High Definition Digital Satellite PVR

User's Manual
900HD miCro PVR

UltraPlus

INDEX

Precautions

1. Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not alter the mains plug in any way. If the provided plug does not fit consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

  WARNING : *To Prevent fire or shock hazard do not expose the set to rain or moisture.*

2. Notice

- These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- 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.
- The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: SHOCK HAZARD-DO NOT OPEN.
AVIS: RISQUE DE CHOC ÉLECTRIQUE-NE PAS OUVRIR
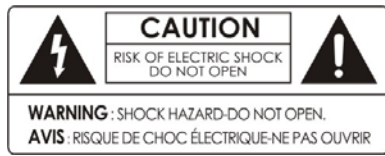
To reduce the risk of electric shock, do not remove the cover (or back).
No user serviceable parts are inside.
Refer servicing to qualified service personnel.

The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

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4. Disclaimer

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The instruction and descriptions which this manual contains are based on the time of this manual's production.
The manufacturer constantly updates it with new functions and technology.
All the specifications are subject to change without prior notice.

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Manufactured under license from Dolby Laboratories.
Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Before You Begin

1. Main Features

- ✓ Supports MPEG4 /MPEG2 - HD/SD and Fully DVB-S2 /DVB-S Compliant
- ✓ Intelligent Blind Scan for both SD and HD TV & Multi-Satellite Search
- ✓ Multi-LNB Controlled by DiSEqC Control Version 1.0, 1.1, 1.2 and USALS
- ✓ HDTV PVR Receiver (H.264/ MPEG4 HD)
- ✓ Embedded Linux OS
- ✓ Time Shifting, Recording & Playback with External HDD (USB 2.0)
- ✓ Simultaneously Records upto 3 Channels and allows Viewing of 2 others (PIP) on the same Transponder

- ✓ Powerful Extended EPG supports Event Recording
- ✓ Dual USB 2.0 Host ports (MP3 Player & JPEG Viewer)
- ✓ MKV, Xvid file play back support
- ✓ Ethernet Support
- ✓ High Definition On-Screen Display
- ✓ Favorite Groups
- ✓ Powerful Service List Manager for Favorites, Lock, Skip, Move, Edit and Delete
- ✓ Service Sorting by Name, Transponder and CAS
- ✓ User Friendly & Multi-language Supported (OSD & Menu)
- ✓ Teletext / Subtitles Supported
- ✓ Maximum 10,000 Services(TV & Radio) Programmable
- ✓ Picture-in-Picture (PIP) & Multi-picture Display
- ✓ Parental Lock / System Lock / Installation Lock
- ✓ HDMI Video & Audio Output (576i, 576p, 720p, 1080i, 1080p)
- ✓ CVBS(composite) Video & Audio Output via RCA
- ✓ CVBS, RGB, Video & Audio Output via TV SCART
- ✓ Optical Output for Digital Audio(SPDIF)
- ✓ Software & Service channel Database upgrade via USB & RS-232C port
- ✓ 1 Smart card reader and 2 Common Interface Slots
- ✓ 1W Stand-by Power Consumption

2. Accessories

User's Manual

Remote Control

AAA size Batteries X2

HDMI Cable (Option)

AC Power Cord

Hardware Description

1. Front Panel Configuration
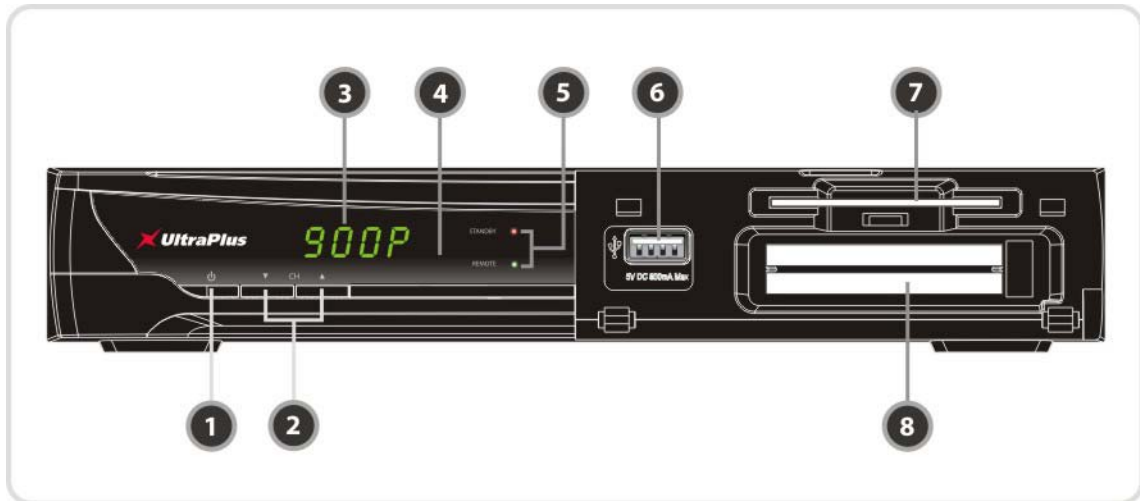
1. **POWER BUTTON :** Press to switch between STANDBY and POWER ON modes**.**

2. **CH Up/Down *BUTTON* :** Press to change services in normal mode, or to move highlighted-bar in menu mode.

3. **Display :** The 4-digit display shows the service number or menu state in normal mode. It will show the local time in standby mode.

4. **Remote Sensor :** Receives commands from remote controller.

5. **STANDBY Indication LED(RED) :** The LED lights on in standby mode.
    REMOTE Indication LED(GREEN) : The LED lights when a key on the Remote Control is pressed.

6. **USB (Front) :** Used to connect external USB storage devices.

7. **SMART CARD READER :** Insert smart card for encrypted service access.

8. **PCMCIA :** To receive other pay-tv service you need a CA-Module(Viaccess, Irdeto, Nagravison, etc.) and a smart card from the service provider.

2. Rear Panel Configuration
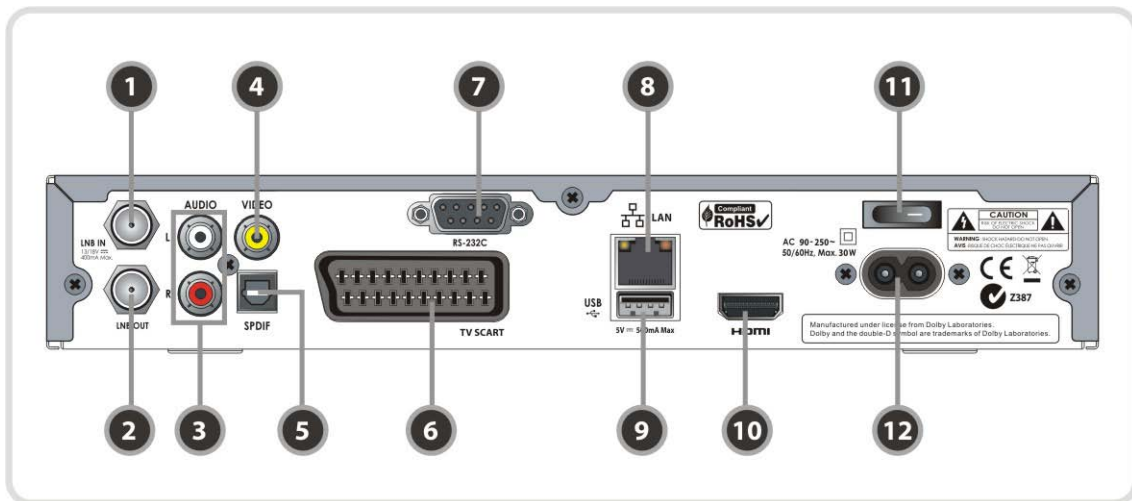
1. **LNB IN:** Connects to a satellite antenna cable.

2. **LNB OUT:** Connects to another STB for loop-through.

3. **AUDIO L/R** : Connects to a TV or VCR using an RCA cable. (Stereo audio output / White, Red)

4. **VIDEO** : Connects to a TV or VCR using an RCA cable. (Composite video output / Yellow)

5. **SPDIF** : Connects to an audio system using a S/PDIF cable. (digital audio)

6. **TV SCART** : Connects to the TV input using a TV SCART cable.

7. **RS-232C** : Serial port for firmware update and data transfer.

8. **Ethernet** : Local area network port for direct computer connection.

9. **USB** : Used to connect to external USB storage devices or WiFi adaptors.

10. **HDMI** : Connects to a TV using an HDMI cable for the best quality picture and audio.

11. **A/C Switch** : Power switch

12. **A/C power cable socket** : Connects to the A/C power cord.

3. Remote Control Unit
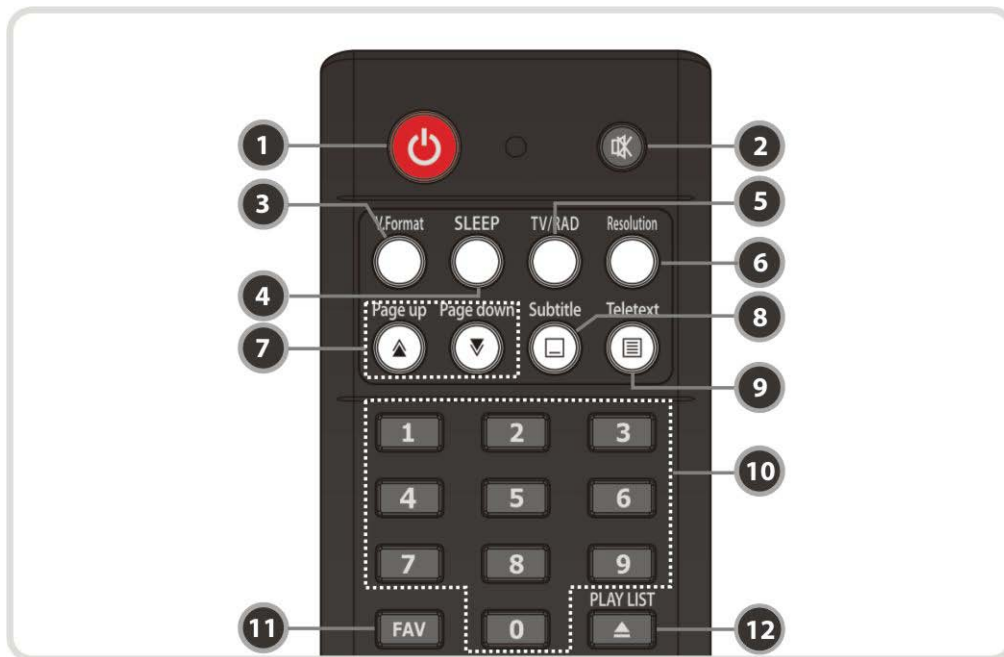
1. **POWER** : Turns the STB On/Off.

2. **MUTE** : Turns the sound On/Off.

