Content

✎ Safety Precaution

This STB has been designed and manufactured to satisfy the international safety standards. Please read the following safety precautions carefully before operating this receiver.

▤ Main Supply:
Before operating, please check the units operating voltage is 90~250V AC 50/60Hz.

▤ Overload:
Do not overload a wall outlet, extension cord or adapter, neither use damaged power cord or touch it with wet hand as this may result in electric shock.

▤ Liquid:
The receiver shall not be exposed to dripping or splashing water, and that no objects filled with liquids, such as base, shall be placed on the apparatus.

▤ Ventilation:
Keep the slots on top of the receiver uncover to allow sufficient airflow to the unit. Do not put the receiver on soft furnishings or carpets. Do not expose the receiver to direct light or do not place it near a heater or in humid conditions. Do not stack other electronic equipments on top of the receiver.

▤ Cleaning:
Plug out the receiver from the wall outlet before cleaning. Clean the receiver by a soft cloth or mild solution of washing-up liquid (no solvents).

▤ Connection:
Disconnect the receiver from the mains when you connect it to satellite LNB or disconnect it from LNB. Failure would possibly cause damage to the LNB.

▤ Location:
Put the receiver indoor in order to avoid lightening, raining or sunlight.

▤ Uncover:
Do not remove the cover, to reduce the risk of electric shock. Contact qualified and licensed service personnel to repair the receiver, or contact your dealer.

1. Reference

1.1 General Features

DVB-S/DVB-S2 Satellite Compliant (MPEG-II/ MPEG-IV/ H.264)

SCPC & MCPC receivable from Ku and C band satellites

Universal, Single, Single S & C Band Wideband LNB

Sensitive Tuner with Loop-Through

DiSEq C 1.0/1.1/1.2/1.3 (USALS)

Unicable Supported

Blind search supported.

Multi satellite search, network search, PID search, manual search and Multi-TP Search

Fast Scan on Astra (19.2)

Auto DiSEqC Search

PAL/SECAM/NTSC Conversion

Variable aspect ratio (4:3,16:9)with PAN& SCAN vector or letter BOX option

Output Resolution: 480p&480i,576p & 576i, 720p&1080i50Hz,720p &1080i60Hz

True full Color (32 bits)on screen display (OSD)

Storing memory: 100 satellite, 4000 transponders and 10000 channels

Supported satellite add, delete, move, rename

Supported transponder add, delete, edit

8 favorite group and parental lock supported.

Supported programmed lock, delete, move, rename.

Supported multi-language menu

Supported list of programmers, have six sort function:

Easy functions such as Group Move/ Recall History

Multi-language audio.

Multi-language DVB Subtitle output

7 days Electronic Program Guide (EPG)

Teletext output through VBI and OSD.

Multi-Picture supported

Software (data, kernel and file system) upgrade through USB or Ethernet

USB 2.0 Interface

1.2 Accessories

˙ Users manual

˙ Batteries

˙ Remote Control Unit

˙ A/V Cable

˙ HDMI Cable

Figure 1.Accessories

2. Basic Function

2.1 Front Panel

Figure 2. Front Panel

1. Power Button
The POWER button is used to turn the power on or to make it on Standby Mode.

2. Power LED
Power indicator.

3. Signal LED
Signal indicator.

4. Display(VFD)
The VFD displays channel information. In Standby mode the VFD displays local

2.2 Rear Panel
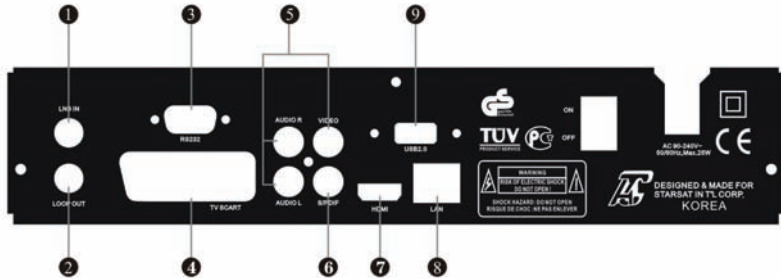
Figure 3. Rear Panel

1. LNB IN
Connect the Satellite Dish LNB.

2. LOOP OUT
Output the Dish LNB IN signal.

3. RS232
Connect to serial port of PC for software upgrade.

4. TV SCART,
Connect to TV set with Scart cables.

5. AUDIO, VIDEO
Connect to Audio/Video of TV. Connect Yellow to Video port, connect Red and White to Audio Right and Audio Left.

6. S/PDIF
Digital Audio output.

7. HDMI
HD signal output

8. LAN
LAN for Ethernet.

9. USB2.0
One USB 2.0 Host Port.

2.3 Remote Control Unit(RCU)

You can control this receiver by this remote controller with full function.

