.

The display time of the Info Box is adjustable under the - System preference / OSD control / Info Box time out 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.
- Plug LAN cable (Direct) for network applications
- 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 green 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 of this User's manual.

GUIDE OF FUNCTIONS

USEFUL TIPS



• Information Box: While viewing the channel, press 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 ① 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.

Audio

CHESS (one of games)

- **Zoom function**: Press the Green color key to open the menu. You are able to zoom in the normal size of screen up to x2.
- Volume control : Use this volume down▼/ up▲ keys to control the audio Volume level.
- Teletext & Subtitle: Press the teletext key to view the teletext and subtitle information

Radio Mode

- provided.
- Sleep Timer by COLOR key: Press this key to choose the Sleep Time that can be automatically power off (standby mode) of the STB on reserved time.
- 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 & Capture: Press PAUSE button to pause the current channel screen and capture for UI background image and image source of Puzzle Game.
- 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.
- 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 (TV/Radio key): Use this TV/Radio button to toggle between the TV
 and Radio channel mode.
- Multi-PIG: 13 sub-pictures would be shown when press "Blue" button of RCU.
- 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 ① button of the RCU.



EPG supports 7-day schedules and reserved watching on EPG.

Note) If prefer to cancel the reserved event, please go to "SET ON/OFF Timer" MENU.

• Entertainments MENU: Pressing "Yellow" key, it shows CHESS, Puzzle and RPN are available. For detail about this, please refer to the chapter of Special Features.

OPERATION OF MAIN MENU

I. CHANNEL ORGANIZE

A. 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.
 - RENAME: 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: Use the RED key to name the Favorite group name as you wish, then
 press the GREEN button to add or delete the channels from that favorite group. The
 YELLOW button is provided for deleting the selected
 group.

II. INSTALLATION

A. 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 (Green bar) level at the bottom of the menu.
 Now, press OK button(Blue key) to start searching.

B. 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.
- 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.
- 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 (Green 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: DiSEqC Positioner menu

BLUE key: Save or Add Satellite

C. 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.

D. DiSEqC Positioner





■ DiSEqC Motor

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.
- 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

■ 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.

(You can also visit - www.stab-italia.com for your reference).

III. SYSTEM SETTING

A. OSD Control





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

- Menu language: Select the language which you want the OSD to be displayed in.
- Transparency: Higher the OSD transparency, you will be able to see the live picture more clearly on the back screen.
- Info Box & Volume Bar Time out: If set for 5 seconds, the corresponding display will disappear after 5 seconds.
- VFD Channel Number (for Next9000 Ultra model)
 If you select 'ON' channel number and channel name will show up together in the front display. And if you select 'OFF', just channel name will show up.
- VFD Flow (for Next9000 Ultra model)
 If you select 'ON' channel name displayed on the front display will flow from left to right.





B. A/V Output Setting

Choose the TV type between PAL/NTSC/AUTO 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.

C. 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.





D. 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.

* Reference time for a Timer operation is either the GMT time or a Manual time set, depends on a GMT usage status.

E. 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.

F. Memory Management

Factory Setting

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.

Memory Backup

Memory backup saves data setting up searched satellite, TP, channel, channel edit, systemsetting and so on

Memory Restore

Memory Restore restores backup data





G. STB Upgrade

Data Transfer:

Set-to-set data transfer function. We would like to recommend NOT using this function in the End User side.

- **Program**: Operating software of the STB /
- Data: Satellites, TP, Channel relating data will be transferred.
- OTN (Over the Network) (for Next9000 Ultra model) :

S/W updates via FTP server on Internet. This service would be done by your authorized service person or installer.



DNS: ON/OFF

IP Address: xxx.xxx.xxx.xxx

URL: DNS name

If DNS is ON, URL would be available. Otherwise, IP address is available.

Network Device Upgrade: Installer only

Do not use this function. This is not for end-user.

H. INFORMATION

In this menu, you will be able to **check the version of the lasted software** installed in your set top box. Also, the percentage and numbers of Satellites / Transponders / TV channels / Radio channels being used from the total memory are indicated. To know the s/w build-up time, please press "I" button.

Note) The percentage of Satellite and TP used includes the number of satellites and TPs which are memorized for default settings.