3. **V.Format** : You can switch the Display Format (4:3 / 16:9)

4. **Sleep** : To adjust sleep timer.

5. **TV/RADIO** : Switches between TV and Radio.

6. **Resolution** : To select the resolution format. Each time you press the **Resolution** button, the resolution changes in the following sequence: ***576i > 576p > 720p > 1080i > 1080p***

7. **Page Up& Down** : Move to the next or previous page if more than one page are available. This button also is change the location of sub picture in PIP.

8. **Subtitle** : To show subtitles.

9. **Teletext** : To show the digital teletext.

10. **Numeric** : Allows numerical data entry and changing of services directly.

11. **Favorite** : To display the satellite group and the favorite groups.

12. **Play List** : To show the file list for the USB Storage Device or Network Storage Device.
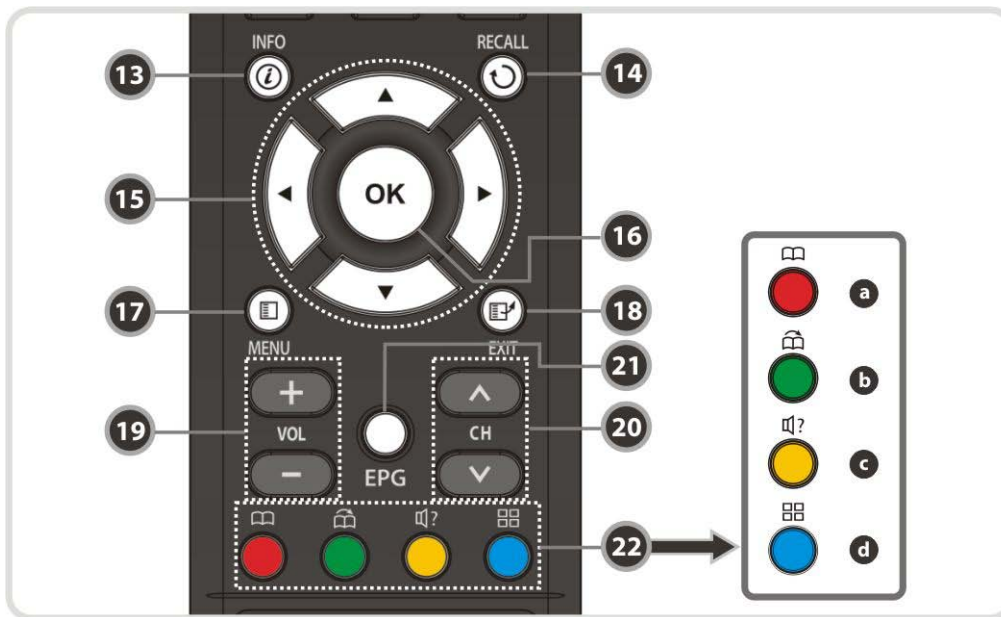
13. Information : Shows the information about the current program. If you press it twice, the detailed information box will be shown.

14. Recall : Moves to previous service.

15. ARROW Buttons
 a. Up & Down Buttons : To change the value of a selected item with preprogrammed values in menu.
 b. Left & Right Buttons : To move the cursor left and right in menu.

16. OK or Service List : Show the service list in non-menu mode and select an item or confirm in menu mode.

17. Menu : To enter the main menu or to move to the previous menu.

18. EXIT : Exit from the menu or pop-up window.

19. Volume Up & Down : To change the Volume.

20. Channel Up & Down: To change service channel.

21. EPG(Electronic Program Guide) : Shows the TV/Radio program guide.

22. Color Buttons
 a. RED : Used for special functions in the menu. The RED key is used to sort lists in the service list or go to previous day search in the EPG or make/delete the current position as a bookmark.
 b. GREEN : Used for special function in menu. The Green key is used to set the favorites setting in the service list or go to the next bookmark position.
 c. YELLOW : Used for special functions in the menu. Yellow key is used to find services in the service list or change the audio track.
 d. BLUE : Used for special function in the menu. The Blue key is used to set service list options in the service list or display **Multi-Picture.**
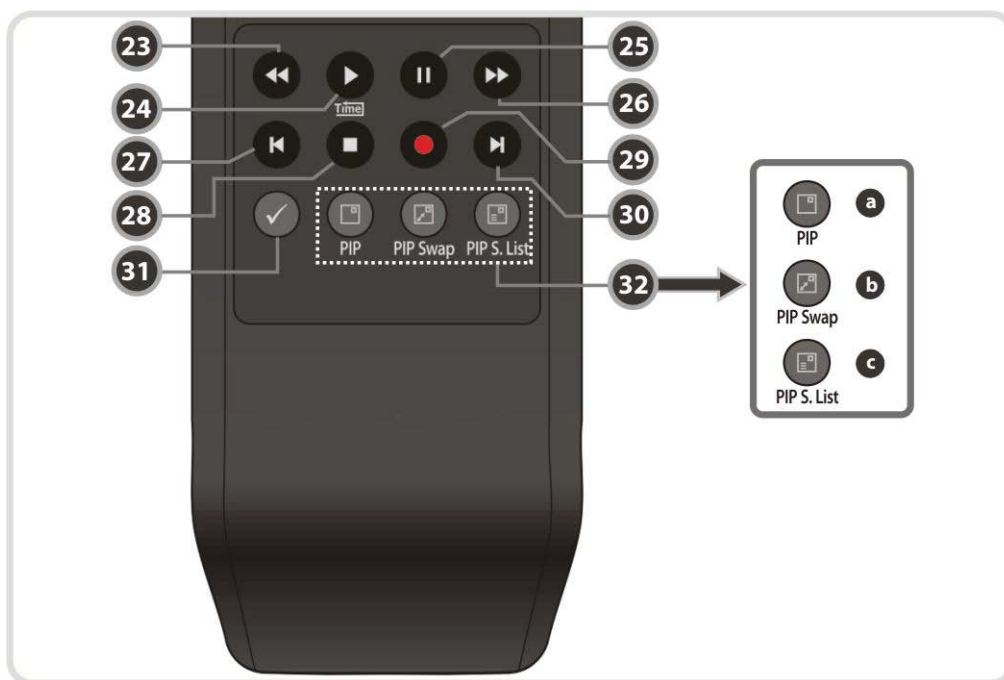
23. Rewind : Rewinds at high speed. Each time you press this button the rewind speed is increased.

24. Play / Time shift : Display the progress bar during playback when no progress bar is displayed. It starts playback at normal speed. It also returns to normal speed from trick mode..

25. Pause : This key is used to pause the video. Press once more to resume the video.

26. Fast Forward : Fasts forwards at high speed. Each time you press this button the speed is increased.

27. Previous File : Used to play the previous MP3 file in MP3 play mode. This button is also used to jump back to beginning of recording during playback.

28. STOP : To stop time shifting, play back or recording.

29. Recording : To start Recording.

30. Next File : To play the next file. This button is also used to jump to end of recording during a playback.

31. Repetition (*): This key is used to play back a recording repeatedly.

32. PIP Buttons
    a. PIP(Picture in Picture) : To activate the PIP window.
    b. PIP Swap : Switching between the main-picture and sub-picture
    c. PIP(Picture in Picture) Service List : To show the sub-picture service list.

NOTE : (*) Repetition may not be available until a new firmware version is installed. Please refer to your local dealer / distributor for clarification.

Connections diagram

1. Receiver to A/C power

● **Connect the A/C power cord between A/C power cord socket of receiver and A/C outlet.**
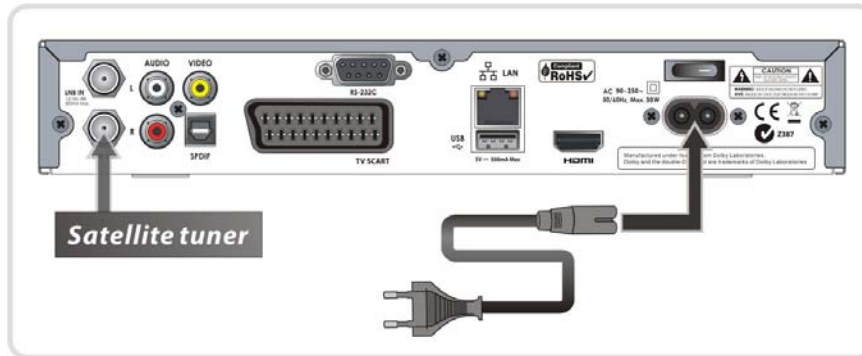
2. Receiver to TV with Digital A/V Output

● Connect the HDMI Cable to the HDMI Connector of the TV.
● Connect the SPDIF Cable to the Digital audio input of the Digital Audio Equipment.
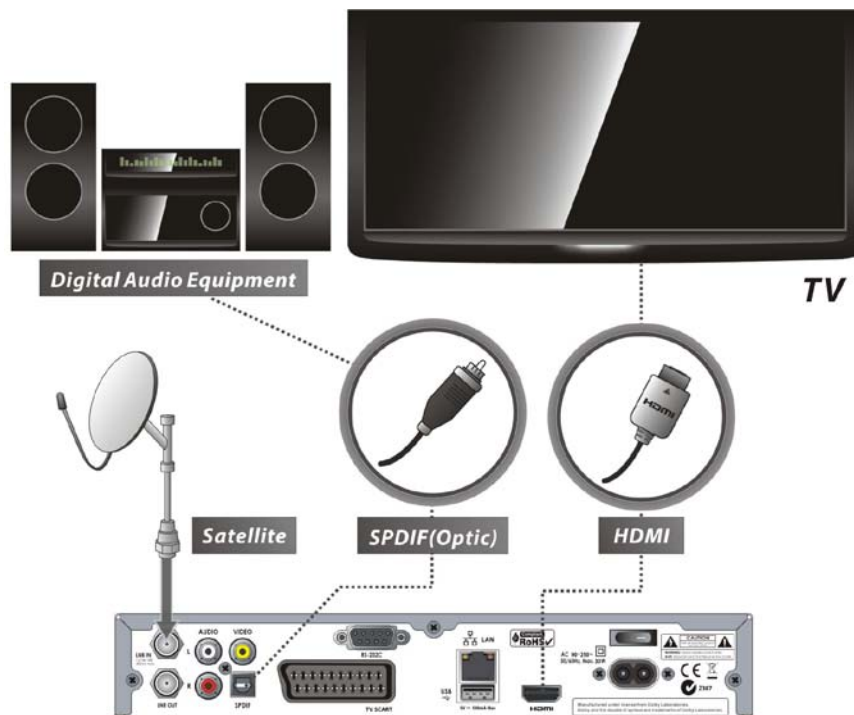
NOTE : Depending on the A/V equipment you own, there are various ways you can connect the STB. To choose the best connection options, please refer to the manual of the equipment you would like to connect to. To get High Definition playback of High Definition content, we recommend that you connect your high definition display with a HDMI cable. HDMI supports standard, enhanced or high-definition video and multichannel audio in a single cable.