1. POWER :

Swith the receiver on or off.

2. :

Setting the time for turning the receiver off.

3.PVR

Enter into recoding information.

4.MUTE :

The sound On/Off.

5. NUMERIC KEY (0~9):

Change program or input number.

4. TV/RADIO:

Switch between TV and RADIO.

5. SAT:

Show the scanned satellite list.

6. AUDIO :

Select or change the Audio.

7.ZOOM:

Picture Zooming function.

8. PAUSE:

Freeze the picture.

9. INFO (i):

Show the information of the current channel.

Press **EXIT** button to exit this menu.

10. RECALL:

Move to the previous viewed channel.

11. FAV:

To get favorite channel list you set before.

12. EPG (Electronic Program Guide):

Show the TV/Radio program guide.

13.SUB: Subtitle.

14. PAGE :

Change page up or down

Figure 4. Remote Control Unit

15. F1 : No function.

16. TXT:

show the teletext content if teletext is transmitted.

17. CH +/-:

Change program.

18. VOL +/-:

Change volume in viewing mode.

19. OK:

Confirm the highlighted menu item.

Open the program list.

20. MENU:

Activate main menu or exit to live channel.

21. EXIT :

Exit current menu step by step.

22. TIMER:

Enter timer event directly

23. DISPAY:

Switch the TV type.

24. MODE :

Switch 4:3 & 16:9 Screen Formats.

25. USB :

Showing Subtitle information if the channels contains.

26. FIND :、

Find the channel quickly

27. ⊞ :

Multi picture display.

28.◄◄**:** Fast backward.

29. ►►: Fast forward

24. ►: Start playing / Release pause

25. ■: Stop recording

26. I◄◄ : Play previous item

27. ►►I: Play next item.

28. I I: Pause/ Time shift

29.●: Start recording

3. Installation and Connection

The following diagram shows you the connections among receiver, TV, LNB and other equipment, please read this first if you are not sure about the connection, and it will guide you to the correct connection.
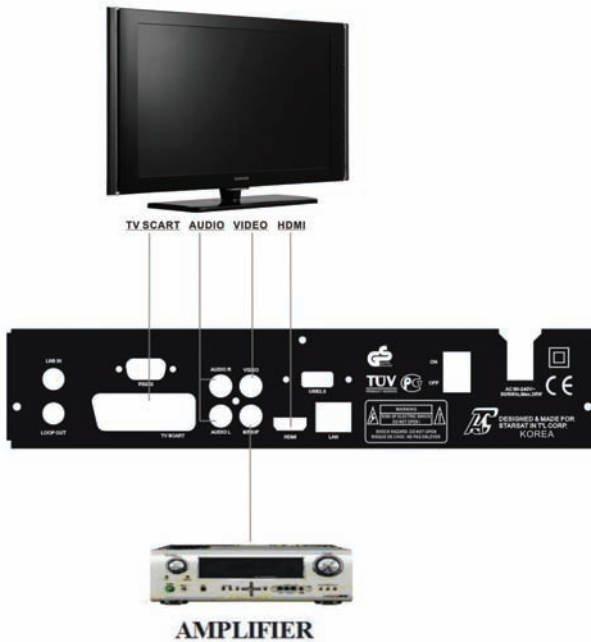
3.1 Connecting to TV

