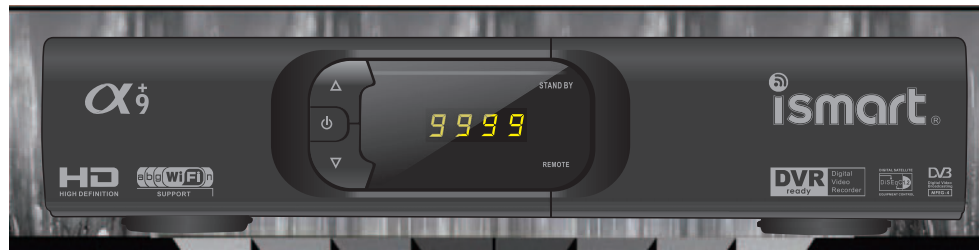




USER MANUAL



High Definition Digital Satellite
Television Receiver
and Recorder



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Introduction

1.1 Overview

This satellite receiver is designed for the reception of free-to-air and encrypted channels. Depending on your location, enjoy the rich choice of up to 10,000 different channels broadcasting a large range of programs: culture, sports, cinema, news, events, etc. This receiver is assembled with high quality electronic components.

1.2 Main Features

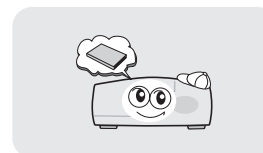
- ▶ Video Resolution : 1080p / 1080i / 720p / 576p / 576
- ▶ DVR Ready via USB External Mass Data Storage Device
- ▶ Time Shift, Record & Playback
- ▶ USB 2.0 Host for MP3 Playback, JPEG Viewing & Firmware Update
- ▶ Embedded CONAX CA S7
- ▶ 10,000 Programmable Channels
- ▶ DVB-S, MPEG-2/MPEG-4 Compliant
- ▶ HDMI Output
- ▶ On-screen display with true color full resolution
- ▶ Advanced Blind Scrambling
- ▶ Auto & Manual Channel Search
- ▶ Dolby Digital Output
- ▶ Channel Sorting by Alphabet, Transponder or CAS
- ▶ 16 Favorite Channel Groups
- ▶ OSD in 12 Languages
- ▶ Multi Picture Display and Zoom
- ▶ 16:9 Full Screen, 4:3 Letterbox & Full Screen
- ▶ DiSEqC 1.2 and USALS Compatible
- ▶ Data Transfer Between Units
- ▶ Extended Electronic Program Guide (EPG) and program reservation through EPG
- ▶ Teletext by OSD / VBI (Vertical Blanking Interval)
- ▶ Auto Voltage (AC 90 - 250V) SMPS
- ▶ High speed software upgrade via USB 2.0
- ▶ Parental Lock / Installation Lock / Receiver Lock / Channel Lock / Lock Channel Confirm
- ▶ Software & channel database upgrade via RS-232C: PC to STB / STB to PC
- ▶ Video color adjustment function.

DiSEqC is a trademark of EUTELSAT

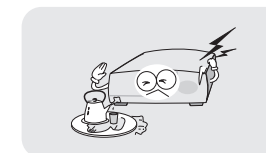
Safety/Precautions

2.1 Safety

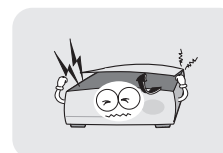
Be sure to read this user's manual before starting the operation of the unit



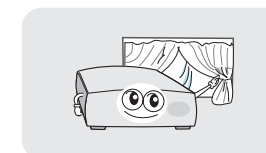
Do not touch the power cord with wet hands as it may cause electric shock.



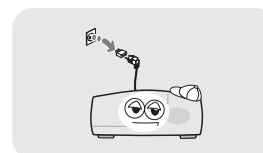
Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.



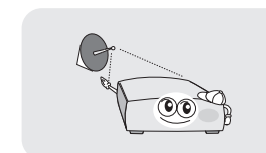
Place the unit in a well ventilated and no-heat environment.



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



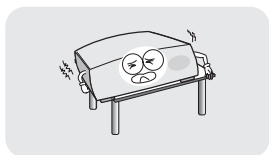
A professional installation is required. If reception is interrupted, contact your local service centre.