IV. NETWORK (for Next9000 Ultra model)

Network Address Setting

For network applications, the STB should be set network addresses. Please follow the steps for setting network address;

- Step 1. Connect Ethernet(i.e., LAN cable) to the STB
- Step 2. Enter the Network Address Setting menu of Main MENU
- Step 3. Set the IP address of STB either Static or DHCP

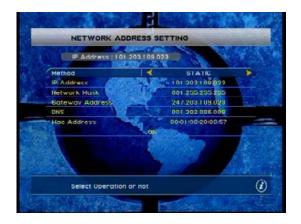
Before setting to Network Address, the STB should be connected the Ethernet network with ADSL router (or HUB). If not connected, and enter the Network MENU, it shows a message of being not connected as below;



If LAN cable connected, Network Address Setting would be available as above figure, and press "OK" for entering it. There would be set the network IP address through either Static or DHCP method as below;

Static Method – Not recommended (Use for Professional usage)

In this method, a user directly inserts the IP address of STB. Thus, select the Static, and all terms required network address would be highlighted;



This Static mode also purposes for

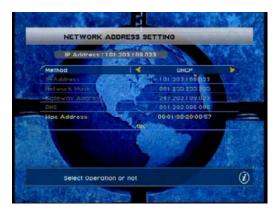
TEST or **Manufacturing** of STB.

Not recommended.

DHCP Method – Recommended (Use for generic network applications)

In this method, a user obtains the IP address of STB from DHCP server (i.e., ADSL router or HUB which has a IP sharing function). Thus, select the DHCP and some of terms required network address would be not highlighted as below. Press OK for obtaining IP address.

This DHCP mode is a factory default mode when factory reset of STB.





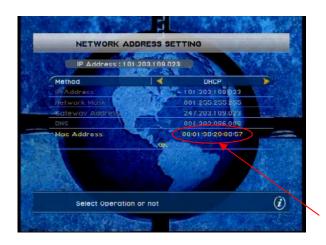
MENU for DHCP

Finding IP address

Note) On DHCP mode, IP address would be automatically obtained every time power is off and on.

MAC address:

There would be a unique address for a STB, and it is called **MAC address**. It is related to the number that assigned by IEEE for every network appliance and distributed by Ethernet Controller Chip Manufacturer



MAC Address

This **MAC** address would be automatically (i.e., randomly) assigned by the system software of STB, and its ranges of number would be as below;

00-0B-78-57-27-2F 00-0B-78-57-28-2F 00-0B-78-57-29-2F 00-0B-78-57-3A-2F | 00-0B-78-57-52-26

Thus, it is not required that a user direct insert MAC address, however, if your network addresses settings are not quite worked, please check the MAC address whether it is conflicted to other network devices. If same MAC address is found, then inserts one of any MAC addresses as above list.

Note) At least, MAC address is not conflicted over Internet due to the address number being assigned is unique. Therefore, please check MAC addresses, when you set more than one STB in same LAN environment.

EMAIL (English Text base) (for Next9000 Ultra model)
 EMAIL function works only with English-text and is based on POP3 type of EMAIL reception and SMTP sending with virtual keyboard.



EMAIL SETTING

- SERVER(POP3/SMTP)
- LOG ON(UserID/Password)

[°] Verified on mail.yahoo.com



Receiving email message

Sending email message (1)

To whom

Sending email message (2)

Body Text with RCU

V. ACCESS CONTROL [Embedded CONAX] (for Next9000 Ultra model)



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.

VI. COMMON INTERFACE (for Next9000 Ultra and CI models)



Slot #1 & #2

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.

Special Features

I. 5-BAND AUDIO EQUALIZER (for Next9000 Ultra model)



Press "Audio" key twice for showing equalizer MENU

This menu is only available with installed audio equalizer function as an option.

The OSD menu can change for improvements without notice in advance.

- Press the red button after pressing audio button on the RCU, and the above window that shows five audio frequencies will show up.
- Starting from the left side, it **indicates 60Hz, 200Hz, 800Hz, 3KHz and 12KHz**. And each freq. can be controlled **manually** or by **presets**.
- The yellow indication on each frequency selected can be controlled by RCU.

You can select the frequency which you want to modulate with the right and left button on your remote control, and adjust the level of frequency with the up/down buttons.

- If you press the yellow button, you can select the various preset modes for Classic /
 Voice / Rock / Jazz modes.
 - And you can select and set the desired modes you want in the User mode.
- Use this 5 band Audio Equalizer feature when you are watching or listening to the music channels of your favorites, and Enjoy!

II. ENTERTAINMENT

This MENU would be advanced features for users, and presented as below functions;

- CHESS Game
- (Picture) Puzzle Game
- RPN™ (Remote PC Navigation) (for Next9000 Ultra model)

To enter ENTERTAINMENT, please press "Yellow" key, and then below MENU would be shown.



MENU to ENTERTAINMENT

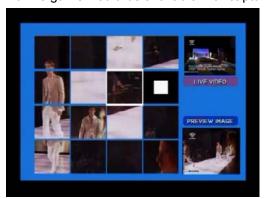
II-1. CHESS



CHESS Game playing with one RCU

II-2. Puzzle (Picture Puzzle)

Puzzle game would be available with captured live image through PAUSE function.



Puzzle Image shall be captured on PAUSE.

Cursor on Puzzle as left would be moved with

RCU, and matching the scattered image.