Figure 5. Connecting to TV

3.2 Connecting to Dish LNB

You can connect one fixed dish LNB directly to the LNB IN, or connect at least two dish LNB by DiSEqC Switch, you can also connect to HH mount dish LNB.
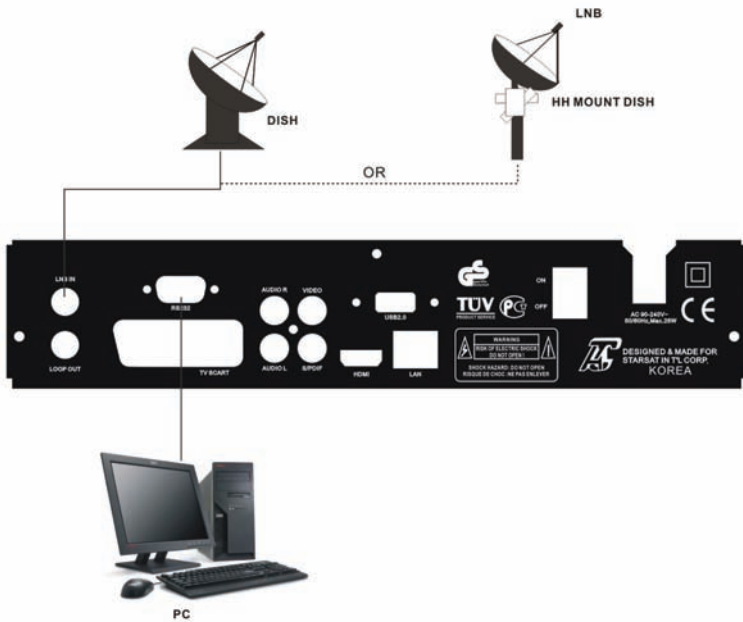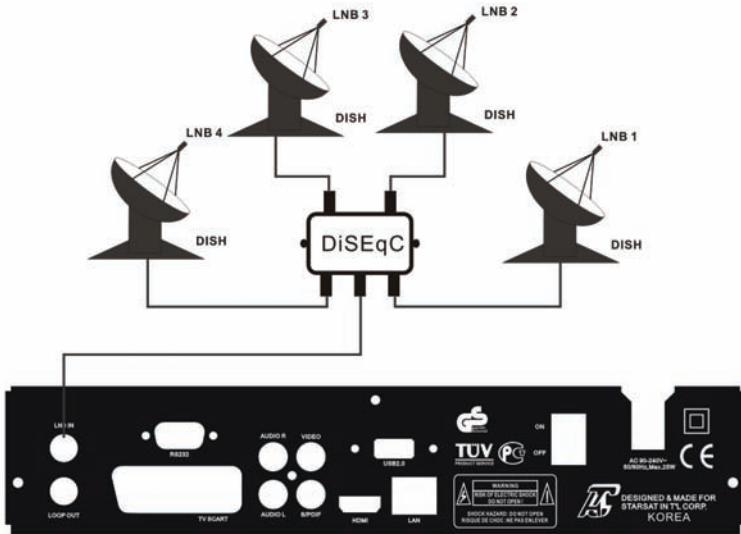

Figure 6. Connecting to Dish LNB

Figure7. Connecting to Dish LNB

4. Installation and Operation

After connecting the receiver to other required equipment, turn on the receiver, there should be no channel information available at the first startup, you need to follow the procedure to setup your receiver to search the channel.

Main Menu

Press MENU button to activate main menu, main menu consists of Installation, Channel manager, system setting, Time Setting, Expansion, Interface.

Use UP/DOWN button to select your subject and press OK to confirm your selection and enter that sub menu, press EXIT button you can return to the previous menu.

4.1 Installation

Select Installation, press OK button to activate Installation menu, the Installation window will be displayed.
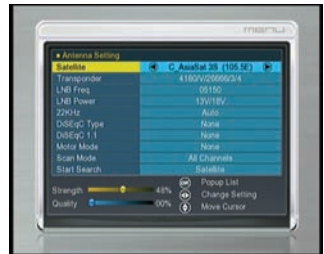
A: Antenna Setting

Press OK to Enter Antenna Setting; here you can make Satellite Search, Satellite Edit, blind Search and other Functions.

a: Satellite List

Enter this picture, you can see the presorted Satellite list, in this menu, you can select, add, move, rename, delete Satellites.

b: Select

In this menu, you can press the UP/DOWN keys choose the satellite which you want to use, then press the OK to confirm the setting, you can setting other parameters

c. Add

Select the Add using the Left/Right keys. Here you can input new Satellite angle, Satellite Direction (east, west),Band (ku, c). **OK** to confirm the setting ,and this new satellite will be added to the end of the Satellite list.

d．Move

In this menu, you can Select the satellite that you want to move from the satellite list using the UP/DOWN keys, then press OK, you will be asked to move the satellite to put where, input the destination number and press OK. Then you can move one satellite from one position to another.

e. Delete

You can delete the user satellite. Press the **OK** button select the satellite that you want to delete from the satellite list. You will be asked to confirm whether delete the satellite or not. If you select YES, all the channels in the selected satellite and transponder will be deleted. Press **OK** key, and the selected satellite will disappear.
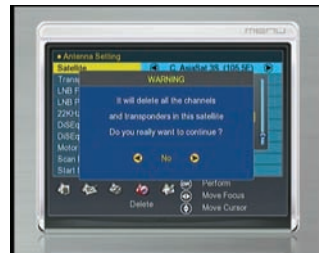
f．**Rename Satellite**

You can also change the satellite name.
Select the Rename using the LEFT/RIGHT
keys. Press OK key and select the character
which you want to edit using the browse.

➢ **Transponder List**

If you change the satellite, the transponder will be changed automatically.