3. Receiver to TV with Analog A/V Output

- Connect the TV SCART to the SCART input of the TV.
- Or connect the VIDEO and AUDIO L, R to VIDEO IN and AUDIO L, R IN of TV.
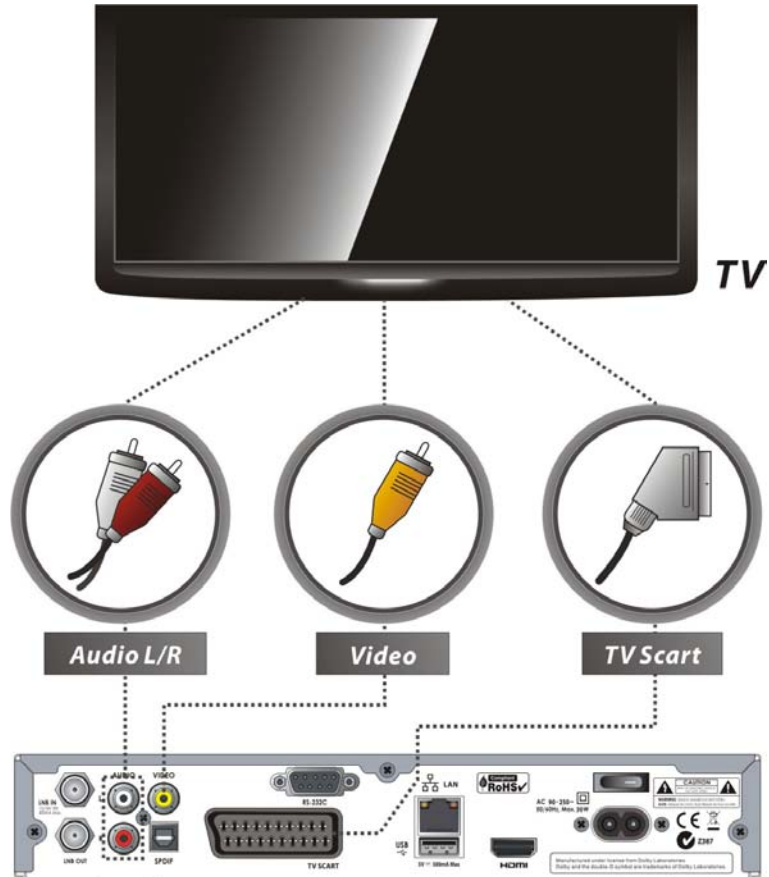
NOTE : The SCART cable connection is recommended for analogue TVs or VCRs
The composite connection(RCA cable) is recommended for analogue TVs
You cannot view high definition video with the SCART or the composite video
connector.

4. Connecting to Antenna Cable

- Using Single DISH : Connect the Satellite Antenna cable to LNB IN.

● Using a DiSEqC switch : Connect the cable from the DiSEqC switch to LNB IN.
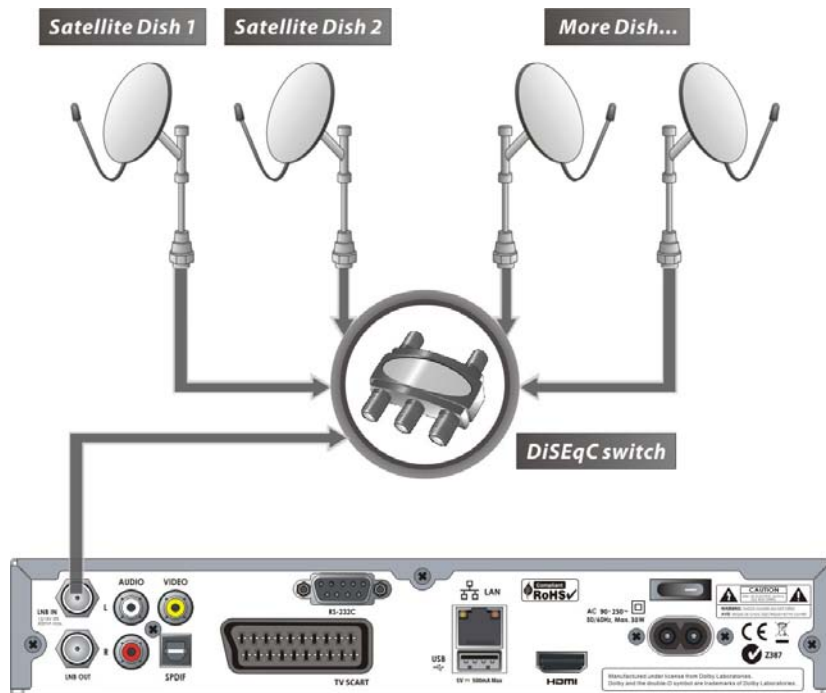
● Using DiSEqC motor : Connect the cable from the DiSEqC motor to LNB IN.

Guide of Functions

1. Selecting a Service

To select the desired service (channel), please refer to the instructions below.

1.1 Using CH UP/DOWN buttons

You can navigate between services by pressing the **CH UP/DOWN** buttons. Whenever you press the **CH UP(DOWN)** button, current service will be changed to next/previous service. Please press the **CH UP** or **CH DOWN** button until you fine the service you want to watch.

1.2 Using Service List

To select the desired service in the service list, you should firstly display the service list by pressing the **OK** button.

Use the **ARROW** buttons to select a desired service and press the OK button.

You can see that the service is changed in the small screen on the top-right.

To watch that service, press the **OK** button once more.

To watch the previous service, press the **EXIT** button.

In the Service List window, you can also select additional functions with the **COLOR** buttons. Press the **RED** button, and you can sort the services by Name, Transponder(TP), Group, Tuner and CAS (Conditional Access System).

Press the **GREEN** button, and you can add the services to one of 10 Favorite Lists.

Press the **YELLOW** button, and you can search & find the service via a virtual keyboard.

Press the **BLUE** button, and you can adjust service list option.

1.3 Using Simple Service List

- If you press NUMERIC buttons or the **UP/DOWN ARROW** button, the instant service list will be displayed.
- Select the desired service by using the **ARROW** button, and press **OK** button to watch.
- You can also enter the service number directly by using the **NUMERIC** button.

1.4 Using Recent Service List

- To display the recent service list, press the **RECALL** button for a short time.
- To return to the previous service that you were watching, press **RECALL** button twice or for a longer time.
- To choose a service from the recent service list, use the **ARROW** button to select it, and then press the **OK** button.
- Press the EXIT button to exit from the recent service list.

2. Information Window

If you want to view the information of the current service that you are watching, press the **INFO** button. Then the Information window will be displayed.

This Information window is automatically displayed when changing between the services.

This window contains much useful information such as service number, service name, encryption type, teletext, subtitle, Audio indication for Dolby Digital, duration of the service and so on.

By pressing the **INFO** button once again, you can get more detailed information about the service.

3. Multi-Picture Display.

Press the **BLUE** button to display multiple pictures and use the **RED** button to select the display options for 9 or 12 multiple pictures.

4. Electronic Program Guide (EPG)

The Electronic Program Guide (EPG) helps you to navigate through

all the possible viewing options. And the EPG supplies additional

information about each channel, such as program listings, start/end times and detailed information about the program listings for all available services. The availability and size of information of these program details can vary, depending on the particular broadcasters, individual services.

E.g. Freeview provides a full 7 day EPG, with full descriptions of programs broadcast.

- Press the **EPG** button, then the EPG menu will be displayed.
- Use the **ARROW** buttons to move to other services or to see previous/next guide.
- Press the **EPG** button once to view the full EPG with multi service list, and press it twice to view the additional EPG information of a specific channel service. Keep pressing the **EPG** button to toggle between the full and detailed menus of EPG.
- Press the **GREEN** button to view next days EPG and the **RED** button to view the EPG for a previous day.
- Select the program by using the **ARROW** buttons then set the event timer by pressing **OK**.
- You can schedule a recording with the EPG menu as follows.
  - Press **RECORD** button to schedule the event. This schedule can be checked in the Timer Settings, in the System tools menu.
  - To cancel the scheduled recording, press the **OK** button with the desired event selected.
  - To edit the scheduled recording, press the **RECORD** button with the desired event selected.

5. Favorite Group

Press the **FAV**(Favorite) button to view all favorite groups such as sports, movie, drama, satellite group and so on. Scroll through the various favorite groups using the **UP/DOWN ARROW** buttons, and select the desired favorite group by pressing the **OK** button.

6. Volume Control

- To adjust the audio volume, press the **VOL UP/ DOWN** buttons.
- The Audio volume control bar will be displayed at the top of the screen and will disappear after 4 seconds.
- When necessary, press the **MUTE** button to turn on/off the audio.

NOTE : The mute function remains set while you change services.

7. Pause

The **PAUSE** button is used to freeze the video. Press the **PAUSE** button once more to resume the video.

8. Subtitle

You can select the language for Subtitles, if the program provides subtitle information.
- Press the **SUBTITLE** button on your remote control unit.
- Select the desired subtitle language then press the **OK** button.
- The subtitles will be displayed in the selected language at the bottom of the screen.
- To turn OFF subtitles, Select *'Off'* from the subtitle language list.
  NOTE : If a program does not provide subtitle information, the SUBTITLE button will not be active.