II-3. RPN™ (for Next9000 Ultra model)

Enable to RPN function

Please follow below procedure for enabling RPN at STB;

- Step 1. Press "Yellow" key of RCU on normal picture as below;
- Step 2. Pop-up the "ENTERTAINMENT", select the RPN as below;
- Step 3. Pop-up the RPN setting, and scroll "Status" to be "Running" and press "OK" as below;



Step 4. After Step 3, pop-up the "ENTERTAINMENT" again. Press 'Exit" as below; After that, RPN would be worked as below





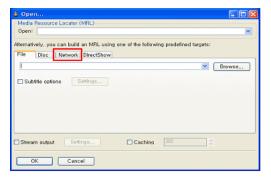
Note) In cases of ERROR

If network configurations are not configured prior to RPN selection, RPN will not work,

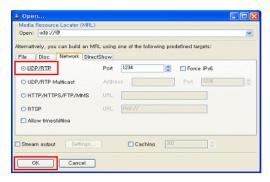
Viewing RPN stream at PV with VLC Player

VLC (initially VideoLAN Client) is a highly portable multimedia player for various audio and video formats (MPEG-1, MPEG-2, MPEG-4, DivX, mp3, ogg, ...) as well as DVDs, VCDs, and various streaming protocols. It can also be used as a server to stream in unicast or multicast in IPv4 or IPv6 on a high-bandwidth network. Any OS workable VLC Media Player Program is available at http://www.videolan.org/vlc/

- 1. Start to VLC Media Player
 - Step 1. Install VLC Media Player on PC
 - Step 2. Click the icon of VLC Media Player on PC
- 2. Setting VLC Media Player for receiving stream
 - Step 1. Open VLC Media Player & Click icon
 - Step 2. Select "Network" as below;

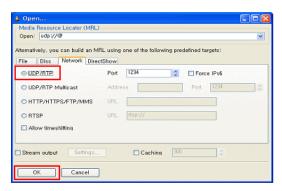


Step 3. Select [UDP/RTP] and Configuring Network Stream as below;

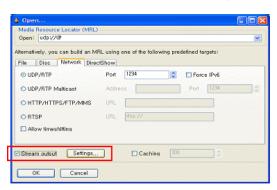


PORT would be used.

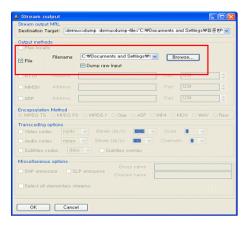
- 3. Recording streaming data on VLC
 - Step 1. Open Network Stream as below;



Step 2. Click Stream Output and then Setting icon would be enabled as below;



Step 3. Click **Setting** and browse the **location** and **name** of file to be recorded. **Caution**: [Dump raw input] should be marked as well.



Step 4. Select **OK** when Step 3 is completed.

Note) When recording is chosen as above, VLC doesn't show video screen on PC.

SPECIFICATION

I. IRD Specifications

Specification	Description
Power	~AC 95 - 250V SMPS
Input Frequency	950~2150 MHz
Data Transfer	RS 232C, Male type, 115Kbps
SCART	2 x SCART 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
Conditional Access Interfaces	CONAX™ embedded 1 x S/C slot
	2 x DVB Common Interface
Network	RJ-45 connector for Ethernet Interface

II. Main processor & Memories

Specification	Description
Main CPU	32bits MIPS VR 4120A, 150MIPS@167MHz
Flash Memory	4MB
SDRAM	16MB
Network CPU	8bits network-centric CPU

III. Tuner & QPSK Channel

Specification	Description
Input frequency range	950~2150 MHz
Channel capacity	6000 TV and 2000 Radio Channels
Tuning system	PLL digital synthesis channels
Tuning step	500KHz 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)

IV. MEPG Audio

Specification	Description
Operation mode	Stereo and Left/Right (Mono)

Sampling Rates	32, 44.1 and 48KHz
Resolution	16 bit digital to analogue Converters

V. MPEG Video

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

VI. 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

VII. Data Input & Output

Specification	Description
Serial Interface	9-pin D-sub Type Male RS-232
	Max. 115Kbps supported
Ethernet Interface (for Next9000 Ultra	RJ-45
model)	10base-T supported

VIII. Conditional Access Interface

Specification	Description
CONAX embedded (for Next9000 Ultra	1 x ISO 7816 compliant S/C slot
model)	
PCMCIA(for Next9000 Ultra and CI	2 x DVB Common Interface
models)	

IX. Power Supply

Specification	Description
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Input Voltage	~AC 95 - 250V, 50/60Hz
Туре	SMPS
Power Consumption	Max. 30 Watt
Standby Power	10 Watt
Power protection	Internal fuse

X. Others

Specification	Description
Physical figure (W x H x D)	340 x 60 x 252mm
Weight (net)	Approx. 2.5 Kg
Operation Temp.	0°C ~ 45°C