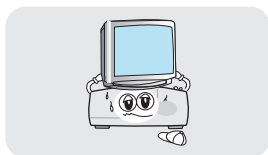
2.2 Precautions

When installing the unit

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



Do not put heavy items such as a TV set on the unit. That may damage the unit.



Do not place the unit near water.

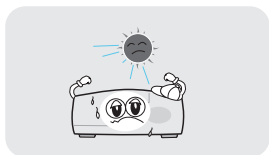


Do not put water holding items such as vases on the unit.

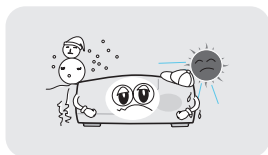


Do not install the unit:

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



Moving the unit to a hot area from a cold one will cause condensation. Do not operate the unit for one or two hours or until it has dried completely.

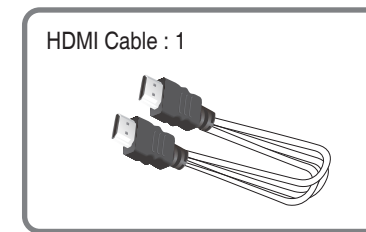
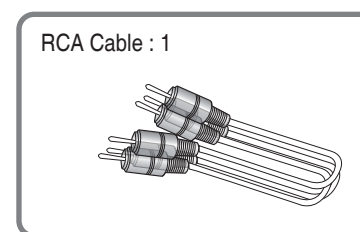


- ▶ The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.

Points to Check before Use

3.1 Accessories

The accessories below are included with this receiver:



- ▶ If any of the above-listed accessories is missing, contact your sales representative.

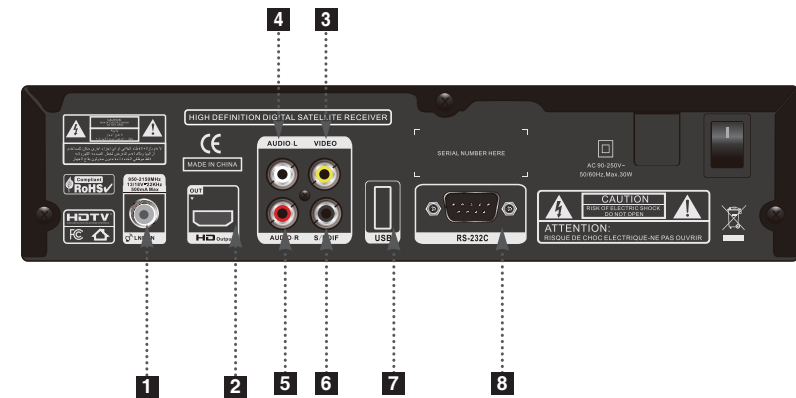
3.2 The Satellite dish

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

- ▶ This unit supports DiSEqC 1.2 and can work with a compatible antenna positioner. Ask your dealer for information.

Controls/Functions

4.1 Front Panel



1 Power : Switches the receiver between 'Standby' and 'Power ON' modes.

2 - 3 CH. (▲/▼) : To switch channels or change the cursor position on the application screen.

4 Standby/Power on Indications Lamp : Flashes red light in 'Standby' mode and shows no light in 'Power ON' mode.

5 Indication Light : Flashes when a key on the Remote Control Unit (RCU) is pressed.

6 USB : To connect USB devices such as Memory stick or external Hard Disk Drive.

7 Smart Card Reader : Insert smart card for encrypted channel access.

No.	Name	Connecto	Function
1	LNB INPUT	IEC 169-24 FEMALE	IF input from LNB to digital tuner
2	HD OUT PUT	HD OUT PUT	Digital Video/Audio Output
3	VIDEO	RCA cinch	Composite video output
4	AUDIO L	RCA cinch	Left audio output
5	AUDIO R	RCA cinch	Right audio output
6	S/PDIF	RCA cinch	Digital audio output
7	USB	USB	USB WiFi Output
8	RS-232C	DB-9	Low speed serial port