You will find the transponder list of selected
satellite here In this menu you can select,
Delete, Edit and Add Transponder. The
Operation similar to the above, you can input
the transponder frequency symbol rate,
choose polarization (Ver,Hor)　and　Auto
(1/2, 2/3,3/4,6/5,7/8,Auto).

➢ **LNB frequency and power**

Here you need to check the LNB frequency according to your antenna, set
the correct frequency or define yourself, and keep LNB power to be 13V/18V
or 14V/19V.

➢ **22KHz**

In case you are using two antennas
connected to a 22KHz tone switch box. You
can supply either 22KHz by setting "ON" or
"OFF" to select antenna.

➢ **DiSEqC type DiSEqC1.1**

If you connect antenna to DiSEqC Switch, you need to specify the DiSEqC
input to which your selected satellite have been configured.

➢ **Motor**

When you enable this option, and press OK, you will get this window to show you how to adjust position of the dish.
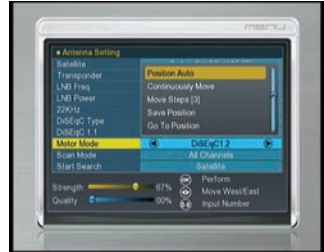
➢ **Move Auto [W/E]**

Press RIGHT/LEFT button, the dish will be motorized to East/West

continuously, it will stop until it find the best signal.

➢ **Move west-east**

Push RIGHT/LEFT button, the dish will be motorized to East/West step by step until you find the best signal showed on the signal bar.

➢ **Fine Tuning(1)**

Input digital button to set the moving step; Press RIGHT/LEFT button to move steps.

➢ **Store Position**

Save the current position you searched.

➢ **Go to Position**

Press OK button to move the dish to the stored position.

➢ **Go to Reference**

Press OK button to move the dish to 0 position.

Press EXIT after setup, and you can search channel now

➢ **Set West Limit**

Enable West limit.

➢ **Set East Limit**

Enable East limit.

➢ **Disable Limit**

Disable West limit and East limit.

USALS: If you use USALS and select the Motor Mode to USALS, here one more option you can move the dish to exact position of the satellite.

Note: Before you use USALS, you should go to Main Menu→Installation→ USALS Setup to set you local position firstly.

➢ **scan mode**

In this menu, you can select all Channels & FTA Channels by setting the search option

➢ **Start Search**

In this menu, you can select Satellite &Multi-Sat & Transponder which you want to start search When you press ok you will be ask whether searching by network, you can choose yes or no
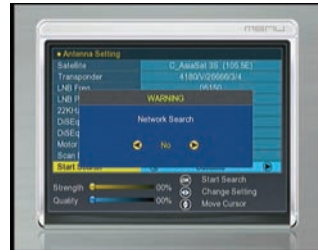
➢ **Satellite Search**

You can use one satellite search when select the scan mode for "satellite" and you also can use the Multi-satellite search ,the operation as follows, Selecting one satellite, and press OK to mark, you can select more satellite at this time, but make sure they are all configured to your DiSEqC Switch, after selecting, Pressing OK will start searching. During searching the TV Channel and Radio Channel will be listed separately.

➢ **Transponder**

Here you need to select one satellite which your dish pointed, then select the frequency, you need to setup the Polarization of that Selected Transponder, Symbol Rate, FEC .Pressing OK will start searching. During searching, the TV channel and Radio channel will be listed seperately.

NOTE: if you don't know any message about the satellite, you can use blind search.

B: Fast scan

In this view, when in Astar (19.2) satellite, base on the transponder (12515, 22000, H, 5/6), can fast search channels by different providers.

C:USALS Setup

You can setup the Dish position to the satellite you want to search, you need to check the detailed information from internet and input the accurate parameters about your local position.

📂 Press the Red button, you can choose the country, press OK button again, you will view the city in this country that as you select.

D．Factory Default

You can erase all the channels and settings. You made by selecting All, press OK you will be asked to confirm whether you select "YES" or "NO". If you select "yes" all data and setting will be lost. (as well as radio list and scramble). in the end, you also can save or load default Date

4.2 Channel manager

In this menu you can edit channels & fav, or sort channels and so on.

A: Edit channel

Here you can Select Channel and Delete/ Un- delete Channel, Rename Channel, Move Channel, Lock Channel, Select TV Channels, you will get this window. You also can group move the channel.

B: Edit fav

Here you can set the channel to favorite in different category, such as news, movies, music, sports, education, weather, children's, social, culture. Press different function color button select any sort press **OK** on viewing mode, you can set the channel type according to your mind.

C: Sort channel

In this menu you can sort the channels in different type, such as language, FTA, satellite, transponder, favor , Alphabet and original channel list

D: Delete satellite channel

In this view, you can delete satellite channels press **OK** you will be asked to confirm whether you select "YES" or "NO". If you select "yes" all data under this satellite will be lost.