9. Audio Control

Press the **YELLOW** button while watching live TV to display the Audio Control menu. You can set the *Audio Track / Sound Mode / Sound Level.*

- **Audio Track :**
  You can see all the audio tracks of the service you are watching. Use the ARROW buttons to choose the preferred audio track. If you select Auto, the audio track will be selected according to the audio language setting in the language setting menu.

- **Sound Mode :**
  To set sound mode, *Stereo / Mono / Left / Right.*

- **Sound Level :**
  To set sound level, *Low(-30%) / Normal / High(+30%) / Off.*

10. Teletext

When the *TELETEXT icon* on the INFO Banner is displayed, press the **TELETEXT** button to view the teletext.

11. PIP (Picture in Picture)

● When you press the **PIP** button, a sub picture screen will appear on the main screen view.
If you press the **PIP** button one more time, the primary picture and the sub picture will appear together side-by-side with the same size. The picture of the left side is the primary and the picture on the right side is sub. If you press the **PIP** button one more time, the sub picture will disappear.
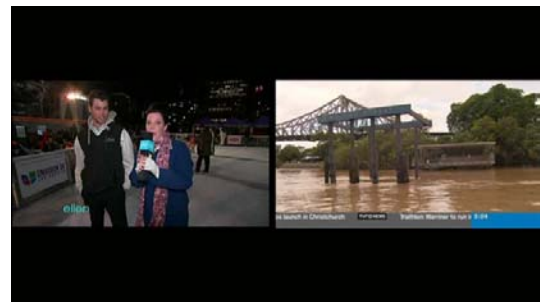
● In the PIP mode, you can change primary and sub with the **PIP SWAP** button.

● If you press the **PAGE UP/DOWN** button, the location of the sub picture is changed.

● If you press the **PIP SERVICE LIST** button, you will see the list of services available for the sub picture. You can change the service of the sub picture from the service   list shown.

> *NOTE : Changing services of sub the picture could be limited the tuner connection or a recording event.*

PVR (Personal Video Recorder) Function

1. Recording

You can select a recording storage device with the following sequence :
Menu > Configuration > Recording Option > Record Device.
The Default is *'USB'*.

1.1 Recording methods

There are 3 type recording methods.
(Instant Recording / Time Scheduled Recording / Event Scheduled Recording).

● **Instant Recording :**

At anytime, you may press the **RECORD** button to start your recording instantly.
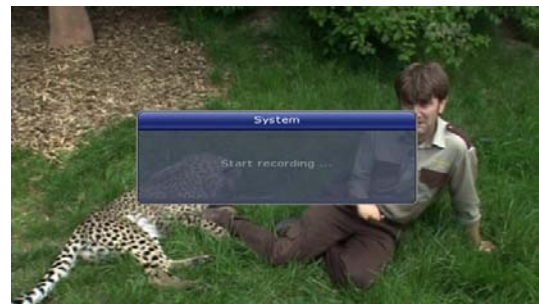
● **Time Scheduled Recording :**
  - In Timer Settings menu, you may set the time & program to record your desired service program.
    (Go to Main Menu > System Tools > Timer Settings)

  - Press the **GREEN** button to activate the new timer edit screen.
  - In the Timer Edit screen, you may choose start date/time, duration, service, mode, type (Recording/Play). Then simply press the *Yes* button to schedule your recording event. Please note that a minimum of 3 minutes is required from the current time to the Start time for the recording process to take place.

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● **Event Scheduled Recording via EPG :**
  - In the EPG menu screen, you can choose the event you wish to schedule or record.
  - While watching the LIVE TV screen, press the **EPG** button to access the EPG menu screen.

  - Go to the event which you wish to view at the time indicated on the EPG schedule, then press **OK**. The event will be scheduled with the *BLUE play icon*. This BLUE play icon means that you want to just watch the event at the scheduled time.

  - Press the **OK** button one more time, then the event will be scheduled with the *RED dot icon*. This RED dot icon means that you want to record the event at the scheduled time.

  - When you set an event for scheduled recording via the EPG menu. It automatically sets a Timer Event in the *Main Menu > System Tools > Timer Settings.*

1.2 Recording Edit

Press the **REC** button while recording to see the recording message window.

- **Pause :** Select *Pause Recording* then press **OK** to pause the current recording process.
- **Duration :** Set recording duration. Press **LEFT/RIGHT ARROW** button to change recording duration.
- **Stop Position :**

    Set the finishing time of recording.
    - ***End of current event :*** finish recording at the end of current event
    - ***End of next event :*** finish recording at the end of next event.
    - ***Not Available :*** EPG is not available.

- **Record Slot :** When you are recording 3 services, you can select Primary / Secondary / Tertiary by pressing **Left/Right Arrow** button, then go to Change Service and press **OK** button to show that recording service.

1.3 Long Time recording

During lengthy recording processes of 4GB(Giga Byte) or more, additional files may be created every 4GB. *(For example; aaa.ts, aaa.ts1, aaa.ts2… and so on).*
You must remember not to delete any of duplicated file.

1.4 Pause during recording

- When the **PAUSE** button is pressed during recording, only the live video is paused, but recording is continued at the selected recording device.

    (Menu > Configuration > Recording Option > Record Device)
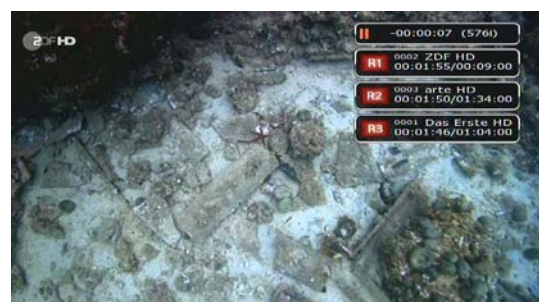
- Press **PAUSE** button once again and event will resume from the pause time.
- During recording, press the **PLAY/TIMESHIFT** button to show the Play bar screen.

- While the Play bar is shown on your screen, you may use the **LEFT/RIGHT Arrow** button to move (forward & backward) freely within recorded time.
- If you press the **YELLOW** button with the Play bar onscreen, you can set Jump time to *Auto / 10sec / 30sec / 1min / 2min / 4min / 10min.* Then press **LEFT/RIGHT Arrow** button to jump by the skip size you have set.
- If you press the **STOP** button, it will go to LIVE and you may press **PREV FILE** button to view the recorded file from the beginning.

- The STB can record up to 3 different services simultaneously.
- When recording 3 services at the same time, you can press the **STOP** button to see a message window of current recording status / information.
  If you select one of the 3 or 2 recordings and press the **OK** button, that recording service will be stopped.
  If you press the **STOP** button while recording 1 service, a recording stop message window will appear. Then select *YES* to stop recording.
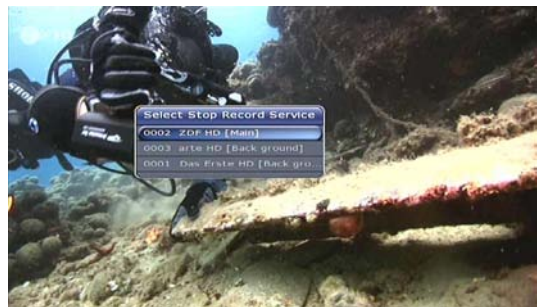
> *NOTE : If you want to record up to 3 services, please format the storage devise with 'Journaled(JFS)' file system.*
> *Menu > Storage Manager > Format > File System > select 'Journaled(JFS)'.*

2. Time Shifting

You can select a storage device to host the temporary file for the Time shift with the following sequence:
Menu > Configuration > Recording Option > TimeShift Device.
Default storage device is set to *'USB'*

- If you press the **PAUSE** button during Time shift, the live video is paused but the time shift buffer will continue to record.

- Press the **PAUSE** button once again, then the event will resume from the paused time.
- While watching live TV, press the **PLAY/TIMESHIFT** button to show the play bar on your screen.

- When the play bar is displayed on your screen, you may use the **LEFT/RIGHT Arrow** buttons to move freely through recorded time.
- If you press the **YELLOW** button with the Play bar onscreen, you can set Jump time to *Auto / 10sec / 30sec / 1min / 2min / 4min / 10min.* Then press **LEFT/RIGHT Arrow** button to jump by the skip size you have set.
- If you press the **STOP** button while time-shifting, you will be returned to live TV. You can also use **PREV FILE** button to move to a start location of the Time-shifted file.

3. Playback (Play List)

You can playback many files with the Playlist which you access by the **PLAYLIST** button.
In the Playlist, you can check and playback *recorded files, multimedia movie files, MP3 music files,* and *image files.*
With the **LEFT/RIGHT ARROW** button, go to the *Recorded Files, Imported Files, Music* and *Photo* category and check & for playback files in each category.
If press the **PLAYLIST** button, you can see all playable files.   In this mode, the **Green** button is not used. You can press the **LEFT/RIGHT Arrow** button to move to from *Recorded Files / Imported Files / Music / Photo / Play List menu.*

3.1 Recorded Files

- If you press **RIGHT Arrow** button in Play List, you can go to Recorded Files menu.
- Locate the recorded file(s) you wish to play with the **UP/DOWN** button and press the **OK** button to playback the recorded file(s).
- To choose a particular selection of files, select a desired file and press the **RED** button. Press the **OK** button to begin the selected files.

- **Select Device** : Press **PLAYLIST** button one more time in the Playlist mode to see *"Select Device"* window, and select the device which has the file you want to play.

    NOTE : "Select Device" window shows devices which are currently connected to the STB.
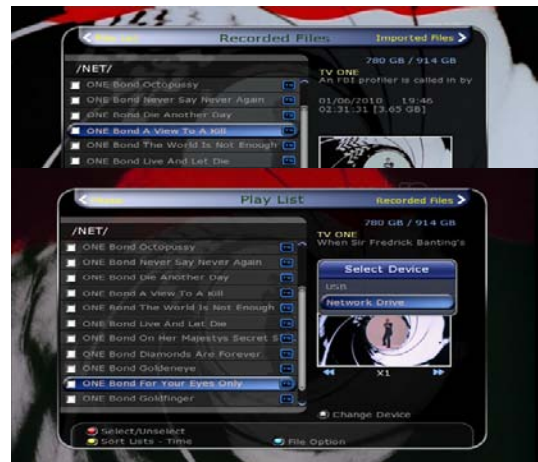
- **Sorting :** If you press the **YELLOW** button, you can sort the files by *Time / Name / Size / Type.*

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- **File Option :**

  If you press the **BLUE** button, you can select *Delete, New Folder, Move to Folder, Copy to Device, Rename, Lock/Unlock.* You can select multiple files together and delete or move all of them at once.
  - *Delete :* To delete file(s)
  - *New Folder :* To make a new folder. The default name of the folder is *"Group#"*.
  - *Move to Folder :* To move the selected file(s) to a folder you want. This option is available if there is no folder.
  - *Copy to Device :* To copy the file(s) to other storage device. This option is not available if only one storage device is connected.
  - *Rename :* To rename the folder or file.
  - *Lock / Unlock :* To lock and/or unlock the file with your PIN Code. You must select a file to do this option.