- 1 POWER : To turn the receiver On/Off.
- 2 STAND BY : Just turn the receiver off.
- 3 TEXT : To show the tele text contents if tele text is transmitted .
- 4 SUBTITLE : To turn closed captions on or off.
- 5 AUDIO : To show the Multi-language audio track, the stereo-mono mode and subtitle information.
- 6 MUTE : To turn the sound On/Off.
- 7 Numeric Keys (0-9) : To enter numerical settings (such as channel numbers) directly.
- 8 TV/RADIO : To switch between TV and Radio.
- 9 FAV LIST : To show the list of the fav.channels
- 10 GUIDE : To show the TV/Radio program guide .
- 11 INFO : To show information about the current program. Press twice to show detail.
- 12 RECALL : To move to the previous channel. Used for special functions in menu mode .
- 13 ASPECT : To select a TV aspect ratio with Pan Scan or Letter-Box(4:3) (Full screen or pillar box(16:9) .
- 14 MENU : To enter or exit the main menu.
- 15 EXIT : To exit from the present menu and move to the previous menu.
- 16 - 17 Up & Down : To switch channels in non-menu mode and move the cursor up/down in menu mode.

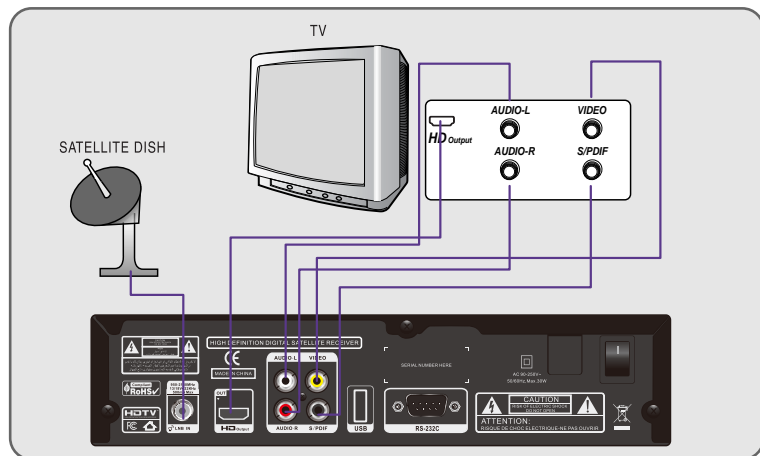


- 18 - 19 Vol Up & Down : To change the volume level in non-menu mode.
- 20 OK : To show the Channel List in non-menu mode and select an item or confirm in menu mode .
- 21 - 22 Vol Up & Down : To change the volume level in non-menu mode.
- 23 - 24 Double arrow Up/Down : To move to the next or previous page when many pages are available.
- 25 FILELIST : To display the filelist
- 26 GROUP : To change the channel groups (Satellites or favorite groups) .
- 27 - 30 Color Key : Select the option such as View List, Select Disk, Rename .
- 31 REW : Playback in rewind mode .
- 32 FREEZE : To pause the video. Press again to resume the video .
- 33 PLAY : Play Content .
- 34 FWD : Playback in forward mode .
- 35 REC : Start recording .
- 36 STOP : Stop Playback .
- 37 SLOW : Playback in slow mode .
- 38 ZOOM : To zoom In/Out .
- 39 WEATHER : To show the weather Condition in all the World .
- 40 ENTERTAIN : To show the List of the App .
- 41 WIFI : Show the WIFI Settings .
- 42 PHOTO : To show the Internet Photos .
- 43 WEB RADIO : To Listen to Radio through internet .
- 44 IPTV : To Watch the Internet TV .
- 45 MAP : To View Google maps .

How to Connect

When Connecting the Receiver to a TV

- 1 Connect the TV antenna to TV ANT IN
- 2 Connect the Video and Audio of the TV to Video and Audio: connect the red and white connectors to Audio R and Audio L, and the yellow connector to Video
- 3 Connect your satellite dish



Operation

6.1 Getting Started

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

1) Menu Language Setting

- 1 Turn on your TV and receiver.
- 2 The pop-up menu for language selection will appear. <Figure 6.1.1>
Select one language and press **OK** button to proceed.