E: User channel list

In this menu, you can save and load the channel list .

4.3 System setting

A: System

You can setup the menu language, audio language according to the standard of your country. You also can set the recall list function on or off.

B: OSD

Here you can setup the OSD /TXT transparency ,Time out means the duration of the information bar. You also can setup the HDMI, press **Right /Left** button, you will change the HD format from 1080i to 720p/576I. After you confirm, the TV Type can be changed

C: Parental Lock

This function prevents children or unauthorized persons from watching programs. You can select if need the password or not for Installation, Edit Channel and System, also you can change the Password, the default password is 0000.. When you choose yes, you can "change the password option to unlock or lock some menu enter

D: About STB

In this window, you can get the information about the STB, such as product name, software & hardware ver, loader ver and so on. When you need service from the dealer you need to submit this information in order go get the correct and fast after sales service.

4.4: Time Setting
D-1: Timer Setup

The default time setup is auto, you can select manual and input by hand, select the time zone of your country and you will get the correct current time which is based on TDT (Time and Data Table) in the stream of the current channel service.

▤   The time you set will be shown on the front panel when you set receiver to standby mode.

D-2: Event Timer

Here you can set the channels that you likes, so the customized time to jump the designated program. You also can customized time to record the designated program, you set including both TV and Radio, you can add, edit and delete the timer event.

Note: You can add multi-groups in event timer.

D-3: Sleep Timer

Here you can set Sleep timer and this will enable receiver to sleep automatically according to the time you set.

4.5 Expansion

Here you can enter the USB menu, and also can set some net parameter and browse web view

A: USB menu:

Press **USB** key to enter USB menu. The current directory path display on the top part of the menu. The default file list is composed of all files and subfolders in the current path.

All supported files can be opened by pressing OK key, and these files such as*avi*. mkv*. mp4*. mov* 3gp*. mpg*. ps*. vob*. dat* .ts*. m2ts* .flv*. asf*. jpg,*. bmp, png, gif mp3 and so on . You also can play stream and picture.

1) Press Blue button change loop off/on.

2) Press Green button get help message.

3) Press Yellow button upload the date.

4)press RED button get the detailed information about the file

📄 Supported video format:

MP4/3GP/MPG/AVI / MKV /MOV/TS/ VOB/ DAT/ M2TS/ FLV/ ASF

📄 Supported audio format: MP3/PS .

📄 Supported picture format: JPG/BMP/ PNG/GIF.

A-1 : Play Stream

➢ **OK** : View play list / Play the selected file in play list

➢ ► : Play the selected file in play list / Resume playing file

➢ ■ : Stop playing file

➢ I◄◄ : Play the previous item

➢ ►►I : Play the next item

➢ ◄◄ : Fast backward

➢ ►► : Fast forward

➢ **I I / PAUSE** : Pause

➢ ◄ / ► : Adjust volume

➢ 【0】: Jump

➢ **EXIT** : Exit play list menu / Exit playing state and return to file list menu.

A-2 : Play Movie

➢ **OK** : View play list / Play the selected file in play list

➢ ► : Play the selected file in play list

➢ ◄◄ : Fast backward

➢ ►► : Fast forward

➢ I◄◄ : Play the previous item

➢ ►►I : Play the next item

➢ **EXIT** : Exit playing state and return to file list menu

➢ 【0】: Jump

➢ **EXIT** : Exit play list menu / Exit playing state and return to file list menu.

A-3 : Play Music

➢ **OK** : Play the selected file in play list
➢ **I◄◄** : Play the previous item
➢ **►►I** : Play the next item
➢ **◄◄** : Fast backward
➢ **►►** : Fast forward
➢ **I I / PAUSE** : Pause
➢ **◄ / ►** : Adjust volume
➢ **EXIT** : Exit playing state and return to file list menu

A-4 :   View picture

➢ **OK** : View play list / Play the selected file in play list
➢ **◄ / ►**: rotate.
➢ **I◄◄** : Play the previous item
➢ **►►I** : Play the next item
➢ **▲/▼** : Play the previous/ next item
➢ **EXIT** : Exit playing state and return to file list menu

A-5:   Download Software/Database

1) Press **◄ / ►** key to switch to "Software" file list of the current folder
2) Press OK key to open and download the selected file

B.USB Manager:

In this menu, you can edit the files:
1)press RED button get the detailed information about the USB
2) Press Green button can rename, delete, create the folder
3) Press Yellow button set recording path

➢ **USB PVR:**

When you use USB devices such as USB memory stick, or USB interface

hard-disk drive (HDD) with this receiver, Watching one channel (FTA/Scramble) and Recording another channel (FTA/Scramble) in the same TP. During recording, can switch the channel in the same TP

Note: USB supported FAT & FAT32 Ext2, Ext 3, NTFS

➤ **Time shift**

Press the **I I** button, enter the time shift function.