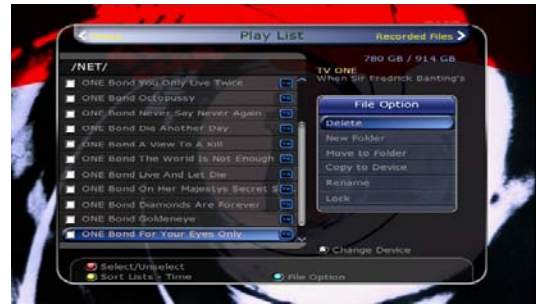## 3.2 Imported Files

- If you press **RIGHT ARROW** button in Recorded Files, you can go to Imported File menu.
- Locate the file(s) you wish to play with the **UP/DOWN** button and press the **OK** button to enjoy the movie.
- To choose a particular selection of files, select a desired file and press the **RED** button. Press the **OK** button to begin the selected files.
- You can use the same 'Select Device', 'Sorting' and 'File Option' features as in the Recorded Files.

3.3 Music

- If you press the **RIGHT ARROW** button in Imported Files, you can go to Music menu.
- If you press the **RECALL** button, you can enjoy music with Shuffle playback and repeat.
  You can use the same *'Select Device'*, *'Sorting'* and *'File Option'* features as in the Recorded Files.

3.4 Photo

- If you press the **RIGHT ARROW** button in Music, you can go to the Image Photo menu.
- If you press the **RED** button or **OK** button, you can start a slide show of image files. Press the **EXIT** button to stop slide show.
  - *RED button :* Auto Slide show
  - *OK button :* Manual Slide show
- If you press the **GREEN** button, you can adjust the Slide Time, Repetition, Title, Down-scale.
- You can use the same *'Select Device', 'Sorting'* and *'File Option'* features as in the Recorded Files.

4. Bookmark

- When the Play bar is displayed, you may move to desired time and book mark it by pressing the **RED** button.   Bookmark(s) are indicated with a *Green line* on the play bar. Also, you may press the **RED** button to activate the play bar to mark your bookmark(s).

When the play bar is on, user can move / jump between the bookmarks by pressing the **GREEN** button.

- If you wish to delete any Bookmarks, go to that bookmark by pressing the **GREEN** button, then press the **RED** button to delete the current bookmark.
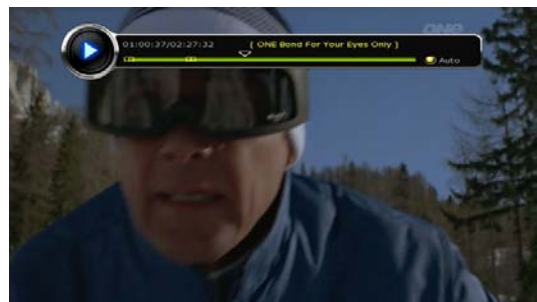
5. Trick mode

- The user can change the speed of a fast forward play with the **FF**(Fast Forward) button. Press the **FF** button to change the speed to **x2, x4, x6, and x8.** If you once again press **FF** button in its **x8** mode, it returns to normal(x1) speed play.
- You can also change rewind speed with the **REWIND** button. Press **REWIND** button to change the speed to **x2, x4, x6, and x8.** If you press the **REWIND** button again in its **x8** mode, it returns to normal speed.

- You may press the **PAUSE** button at any time to pause a pre-recorded event. Press the **PAUSE** button once again to resume play of the recorded event.

Menu Map

Main Menu	
System Tools	1. Storage Manager 2. Timer Settings 3. Service List Manager 4. Data Transfer
Configuration	1. Recording Option 2. Parental Control 3. Display Setting 4. Time Setting 5. Language Setting 6. A/V Output Setting
Installation	1. Dish Setting 2. Positioner Setting 3. Service Search 4. Network Setting 5. System Recovery 6. System Information
Utilities	1. Calculator 2. Calendar 3. CAS 4. Plugin 5. YouTube

Main Menu of Guide

To display the menu, press the **MENU** button at any time. You can select the sub menus by using the **ARROW** buttons.

The selected sub menu becomes highlighted. After selecting (highlighting) the sub menu you want to access, press the **OK** button. If you want to return to the previous menu, press the **MENU** button. And if you want to exit from the menu, press the **EXIT** button.

1. System Tools

1.1 Storage Manager

The items in this menu allow you to access and control the storage devices that you want.

● **Current Device :** Select the storage device you want to access with the **ARROW/OK** buttons.

● **Status :** You can see the information of current connected devices, such as *'Mounted', 'Not Available'*

● **File System :** It shows the file system of the current device. You can also select desired file system that you want when you format the device.

> *NOTE : You must select FAT32 file system, if you want to access the USB storage devices in Windows*

● **Total :** Displays total size of the current device.

● **Free :** Displays amount of free space on the current device.

● **Format :** If you press the **OK** button to format current device, the device will be formatted with above file system.

> *NOTE : When file system is 'Unknown', the device will be formatted with 'Journaled'.*

● **Storage Check :** Check the current connected device.

● **Play List :** Press **OK** button to move to *'Play List'* menu directly.

1.2 Timer Settings

Insert a new timer entry or modify an existing timer entry.

- **To add new timer entry :** Press the **GREEN** button. The Timer Edit window will popup. You can set the specific start date, time, duration and service for its reservation. And you can choose one of the Timer Modes *'Once'* or *'Daily'* or *'Weekly'.*   You can choose the timer operation type '*Recording*' or just to *'Play'.*

  - If you choose *'Recording'*, it will start recording at that time.
  - If you choose *'Play'*, it will change and tune to the service that you wish to watch.
  - If you set Alarm Confirm Message to *'On'*, alarm message will activate.   Or choose *'Off'* to disable.
- **To modify existing timer entry :** Choose the timer entry which you wish to modify and press the **OK** button.
- **To delete an existing timer entry :** Choose the timer entry that you want to delete and press the **RED** button.
- Press the **YELLOW** button to enter to Calendar.
- Press **BLUE** button if you want to delete all the event(s).

> *NOTE : If you reserve one or more event through the EPG menu, the reserved event(s) will be added to Timer Settings automatically.*

1.3 Service List Manager

The Service List Manager menu will appear when you press the **OK** button.
You can select Edit Mode by pressing the **YELLOW** button.

- **Lock Services :** All service lists will be shown on the left side of the window, the middle will show the list of service to be locked. By using the **ARROW** and **OK** buttons, you may move the chosen service to the middle window to lock that service. Services can also be moved back from the middle to the left side to un-lock them.

- **Move Services :** All service lists will be shown on left side of the window, services to be moved will be shown on the middle window. Move the service to the middle window by using the **ARROW** and **OK** buttons, then the middle window service will be moved to a specified location when the desired location is selected from the left window.

● **Delete Services :** All service lists will be shown on left side of the window. By using the **ARROW** and **OK** buttons you may select services to be deleted by placing them in the middle window. The press the **GREEN** button to delete the selected services.

● **Skip Services :** All services will be shown on left side of the window, the middle window will only show the services that are chosen to be skipped. By using the **ARROW** and **OK** buttons you may move the selected services from the left to middle window to skip them.

● **Set Favorite Services :** Use the **ARROW** and **OK** buttons to select your desired favorite group. Once a favorite group is chosen, the left side window will show all service lists and the middle window will only show the selected services of the favorite group selected. By using the **ARROW** and **OK** buttons, you may ADD the desired services to a favorite group or DELETE any from the favorite group. The name of the favorite group can be edited by pressing the **GREEN** button.

● You can go to Select Favorite Group by pressing **GREEN** button. In this mode, you can select *Lock Group / Edit Group Name / Add Group / Delete Group.*

● **Edit Services :** All services name will be shown on the left side of the window.
Move the highlighted bar to the service where you want to edit its name and press the **OK** button for Edit Service menu. Then move the highlighted bar which you want to edit.
You can edit *Service Name, Video Stream Type, Video PID, Audio Stream Type, Audio PID, PCR PID.*

1.4 Data Transfer

When the data transfer task is in process, the Front USB slot is set to a default device slot.   But, if no USB device is connected to a front USB slot, then the Rear USB slot is set as a device to be used for the data transfer process.

> *NOTE : If no USB device is connected on either two (Front & Rear) USB slots, then the Menu item will not be available.*

● **Transfer all System data to USB storage :** If you want to transfer and use BOTH of the current system parameters and service data in the future, this menu will allow you to store all data to your USB device. Press **OK** button to store all current data to an external USB storage.

● **Transfer Service data to USB storage :** If you want to transfer and use ONLY the service data in the future, this menu allows you to store current service data. Press the **OK** button to store the current service data to your external USB storage. The service data can also be viewed and edited on a PC with an appropriate editor such as DrEdit.

● **Data download from USB storage device :** This menu allows you to download the saved data from the external USB storage to your STB. Press **OK** button to download data.

2. Configuration

2.1 Recording Option

- **Alarm Confirm Message** : Turn *'ON'* this Alarm message to indicate and show the alert pop-up message when a reserved recording event is about to start. The alert message will show 3 minutes before the start time of the reserved recording event.

- **Recording Stop Message** :
  - *Set 'On' :* When you press the **STOP** button while recording, then a confirmation window is displayed.
  - *Set 'Off' :* When you press the **STOP** button while recording, the STB will stop the recording process immediately / instantly without asking the additional confirmation from the user.

- **Extra Recording Time Before(Start) & After(Finish)** :
  - You can add an extra recording time before start / after finish *(1min /2min /3min /4min /5min/ 10min/ 15min/ off)* to scheduled recording events. If you set an extra recording time by using the **ARROW** and **OK** buttons, the scheduled recording event will have a *'Start' / 'Finish'* time of additional recording time added to the basic event. This option only works for events scheduled from the EPG. If you schedule a service recording in the Timer Settings menu, this option has no affect.