<Figure 6.1.1>

2) Antenna Setup

- 1 Press the **MENU** button to display the main menu.
 - 2 Use **CH A** / **CH V** button and **VOL** / **VOL** button to move in the menu.
 - 3 Press **OK** button on "Dish Setting". The following window will appear. <Figure 6.1.2>
If you have a motorized dish, press **OK** button on "Motorized Setting". <Figure 6.1.3>
- * Note : Enter a 4-Digit password if need arise. the default password is '0000'.**



<Figure 6.1.2>



<Figure 6.1.3>

6.1 Getting Started

4 Select the item that you want to edit and set its parameters as desired. <Dish Setting>

- **LNB Power** : Select among ON/OFF/13V/18V.
- **LNB Type** : Select among Single/Universal/OCS.
- **LNB Freq** : Set the frequency of the LNB oscillator.
- **22KHz** : When not AUTO, set the signal path from LNB or switch by selecting a control signal among 0/22KHz.
- **DiSEqC 1.0** : Select DiSEqC 1.0 Port
- **DiSEqC 1.1** : Select DiSEqC 1.1 Port

5 Select the item that you want to edit and set its parameters as desired. <Motorized Setting>

- **Frequency** : If the default TP frequency is not appropriate, you can select another TP frequency at which to check for signal.
- **DiSEqC Motor** : Select DiSEqC protocol among OFF/1.2/USALS as appropriate for your Motor.

(When the DiSEqC Motor parameter is set as 1.2 <Figure 6.1.4>)

- **Satellite** : Select any satellite by pressing **↑** / **↓** buttons.
- **Frequency** : Displays the current TP value of the selected satellite.
- **Move** : Move the dish position to west/east by pressing **←** / **→** buttons.
- **Move Fine** : Move the dish position 1 step at a time to west/east by pressing **←** / **→** buttons.
- **Motor Control** : Control motor by press **OK** button on the remote. <Figure 6.1.5>
- ****Recalculate** : Recalculate the position of all other saved satellites relative to the known position.
- ****Reset System** : Reset the position of all saved satellites.
- ****Goto Reference** : Move the dish to the 0 position.
- ****Disable Limit** : Disable east and west limit.
- ****Enable Limit** : Enable the saved east and west limit.
- ****Set East Limit** : Edit & Save east limit by pressing **←** / **→** or **OK** buttons.
- ****Set West Limit** : Edit & Save limit by pressing **←** / **→** or **OK** buttons.
- **Go To** : Go to the position of the saved satellite.
- **Save** : Save the current setting of DiSEqC 1.2 system.

6.1 Getting Started



<Figure 6.1.4>



<Figure 6.1.5>

(When the DiSEqC Motor parameter is set as USALS <Figure 6.1.6>)

- **Sat Degree** : Satellite location.
- **Antenna Position** : Press **OK**.
- **Goto Reference** : Move the dish to the reference 0 position.
- **Antenna Longitude** : Your longitude at present.
- **Antenna Latitude** : Your latitude at present.
- * **Note** : You need to know what LNB you are using to correctly set the L.O. (local oscillator) frequency.
- * **Note** : You need to understand how your receiver is connected to properly set the 22KHz and DiSEqC.



<Figure 6.1.6>



<Figure 6.1.7>

6 When you are done, press the **EXIT** button.

3) Satellite Scan

Through this function, the receiver searches for all the available channels and saves them in memory.

► Auto Scan <Figure 6.1.8>

① Select the satellites you want to search by pressing the **OK** button on the remote.

You can select more satellites by pressing the **VOL** / **VOL** button and **OK** button on the remote.

- **Search Type** : Select the type of channel search you want by pressing **VOL** / **VOL** buttons on the remote.

** **All** : To search all the Free To Air and scrambled channels, TV & Radio channels.

** **Free** : To search Free To Air channels only.

** **TV** : To search TV channels only.

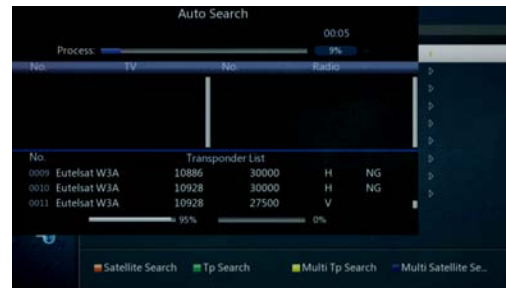
- **Network Search** : Select Network Search ON/OFF to find more transponders through NIT Search.