You can pause and resume a live television program, and even rewind and replay it. When you are watching a program and you miss something, you can rewind and replay it. Or when your attention is needed elsewhere, you can pause it and resume it a short time later without losing any of it. When you do this, you are no longer watching the live program; instead you are watching a delayed presentation of it. This is called

time shifted television., you can skip commercials until

you catch up to the live broadcast.

With time shift enabled, the following operations are possible: To go back in time, hold down the ◀◀ button; to go forward, hold down the ▶▶ button.

🗐   Press the **I I** button again, pause the channels

🗐   Press the Exit button, you will be asked whether exit or save the program data, select yes or no you want.
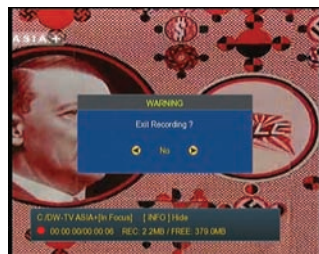
C: Network Setting

Enter this view, you can set some net parameter and browse web

C-1: VFTP

VFTP Download s/w, channel data, music, picture, media files. Visual FTP to list all the FTP folders and files, user can select the file to downloading into memory (like picture music) and USB (like movie and so on). You can see current directory path display on the top part.

C-2: Wireless setting:

In this view, you can set the wireless by two step

▤ IP Situation

In this view, you can check the IP address and the situation of the net whether connect **by wireless net.**

▤ Search access pointer:

First of all, search wireless networks, then you can select the wireless

pointer, press "Ok" ,you can input
wireless password and verify it. If the
password is ok, it will auto connect the
wireless net ,then you can enter IP
Setting menu to check the situation of
the connection..

C-3.Internet Radio

In this view, you can listen radio online,
First, select the country, then the music radio
lists will be show

C-4. SMB File Setup

Enter this view, put in the windows share
address such as 192.168.0.45/bt, user name
and password, select the SMB Enable ,you
will be ask whether enter the file yes or no,
after select yes, then press red button link to
the windows share.

1) After above step, enter the USB menu ,
you can glance over the file of the windows
share, if have media file, you can play it ,the
operation like 4.4 USB .

2)And other function, set record patch, you
can record USB file to the windows file like
the picture.

C-5: IP SEETING

In this view, you can connect the network set some IP parameter.

The default setting is DHCP, you can set DHCP is on or off by **Green** key.

📂 DHCP: IP-subnet mask and Gateway are not set because the DHCP server assigns these parameters.

📂 Static IP: The system's IP-address, IP-subnet mask, DNS and Gateway must be specified in the IP-address.

. Set DHCP is on, and press the **Blue** key, start auto search IP, you will be asked to confirm whether continue, select yes, the receiver will reboot. Press **Red** key save IP set

C-6. You tube

Enter this view, you can view the program on line

4.6: CA Menu

Press **OK** enter the CA menu, in this view, you can find some CA message when you inset CA card

4.7 Other Useful Information

This will guide you on how to use general info while watching TV program or listening Radio program.

➢ **i:**

In the viewing mode when you press **INFO** button, the info bar will pop up, it contains satellite and channel information, detailed EPG info will display in the menu if press **INFO** again.

➢ **SAT**

Press **SAT** button on the remote control, you will get this menu which contains the satellites you searched and stored, select one satellite and press **OK**, all channels will be listed under that satellite you selected. Press **Red** button, you also can hide the satellite.
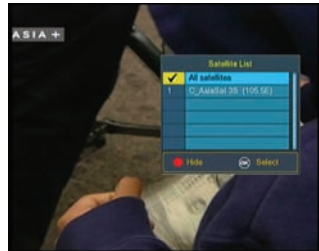
➢ **Recall**

Press **Recall** button and you can get the viewed history channel. maximum it can list channels that you recently viewed.

➢ **ZOOM**

Picture zooming function.

➢ EPG

Press EPG button on remote control, you can get the electronic program guide if applicable. You can get the detailed information

about that program by pressing INFO. Press TV/RADIO to change to TV/RADIO. Press RED key to go to timer Active, timer Active's operation similar to the above Event Timer's functions. Press Page Up/Page Down to switch channels

🔲You can Switch Day EPG and Weekly EPG by Pressing Red Key. In this menu, press Right/Left button, you can view the different time EPG of one day. In the end, you can get the detailed information about that program by pressing INFO Key.
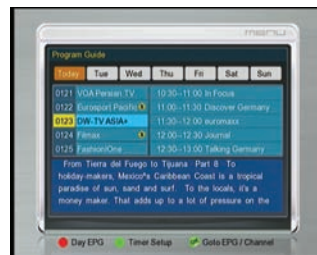
➢ FAV

In viewing mode, you can get the favorite channel group by pressing **FAV**, press **Right/ Left** to change category. If you did not set favorite channel in advance, it will show with all channel.