- **TimeShift Start** : You can choose the method of TimeShift function.
  - *Auto :* TimeShift function is automatically activated.
  - *Off :* TimeShift function will be disabled.
  - *Manual :* TimeShift will be activated when the **Pause** key is pressed.

- **TimeShift Duration** : You can adjust TimeShift duration in 30 minute intervals. *(Off /30min /60min /90min /120min).* This duration defines the maximum time length of the TimeShift as long as the storage device has enough memory space left.

- **Playback Position Jump** : When you use **LEFT/RIGHT ARROW** button to move back/forward through the recorded time bar, You can select the jump size. *(10 Sec / 30 Sec / 1Min / 2 Min / 4 Min / 10 Min / Auto).*

- **Playback Numeric Function** : This function defines the operation of the **NUMERIC** buttons of your remote control unit (RCU) while the *'Playbar'* is displayed on the screen.
  - *Commercial Skip :* When the **NUMERIC** buttons (1 to 9) are pressed the video will move forward according to which of the **NUMERIC** buttons pressed. For example ; when *'1'* is pressed, 1min move forward, *'5'* is pressed, 5min move forward from current position. When *'0'* is pressed, it will move back by 1minute.
  - *Percentage Move :* When the **NUMERIC** buttons are pressed, the video will move to the location of that % percentage of numbers pressed. For example ; if you press *'10'*, you will move to the 10% location of the total video length. If you press *'99'*, you will move to the end of the video clip recorded.

- **TimeShift Device :** You can select the TimeShift Device you wish to use.
  - USB1(Front), USB2(Rear), Network Drive.

- **Record Device :** You can select the Recording device you wish to use.
  - USB1(Front), USB2(Rear), Network Drive.

2.2 Parental Control

User's access rights to a service and programs are controlled by a 4-digit secret code that is defined by the user. Whenever you attempt to access the parental control menu, a pop-up window will ask you to input a *PIN code.* (If necessary, you can change it.)

NOTE : The default PIN code is '0000'

- **Censorship :** Set the parental guidance rating of highlighted censorship classification. The parental level is given as an age-based number.
- **Change Pin code :** To change your PIN code, input the new PIN code using the **NUMERIC** buttons. To verify the new PIN code, input the new PIN code again.
- **System :** Set the access rights to the System menu.
- **Installation :** Set the access rights to the Installation menu.
- **Configuration :** Set the access rights to the Configuration menu.
- **Edit Service** : Set the access rights to the Edit menu.
- **Plugin** : Plugin Set the access rights to the Plugin menu.

2.3 Display Setting

- **Info Box position :** Set the position of the information window.
- **Info Box Display Time :** Set the duration the information window should be displayed on the screen after changing services.
- **Info Box Event Type :** Set the event type that is displayed in left bottom part of the information window.
  - *Present Event with Time :*
    Display the present event name with time. (Default)
  - *Present and Follow Event :*
    Display the present and following event name.
- **Volume Bar Display Time :** Set the time duration that the volume bar being displayed on the screen after changing audio volumes.
- **EPG Time scale :** You can set the time scale in hours which is displayed for a program in the EPG window.
- **Zapping Mode :** You can set the zapping mode as follows (zapping mode is when changing services).
  - *Black screen :* Display a black screen when changing between services.
  - *Freeze :* Display the last still picture when changing services.
- **Simple Service List :** To set the simple service list *'On'* to display or *'Off '*.
  - *On :* Press **UP/DOWN ARROW** button to display the simple service list while watching live TV.
  - *Off :* If you set Off, channel Up/Down when you press **UP/DOWN ARROW** button.
- **Front LED Lighting Time :** You can adjust the lighting time of the front LED.
- **Front LED Brightness :** You can adjust brightness of the front LED with 4 steps. By setting *'off'* this option, will turn off the front LED lighting.
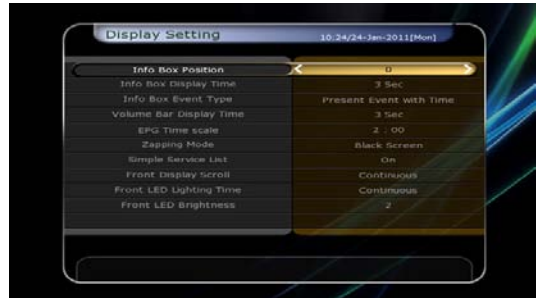
2.4 Time Setting

- **Time Setting :** To set the current time, you can use two modes; *Auto* or *Manual*.
- **Local Offset** : Enter the offset value by using the standardized information of current service area.
- **Daylight Saving** *:* If you want to apply daylight saving, select the counter by using the **ARROW** buttons.
- **Clock Mode :** Select the type of clock display(12 Hours or 24 Hours) using **ARROW** buttons.
- **Wake Up Mode :** Enter the time for the receiver to automatically power *ON*. And you can choose one of Wake Up Mode as *'off'* or *'Once'* or *'Daily'* or *'Weekly'*.
  - *Wake Up Date :* Select the date when the STB is turn on. Press the **OK** button to display calendar.
  - *Wake Up Days :* Select a day of the week when the STB is turn on.
  - *Wake Up Time :* Enter the wake up time of the STB using the **NUMERIC** buttons.
  - *Wake Up Service :* Select the service when the STB is turn on. Press the **OK** button to display the service list.
- **Sleep Mode :** Enter the time for the receiver to automatically switch *OFF* and go to standby mode. And you can choose one of the Wake Up Mode as *'off'* or *'Once'* or *'Daily'* or *'Weekly'*.
  - *Sleep Date :* Select the date when the STB is turn off. Press the **OK** button to display the calendar.
  - *Sleep Days :* Select a day of the week when STB is turn off.
  - *Sleep Time :* Enter the turn-off time of the STB using the **NUMERIC** buttons.

2.5 Language Setting

- **Menu Language :** Select the desired menu language by using the **ARROW** buttons.

    NOTE : The menu and operation languages will differ depending on the country sold. Available languages are subject to change without prior notice.

- **Audio Language :** Select the default language for the audio when changing services. If no other language is provided, then the default language of current will be automatically selected.
- **Subtitle Language :** Select the default language for subtitle when changing service.
- **Teletext Language :** Select the default language for Teletext.
- **User Font file :** Select a font you want to use.

    NOTE : To show and use the User Font, please install a desired font file(*.ttf) to the /Var/Font directory(folder) of your receiver(STB) by using the network. Then press LEFT/RIGHT button to select a font and press OK button.

2.6 A/V Output Setting

- **TV Type :** Select the TV types.(*PAL/NTSC/Auto*) In Auto mode, the STB is automatically selects NTSC or PAL according to the format the of the broadcast.

- **TV Aspect Ratio :** Select the aspect ratio of the TV which is connected to the STB *(4:3/16:9)*. This menu must be set prior to selecting the Display Format function.

- **Display Resolution :** Select   the Display Resolution of the screen by using **ARROW** or **OK** button. You can also change the resolution with **Resolution** button in the remote. Each time you press the **Resolution** button, the resolution changes in the following sequence: *576i > 576p > 720p > 1080i > 1080p.*

> *NOTE : Please note that your TV may not show a picture depending on the Display Resolution set by your STB. Also the STB is set to PAL when NTSC is required or vice versa. If you set the Display Resolution to HD(more than 576p), your TV cannot display anything if the TV is connected to the SCART of the STB. In case of HDMI, your TV can display a picture for all of the resolutions that it supports. It is possible that your TV may not display a picture with 576i,or 1080p because some HDTV's do not support 576i or 1080p.*

- **Display Format :** In case of a 4:3 ratio TV set, you can select *Letter Box* or *Pan&Scan.* In case of a 16:9 ratio TV set, you can select *Pillar Box* or *Full Screen.*
  - *16:9 Display format on 4:3 TV set*
    Letter Box : You can see the full screen of 16:9, but top and bottom edges of your TV screen display black horizontal bars.
    Pan&Scan : The picture is displayed in full on your 4:3 TV screen, but left and right sides of the original picture cannot be displayed.
  - *4:3 Display format on 16:9 TV set*
    Pillar Box : You can see the full screen of 4:3, but left and right sides of your TV screen display black vertical Pillars. 4:3
    Full Screen : The picture is displayed in full on your 16:9 TV screen, but left and right sides of the original picture are displayed by widening of the screen from left and right.
    Because of the artificial widening, the TV picture will be distorted.
- **Video Output Mode :** According to Display Resolution, you can select the *Video Output Mode.*
  - *In case of More than 576p(HD) :* The *'RGB'* output will be disabled automatically.
- **HDMI Dolby Digital :** Set the Dolby Digital mode *'On'* or *'Off'* for HDMI output.
- **Dolby Digital Default :** Set the Dolby Digital Default mode *'On'* or *'Off'*. If you set *'On'*, Dolby Audio will play on the services that support Dolby Audio.
- **Sound Mode :** Set the audio output mode output for the RCA jacks, optical SPDIF and HDMI *(Stereo/Mono/Left/Right)*.
- **Standby Power :** You can select the standby power mode.
  - *'On' :* Front window displays clock and the standby LED will be red in standby mode.
  - *'Off' :* Front window only displays the red standby LED in standby mode.
- **Audio Sync Delay :** To adjust Audio Sync. You can adjust if from 0ms to 400ms.

3. Installation

3.1 Dish Setting

Select the satellite/antenna and LNB settings for service search. The values that are set in this menu will be available for selection in other service searching menus.