- **Scan** : Begin channel search of the selected satellite.

② Press **OK** under 'SCAN' to scan the selected satellites. <Figure 6.1.9>



<Figure 6.1.8>



<Figure 6.1.9>

► Blind Scan <Figure 6.1.10>

① Select the satellites you want to search by pressing the **OK** button on the remote.

② Press **VOL**, **CH** / **CH** to set the "Polarization" and "Scan Mode" options.

- **TP** : Select TP Frequency

- **Polarization** : Select among All / Vertical / Horizontal

- **Mode** : Select among All / Free / TV

- **SCAN** : Begin channel search of the selected satellites.



<Figure 6.1.10>

► Manual Scan <Figure 6.1.11>

① Select a transponder.

② To change a transponder's information (Frequency, Symbol Rate), use the **NUMERIC** buttons.

③ To add a new transponder, press the **GREEN** button.

④ To delete a transponder, press the **YELLOW** button with the cursor next to the Frequency parameter.

⑤ To search a transponder, set its different parameters and press **OK**.



<Figure 6.1.11>

6.1 Getting Started






3) Channel Selection

You can use the  and  or  and  keys to navigate between channels to select desired channels.

- ▶ If you know the channel number you can enter it using the NUMERIC buttons on the remote control and wait 2 seconds for the change.
- ▶ Detailed information about the selected channel will be displayed on the right hand side of the screen <Figure 6.1.13>



<Figure 6.1.13>

- ▶ You can use the following buttons to navigate between channels
 -  and  : Moves one channel up or down
 -  and  : Moves one page up or down
 - **RED** : Shows all channels in the current group
 - **Green** : Shows all the favorites channels .
 - **Yellow** : Shows all channels by transponder.
 - **Blue** : Edit the channels (Delete , rename , move , lock , find) .
- ▶ Press  when the selection bar is positioned on the desired channel.

5) Other Functions of the Remote Control

► Volume Control

- ① Press **vol+** or **vol-** to adjust the volume while watching a program
- ② Pressing the Mute button will remove the sound and the mute icon will be displayed. Pressing the Mute button again will restore the sound.

► Channel Information

- ① Pressing the **i** button will briefly display the channel information
- ② Pressing the **i** button a second time will display a more detailed program information

► TV/RADIO switching

Press this button to change from a TV to a Radio channel. Pressing the button again will return the unit to the TV channel

► RECALL

Pressing this button returns the unit to the previously viewed channel

► Audio

Use this button to adjust the subtitles or audio status of the current channel

- **Audio Mode** : Select from Stereo → Mono Left → Mono Right
- **Audio Track** : Select between tracks available in this program
- **Audio Level** : Use to select High → Medium → Low

* **Note** : *Subtitle and audio settings are only available when the selected channel supports these functions.*

► ZOOM

By pressing the **z** button you can zoom in video.

- ① By pressing the **FREEZE** button and **z** you can zoom in on sections of video on Freeze <Figure 6.1.14>
- ② While watching a program press **z** to zoom in on sections of a video <Figure 6.1.15>
- ③ To cancel the freeze status release it by pressing the **z** button continuously.



<Figure 6.1.14>



<Figure 6.1.15>

► SUBTITLE

By pressing **s** you can select the subtitle language of the current channel <Figure 6.1.16>

► FREEZE

Press this button to freeze video. Pressing the button again will restore the video.

► GROUP

This button is used to view the list of favorite channel groups. Only registered groups are displayed.

6.1 Getting Started

► V.FORMAT <Figure 6.1.18>

You may select the video resolution by pressing **V.FORMAT**. Available selections are 1080p, 1080i, 720p, 576p, 576i, AUTO.

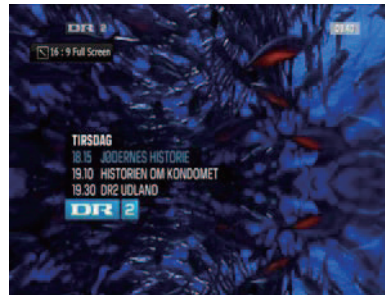
► ASPECT <Figure 6.1.19>

Pressing ASPECT changes the aspect ratio. Available ratios are:

- 4.3 Pan-Scan or Letter-Box
- 16.9 Full-Screen or Pillar-Box



<Figure 6.1.18>



<Figure 6.1.19>

6.2 System Setting

These can be accessed by pressing the **MENU** button and then scrolling to the "System" section and pressing **OK**.