1) Press **Red** key you move the channels.

2)Press **Green** key, you can delete the channels which you select.

3)Press **Yellow** Key you can sort the channels by A-Z Alphabet, Transponder, FTA to CAS.

3) Press **Blue** Key you can rename the channels sort by different alphabet which you select.

➢ **Channel List-OK**
In viewing mode press OK button and you will get this window. Press ◀ / ▶ to view channel in different type, ALL, FTA, Scrambled HD.

1) Press the Red button, select one satellite and press OK, all channels will be listed under that satellite you selected

2) Press the **Green** button, you can put in the channel and quickly find the channel you want

3) Press the **Yellow** button; you can watch the channels sort by alphabet A-Z

4) Press the Blue button you can edit the channels like delete/ move/lock/ rename.

➢ **TXT:**
Show the teletext content if teletext is transmitted.

➢ ▦

Press this button you can enter this window, select how many picture you want to show.
Then press OK button to show

➢ Select one of the multi-picture, you will get this window

➢ **Display**

Press display button, select the HDMI mode according the TV type

➢ **Timer**

Press timer button, enter the timer event directly ,the operation like the above mentioned

5. Additional Information
5.1 Problem Solving

You might meet abnormal working of this STB with various reasons, check the following which may help you.

Problem	Possible causes	What to do
LED on the front panel fail to light up/is not lit.	Mains supply cable is not connected.	Check if the mains supply cable is plugged into the power socket.
No picture or sound.	Satellite dish is not aiming to satellite accurately.	Adjust the dish. Check the signal strength indicator in one of the channel search submenus.
	No signal or weak signal.	Check the cable connections ,LNB and other equipment connected to LNB & receiver, or adjust dish.
	The LNB is faulty.	Replace the LNB.
	The cable is faulty.	Replace the cable.
Bad picture/blocking error.	Satellite dish is not aiming to the satellite accurately	Adjust the dish.
	Signal too strong.	Connect a attenuator to LNB input.
	Satellite dish is too small.	Change to a larger dish.
	LNB noise factor too high.	Change LNB with lower noise factor.
	The LNB is faulty.	Replace the LNB.
No startup menu on screen after turning on STB for the first time.	The system is connected by SCART cables and the TV is not in AV/ EXT mode.	Switch the TV to the appropriate AV input.
The remote control is not working.	Battery exhausted.	Change the batteries (both).
	Remote control is not aimed correctly	Aim the remote control at the STB. Check that nothing blocks the front panel.
	STB is in standby mode.	Check if LED indicator on the front panel is showing the time, press the power button to switch off standby mode.
You have forgotten your password.		Contact the dealer or Service Provider. They will help you set it up again.
Poor picture quality or Less channels in scanning.	Low LNB power or signal loss in cable.	Change the LNB power to 14V/19V in Antenna setup menu.

5.2 Technical Specification

Tuner & Demodulator

Demodulation	QPSK ,8PSK
Frequency Range	950 MHz to 2150 MHz
Signal Level	-25 to -65 dBm
RF Impedance	75Ωunbalanced
LNB	3V/18V/OFF, Imax = 400mA
LNB Tone Switch	22KHz+/-2KHz, 0.6Vpp+/-0.2V
DiSEqC Control	Version DiSEq C 1.0/1.1/1.2/1.3(USALS)Compatible, Tone burst A/B
Symbol Rate	2.0~45 MS/s/s/SCPC,MCPC
FEC Decode & 8PSK	Convolution Code Rate 1/2, 2/3, 3/4, 5/6, 7/8,3/5, 2/3, 3/4, 5/6, 8/9, 9/10, automatic

MPEG

Transport Stream	MPEG-2 ISO/IEC 13818Transport stream specification
Profile Level	MPEG1,MPEG-2 MP@ML,H.264, VC1, DV, DivX, and MPEG4
Input Rate	80 Mbps for MPEG Transport Stream and 25 Mbps for DV streams
Aspect Ratio	4:3, 16:9
Video Resolution	1920 ⌊ 1080i and 1280 ⌊ 720p for HD video,720 ⌊ 480p, 720 ⌊ 480i, 720 ⌊ 576i, and 720 ⌊ 576p for SD video.
Audio Decoding	MPEG-2 layer I and II (Music cam),MPEG4 AAC and MPEG4 AAC-HE (AAC+),Dolby Digital (AC-3) with bit rates up to 640 K bits /s, LPCM up to 48 KHz,MP3.
Audio Mode	Single channel/Dual channel/Joint stereo/Stereo
Sampling	32, 44.1 and 48 KHz