- **Satellite :** Select the satellite which you want to do a search for.
  - Press the **LEFT/RIGHT ARROW** button to select the satellite.
  - If you press the **OK** button, the entire satellite list will be displayed.
  - Select the desired satellite name to search.
  - If the desired satellite name is not listed then select User Defined.
- **Frequency :** Select the satellite frequency which you want to use to check the signal.
- **LNB Power :** Select the LNB power on or off.
- **LNB Type :** Select the LNB type.
- **LNB Frequency :** Select the local oscillator (L.O.). frequency that is specified for the LNB used..
  - Use the **LEFT/RIGHT ARROW** buttons to select the LNB frequency.
  - If the required LNB frequency is not listed, then enter the frequency manually using the **NUMERIC** buttons.
  - When you select Universal LNB type, both 9750 and 10600 are supported at the same time. And then the LNB 22KHz setting is disabled (as this is used for L.O. switching).
- **LNB 22KHz :** If you use a separate 22KHz tone switch box, enable the 22KHz tone if you are connecting to the 22KHz side of the switch, and disable it if you are connection to the 0KHz side of the switch.
- **DiSEqC Switch :** If you use *DiSEqC 1.0* or *DiSEqC 1.1* switch, select one of the DiSEqC inputs.
- **Service Search :** Press the **OK** button to move to the Search Menu

3.2 Positioner Setting

- **Satellite :** Select the satellite which you want to search for the Service.
  - Press the **LEFT/RIGHT ARROW** button to select the satellite.
  - If you press the **OK** button, a complete satellite list will be displayed.
  - Select the desired satellite.
  - If the desired satellite is not listed then select User Defined.
- **Frequency :** Select the TP frequency you want to use to check for a signal.
- **Positioner :** Select the positioner.
  - *None : (No Positioner)*
  - *Using DiSEqC 1.2 :*
    Move : To move the dish, press **LEFT/RIGHT** button.
    Fine Move : To move the dish in smaller steps, press the **LEFT/RIGHT ARROW** button.
    Step : Set to positioner moving steps as 1, 2, 3, 4
    Positioner Command : To use various positioner commands, press the **OK** button. Then, available positioner commands will appear.

- *Using USALS :*
  Dish Longitude : Enter the longitude position of the antenna using the **NUMERIC** buttons.
  Dish Latitude : Enter the latitude using the **NUMERIC** buttons.
  Go To : Press the **OK** button to rotate the dish to the selected antenna position.
  Positioner Command : To use various positioner commands, press the **OK** button. Then, available positioner commands will appear.

- **Dish Setting :** Press the **OK** button to move to *Dish Setting* menu directly.
- **Service Search :** Press the **OK** button to move to *Service Search* menu directly.

3.3 Service Search

- **Auto Search Mode :**
  - *Satellite :* Press the **OK** button to select the target satellite to be searched.
  - *Search Type :* Select the search type.
  - *Network Search :* You can select Off or On. When you select '*On*', you can find more transponders using the home network. As it refers to NIT during searching, if there is the frequency information of other transponder, it searches the other transponder besides the transponder that the user inputs.
  - *Time Calibration :* You can select 'Simple', 'Full' and 'Off' to get TDT(Time Data Table) from each TP
  - *Dish Setting :* Press the **OK** button to move to Dish Setting menu directly.
  - *Positioner Setting :* Press the **OK** button to move to the Positioner Setting menu directly.
  - *Start Search :* Press the **OK** button to start search.

- **Manual Search Mode :**
  - *Satellite :* Press the **OK** button to select the target satellite for search.
  - *Frequency :* Select the frequency from the list to search.
  - *Symbol rate :* Enter the symbol rate using the **NUMERIC** buttons.
  - *Polarity :* Select the polarity. (**Vertical/Horizontal**)
  - *Search Type :* Select the search type.
  - *Network Search :* You can select Off or On. When you select 'On', you can find more transponders using the home network. As it refers to NIT during searching, if there is the frequency information of other transponder, it searches the other transponder besides the transponder that the user inputs.
  - *Dish Setting :* Press the **OK** button to move to the Dish Setting menu directly.
  - *Transmission :* You can select 'DVB' and 'DVB-S2'
  - *Start Search :* Press the **OK** button to start a search

-
● **Blind Search Mode :**
  - *Satellite :* Press the **OK** button to select multiple satellites.
  - *Frequency :* Set *Auto* to search whole frequency, Set *Manual* to search only desired frequency.
  - *Polarity :* Select the polarity. (*All Polarity/Vertical/Horizontal*)
  - *Search Type :* Select the search type.
  - *Dish Setting :* Press the **OK** button to move to the Dish Setting menu directly.
  - *Start Search :* Press the **OK** button to start a search.

● **Advanced Search Mode :**
  - *Satellite :* Press the **OK** button to select the target satellite for search.
  - *Frequency :* Select the frequency from the list to search.
  - *Symbol rate :* Enter the symbol rate by using the **NUMERIC** buttons.
  - *Polarity :* Select the polarity. (*Vertical/Horizontal*)
  - *Video PID :* Enter the video PID using the **NUMERIC** buttons.
  - *Audio PID :* Enter the audio PID using the **NUMERIC** buttons.
  - *PCR PID :* Enter the PCR PID using the **NUMERIC** buttons.
  - *Transmission :* You can select 'DVB' and 'DVB-S2'
  - *Start Search :* Press the **OK** button to start a search.

3.4 Network Setting

To use a Network connected to the STB Ethernet port, you have to prepare the STB Network settings. When the STB and a PC are connected via a network, you can access the files of the STB storage device such as USB storage device.

*NOTE : If you use DHCP function of router, you can set easily network configuration.*
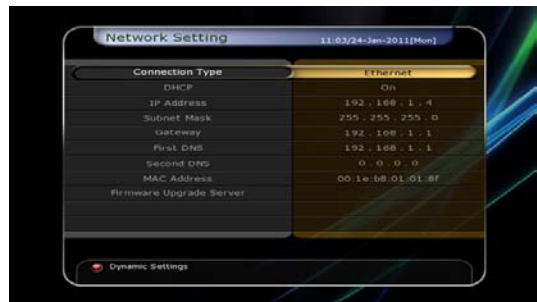
● **DHCP :** You can select *On/Off* for the Dynamic Host Configuration Protocol (DHCP) to get the all configuration from the router.
  - *If you select 'On' :* You will obtain the configuration from network and be set up automatically. In this case, the remaining item *(IP Address, Subnet Mask, Gateway, First DNS, Second DNS)* are automatically set and you don't have to configure them manually.
  - *If you select 'Off' :* You have to input the IP address manually together with the following data.
  - *IP Address, Subnet Mask, Gateway, First DNS, Second DNS :* You can input the address with the **OK** button, **NUMERIC** buttons and the **LEFT/RIGHT** buttons. You can move to the next item of Subnet Mast with the **DOWN** button and you can configure the following items in the same way.
● **Firmware Upgrade Server :** To upgrade the firmware by downloading from a internet server.

NOTE : Server installation and settings must be controlled by an expert server manager. A storage device must be connected with your receiver(STB) when upgrading firmware from a server.

- **MAC Address :** This will display the MAC address of the STB Ethernet interface and is a fixed assignment unique to each STB.
- **Control of the files via the network and your PC :**
  - Check the IP Address of the STB on the Network Setting menu.
  - Press Enter button on your PC, after writing IP Address on the web browser address line. Ex.) \\192.168.1.10\storage
  - You can see the folder name of USB1 and USB2 in the Storage folder.
  - *USB1 :* Front USB Storage Device
  - *USB2 :* Rear USB Storage Device
  - You can load and retrieve data between the PC and the STB via the browser
- **Dynamic settings (RED key)**
  - You can make your DDNS setting in this menu by pressing the **RED** colored button.
  - For more details about your DDNS settings, please ask your local DDNS service provider.
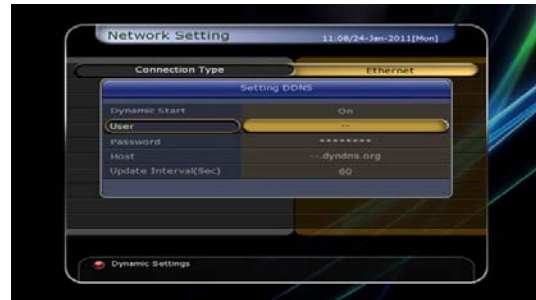
- Wireless LAN can be supported by using the *'USB to Wi-Fi'* module connected (*Option)
  - By pressing the **BLUE** colored button, you can automatically find and do the settings for AP.
  - For the details of Wireless Wi-Fi settings, please refer to the additional AP manual.

    NOTE : The speed of Wireless LAN is slower than the Wired LAN. So, it could take much more time when a file copy / move functions are performed.
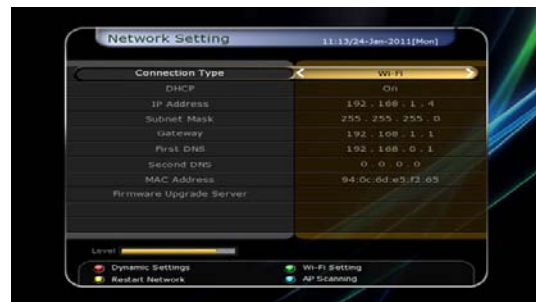
    NOTE : Inevitably, only the limited types of Wireless LAN modules are supported. So, you MUST check for the compatible / supported types BEFORE you purchase. Currently supported types are : RT73 series, RT3070 series, RT2870 series.

3.5 System Recovery

- **System restore to factory default :** Restore the factory set values in case the user has encountered some problems after changing parameters in error. Press the **OK** button to erase all services and restore default setting.
- **Reset Configuration data :** Maintain the service data and reset the configuration data.
- **Reset Service data :** Maintain configuration data and reset the service data.
- **System restore to stored position :** Restore the stored values including service data and system parameters. Press the **OK** button to restore all data.

- **Store system data :** If you want to use system parameters and service data in the future, this menu allows you to store current state. Press the **OK** button to store current state.
- **Delete store position :** Delete stored system data.

3.6 System Information

This menu displays general information about the hardware and software version of your receiver.
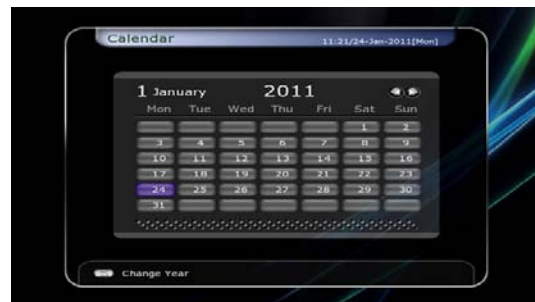
4. Utility

4.1 Calculator

To use the calculator, highlight the calculator and press the **OK** button.

4.2 Calendar

To display the calendar, highlight the calendar and press the **OK** button. Utilize the **ARROW** buttons to choose the date. If you press **PAGE UP/DOWN** button, you can see the past/next month of the calendar.