A/V and Data In/Out Connector

TV SCART	RGB, CVBS, L, R out
3RCA	AUDIO L, R. VIDEO out.
RS-232C	RS232C D-sub male type.
LNB IF Input	F type, IEC 169-24 Female
LNB IF Output	F type, IEC 169-24 Female

Power Supply

Input Voltage	AC 100 ~240V, 50/60Hz
Power Consumption	Max. 25 W
Protection	Separate internal fuse. Input shall have lightening Protection

Physical Specification

Weight (Net)	Around 14.61kg
Operating Temp	**0℃ to + 40℃**
Storage Temp	**-40℃ to + 65℃**

5.3 Menu Screen Structure

Menu Navigator

Main Menu
Installation
Channel manager
System setting
Timer setting
Expansion
Interface

Installation
Antenna Setting
Fast scan
USALS Setup
Factory Default

Channel manager
Edit Channels
Edit Favorite
Sort Channels
Delete Satellite Channel
User Channel List

System setting
System
OSD
Parental Control
About STB

Time Setting
Timer Setuo
Event Timer
SleepTimer

Expansion
USB Menu
USB Manger
Network Setting

Interface
CA Menu

Antenna Setting
Satellite
Transponder
LNB power
LNB frequency
22KHz
DiseqC1.0
DiseqC1.1
Motor
Scan model
StarSearcht

Edit Channels
Lock
Delete
Move
Rename

Edit Favorite
. . .

Sort Channels
Language [English]
FTA
Satellite
Transponder
Favor All FAV]
Alphabel

Delete Satellite Channel
. . .

User Channel List
Save. . .
Load. . .

System
Menu Language
Audio1
Audio2
Audio channel selection
Recall List
Volume per channel

OSD
OSD Transparency
TXT Transparency
Time Out
TV System
HDMI Mode
TV Screen Format
Scart Output

Parental Lock
Password Lock
Installation Lock
Edit Channel Lock
System Lock
Change PIN
New PIN
Verify PIN

About STB
Model ID
H/W Ver
S/W Ver
Loader Ver
Date
S/N

Fast scan
PROVIDER
Satellite name
Transponder
CHS RENUMBER

USALS Setup
Longitude Angle
Longitude Direction
Latitude Angle
Latitude Direction
Rotating Speed(S/°)

Factory Default
ALL
Channel List Only
Radio Channel Only
Scramble Channel Only

Network Setting
VFTP
Wireless setting
IP setting
Youtube
RadioStation
SMB File Setup

5.4 Glossary

⬛ **Antenna**

A device that collects and radiates electromagnetic waves. Includes a satellite dish and broadband antenna.

⬛ **DiSEqC**

DiSEqC(Digital Satellite Equipment Control)system, it is a communication bus between satellite receivers and peripheral equipment using only the existing coaxial cable.

⬛ **DVB**

The Digital Video Broadcast group was created to establish a technical framework for the introduction of digital   video broadcasting systems.

⬛ **LNB (low-noise block converter) or LNB**

An electronic unit mounted on the satellite dish. It receives the signals reflected by the dish and converts them to signals that can be used by the digital satellite receiver.

⬛ **GHz**

The prefix giga means milliard, and Hertz means cycles per second. Signals in the GHz range are often called microwaves.

⬛ **MHz**

The prefix mega means million, and Hertz means cycles per second.

⬛ **MPEG**

Moving Picture Experts Group. Established by the International Standards Organization to provide the basis for a picture coding and compression system.

⬛ **Forward Error Correction(FEC)**

A system of error control for data transmission.

⬛ **Polarization**

Polarization allows several programmers to be fit into the same frequency band. The signals from a satellite are transmitted either with linear (vertical or

horizontal) polarizations or circular (right or left) polarization.

QPSK(Quaternary Phase Shift Keying)
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.

Symbol rate
Speed of the digital transmission

RGB
Red, Green, Blue. Color signals are routed in separate cables in order to provide a high quality TV picture.

Scrambled TV programmer
Some TV programmer are transmitted in scrambled form.

SERIAL RS 232
A serial communication standard data port.

SCART
A 21-pin connector used for connection of the Media master, TV. Also named Euro connector or Partial connector.

S/PDIF
Sony/Philips Digital Interface Format. Digital audio output.