4.3 CAS (Conditional Access System)

● **Smart Card Slot**
 - *Conax smart card menu :*
   To watch scrambled services, you need to have an appropriate Conax smart card from the service provider. Insert a valid smart card into smart card slot. The message of 'Smart card Initializing…' will appear on the screen. After the message disappears, you can watch the service you want.
 - *Smart card information :*
   You can view the current status of smart card. Select the slot which you want to view using the **ARROW** buttons. And press the **OK** button.

● **CAM Initializing**
 To watch scrambled services, you need to have a Common Interface Conditional Access Module(CAM) and an appropriate smart card from the provider. Insert the CAM together with a valid smart card into CI slot (two slots available). The message of *'CI Initializing…'* will appear on the screen. After the message disappears, you can watch the service you want.

● **CAM information**
 You can view the current status of CAM. Select the slot which you want to view using the **ARROW** buttons, and press the **OK** button. If the CAM is available, you can view information about each slot.

   NOTE : The displayed information of each CAMs may be different depending on the CAM used.

● **CI message**
 - *On :* To display the CI message on live TV service.
 - *Off :* To disable the CI message on live TV service.

4.4 Plugin

If you have an appropriate *Plugin,* you can download the file(s) to *Plugin* then enjoy the program.

● **Download Plugin File**
  - In the USB storage, please create a new folder name *'plugin'* and in this *'plugin'* folder, create a folder name *'bin'. (plugin > bin)*
  - Store(Copy) the *plugin* files to the *'bin'* folder.
  - Connect the USB storage to the receiver. When Software Download menu appears, then press **LEFT/RIGHT ARROW** buttons to move to User Data Download mode.
  - Press **RED** button to start download the *plugin* file that you want.

> *NOTE : You can also download by Menu > System Tools > Data Transfer > Data download from USB storage.*

● **Plugin Menu**
  - **RED button :** To set the plugin Start Type. You can select Auto or Manual.
  - **GREEN button :** To Start the plugin. You will see *'Started'* in State if the plugin has started.
  - **BLUE button :** Press **BLUE** button if you want to delete the plugin file.

● We provide a special feature called *WebZeal* which is a plugin for Web-Browsing.

● Executing *WebZeal* with USB Storage device
  - Stored the WebZeal file to the USB storage device.
       File name : *'WebZeal-201xxxxx.mnt'.*
  - Connect the USB storage device to your receiver then go to *Menu > System Tools > Storage Manager.*
    • Set the Current Device to File Mount Drive.
    • Set the Mount File Name to WebZeal-201xxxxx.mnt
    • Press Connect then go to *Menu > Utilities > Plugin* to start the WebZeal.

> *NOTE : If you are using WebZeal by File Mount Drive, current USB storage device will not allow to use PVR functions such as recording and time-shift. But it can be use when WebZeal is not in use.*

● *WebZeal* Option
  - **RED button :** Press to set the current web page as home.
  - **GREEN button :** Press to add the current web page to favorite.
  - **YELLOW/BLUE button :** Press to adjust the page Zoom In and Zoom Out as you want.
  - **MENU button :** Press **MENU** button to show simple internet menu.

4.5 YouTube (Note: Availabilty of this function is subject to change, please ask your Retailer)

● **Required settings :** Before you can enjoy the *YouTube* feature with your STB, please make sure of the following conditions.
   - Set-top-box should be connected with Ethernet cable, with proper network settings.
     (Please refer to the **"Network setting"** section of the manual).
   - Sufficient capacity for buffering is required via a USB memory stick or HDD.

> *NOTE : a) The size of the required USB memory device for buffering depends on the size of the contents that you wish to watch from the YouTube service. So it is recommended to use a sufficiently large sized USB device for buffering.*
> *b) Problems can be caused due to the network environment : Problems such as flickering and freezing of the screen can occur while you are watching the YouTube service. These kind of problems can often occur due to the latency and slow speed of the network. This may also cause the STB to be halted, it may be necessary to reset the STB.*

● **About YouTube feature**
   - The YouTube menu is located in the *'Menu > Utilities > YouTube'*.
   - On the right side of the screen, you can see the list of thumbnails of the contents.
   - Press the **PAGE UP/DOWN** buttons to navigate quickly in the service list on the right.
   - On the left side of the screen, the detailed information of the selected thumbnail is being displayed.-

   - Use the **ARROW** buttons to navigate through the menu
   - And press the **OK / Play** buttons to start viewing the selected content.
   - While playing, use the **PAUSE / STOP** buttons to pause, or stop playing the service.
   - Trick play modes (**FAST FORWARD / REWIND**) are not support in the STB's YouTube menu.
   - Use the **VOLUME UP / DOWN / MUTE** buttons to adjust the audio sound.
   - Press the **MENU / EXIT** buttons to exit from the service, or to the menu while you are watching the service.
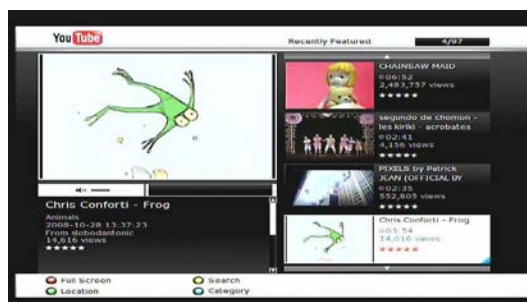
● Using the Hot (colored) buttons in the YouTube menu :
   - **RED (Full screen)** : Press this button to view the service in full screen size. This button only functions while the service content is being played.
   - **Yellow (Search)** : Press this button and input the name of the content that you wish to search in YouTube. When the virtual keyboard is displayed, you can also use the dedicated hot colored buttons for each functions.
   - **Green (Location)** : Press and choose your location from the list of world-wide, and many country names in this list. Based on your selected location, corresponding contents list will be provided.
   - **Blue (Category)** : Press this blue button to view the list of categories, then choose the one you prefer to view the list of contents in the selected category.

Troubleshooting

Problem	Solution
Does not display any message on the front panel.	✓ Check the main power cable and check that it is plugged into a suitable power outlet. ✓ Check the STB main power switch 'ON' at the rear of the STB.
No Picture	✓ See **'Does not display any message on the front panel'** above. ✓ To match the STB system with your TV system (PAL/NTSC), press *V.Format* button until a picture is displayed. ✓ Check the video output port is firmly connected to the TV or VCR. ✓ Check that you have selected the Video Input on your TV. ✓ Press the STB button on the remote to assure you are controlling the STB and no other device with the remote. ✓ Check the brightness level of the TV. ✓ Check the resolution that your TV supports, and set the proper resolution with the remote *Resolution* button to obtain a picture.
Poor picture quality	✓ See **'No Picture' above.** ✓ Check the signal level, if this is low then tries adjusting the alignment of your dish.
No Sound	✓ See **'No Picture'** above. ✓ Check the volume level of the TV and STB. ✓ Check the Mute status of the TV and STB.
Remote Control does not operate	✓ Point remote control directly towards the STB. ✓ Check that the STB button lights up when you press any button ✓ Check and replace batteries.
No or Bad Signal	✓ Check the LNB ; Replace the LNB if necessary. ✓ Check the cable from the LNB. ✓ Check the position of the dish; realign dish if necessary. ✓ If you are using a DiSEqC 1.0 switch, check that you have connected and programmed the LNBs to the correct connections on the switch. ✓ Check the 'Signal Level' and the 'Signal Quality'.

Specifications

Tuner & Channel Decoder

Input Connector	F-type, IEC 169-24, Female
Loop through out	F-type, IEC 169-24, Female
Frequency Range	950MHz ~ 2150MHz
Input Impedance	75Ω, unbalanced
Signal Level	-65 to -25dBm
LNB Power	13/18VDC, max.400mA
22KHz Tone	(22±2)KHz, (0.6±0.2)V
DiSEqC Control	V1.0/1.2/USALS Compatible
Demodulation	QPSK / 8PSK
Input Symbol Rate	2 ~ 45 Ms/s(QPSK of DVB-S)
	2 ~ 45 Ms/s(QPSK of DVB-S2)
	2 ~ 35 Ms/s(8PSK of DVB-S2)
FEC Decoder	1/2, 2/3, 3/4, 5/6 and 7/8 with
	Constraint Length K=7(DVB-S)
	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9 and 9/10 (DVB-S2/QPSK)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10(DVB-S2/8PSK)

MPEG Transport Stream A/V Decoding

Transport Stream	H.264(MPEG-4 part 10, MPEG-4/AVC and H26L)
	MPEG-II ISO/IEC 13818-2/11172-2
Profile Level	MPEG-4/AVC MP@L4, MPEG-II MP@HL
Input Rate	Max. 80Mbit/s
Video Formats	4:3 Letter Box, 4:3 PanScan, 16 : 9
Video Resolution	720 x 576i, 720 x 576p, 720 x 480i, 720 x 480p
	1280 x 720p, 1920 x 1080i, 1920 x 1080p(supports only HDMI)
Audio Decoding	Dolby Digital, MPEG-1 Layer 1,2 and 3
Audio Mode	Stereo/Joint stereo/Mono, Dolby Digital bitstream
Sampling Rate	32KHz, 44.1KHz and 48KHz(According to input)

Main System

Main Processor	STi chipset
Memory	Flash-ROM : 32 Mbyte
	SDRAM : 256 Mbytes
	EEPROM : 256 bytes

Audio / Video & Data IN/OUT

TV SCART	RGB, CVBS Video, Audio L, R Output
RCA	Video & Audio Output
OPTIC	Dolby Digital (SPDIF)
RS-232C	9 pin D-SUB (Male) type, Transfer rate 115Kbps
USB	USB 2.0 Host Front & Rear Support. (5V DC 500 mA Max.)
Ethernet	RJ45 connector, 100 Mbps

Front Panel

Slot	1 USB 2.0 Host port
	2 Common interface PCMCIA slot
	1 Smart Card Slot
Display	7-Segment
Buttons	3 Buttons (Standby, CH UP/DOWN)

Power Supply

Input Voltage	AC 100 ~ 250V, 50/60Hz
Type	SMPS
Power Consumption	Max. 30W
Standby Power	Max. 1W
Protection	Separate Internal Fuse & Lighting protection

Physical Specification

Size (W x H x D)	260mm X 43mm X 180mm
Weight (Net)	1.1 Kg
Operating Temp.	0℃ ~ +45℃
Storage Temp.	-10℃ ~ +70℃

UltraPlus®

High Definition Digital Satellite Receiver
900HD miCro PVR