1) Time Settings

You Can change the time settings by Pressing Menu-Common Settings-Date Time

There' s Many Options for the time By

Auto, Manual, Time Zone.

Auto

The time will be adjust automatically by the Transponder

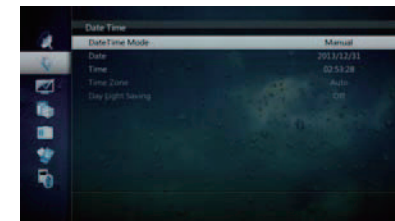
Manual

The time can be adjust by the User

Time Zone

The Time can by dajust by the 12+, 12- or Auto.

*** Note : Lead In and Lead Out Times can be set on your X8 to apply to all Timer recordings. Lead In and Lead Out Times add specified amounts of time to the beginning and the end of Timer recordings so you don't miss the beginning or end of recorded programs.**



<Figure 6.2.1>

6.2 System Setting

2) A/V Output Settings

This menu lets you specify the audio and video output settings of your receiver <Figure 6.2.2>

Use the scroll buttons to select your desired setting

- **OSD Language** : set the audio language
- **Subtitle Language** : Select the subtitle language
- **TV Type** : Select the TV Type (AUTO/PAL/NTSC)
- **Screen Format** : Select the screen format (16.9/ 4.3)
- **Display Format** : Select the aspect ratio
- **Video Format** : Select the video format from 1080p, 1080i, 720p, 576p, 576i or AUTO
- **Digital Audio** : Selects the audio output type after making your selection
press the **OK** to confirm



<Figure 6.2.2>

6.2 System Setting

3) On Screen Display Settings

Using this menu, you can select the menu language, use recall list and the duration that the display and volume bars are shown on the screen. <Figure 6.2.3>

Use the scroll buttons to highlight and adjust your selections and press **OK** button to confirm.



<Figure 6.2.3>

4) Security Settings

To prevent unauthorized access to classified programming, you can set a personal PIN number for your receiver. **(Note that the factory set default password is : 0000. PIN and password are the same)** <Figure 6.2.4>

By setting any of the following functions to **OK** in this menu, the PIN will be required to access them;

- Receiver Lock, Install Lock, Channel Lock, Lock Channel Confirm

► Age Limit (Parental Lock)

Under this menu you may select a Rating of programs you choose to block.

All available ratings are listed in the menu and when the program information regarding the rating available from the broadcaster exceeds the selection, a PIN number is required to access the program.

Use the scroll buttons to make your selection and press **OK** button to confirm.

This section also contains options to change and enter new passwords.



<Figure 6.2.4>

5) Database Reset <Figure 6.2.5>

This section allows you to reset the receiver to the factory settings.

- **Delete Radio Channels** : Erase all radio channels in the database.
- **Delete Scramble Channels** : Erase all scramble channels in the database.
- **Delete All Channels** : Erase all channels.
- **Factory Set** : Erase all channels and restore the factory default settings.

* **Please note that a factory reset is required to be performed after a software upgrade.**

- **LyngSat Update** : Satellite TP data update from www.lyngsat.com.



<Figure 6.2.5>

6) IP Setting

If the Network supports DHCP, IP settings can be allocated automatically. If the Network does not support DHCP, the Addresses must enter manually (Static IP).<Figure 6.2.6>

- **Connection Type**: Ethernet or WiFi. Select Ethernet if you are connecting the receiver to the network via a LAN cable. Select WiFi if you wish to connect to your home wireless network using the wireless USB dongle supplied with your receiver. (Please note the wireless USB dongle is already inserted into the rear USB port or the receiver)
- **DHCP Usage** : On/Off to receive IP settings automatically
- **IP Address** : Enter the IP address
- **Subnet Mask** : Enter Subnet Mask Number from your Network
- **Gateway** : Enter IP address of Gateway (e.g. router)
- **DNS** : Enter IP address of main DNS Server
- **Mac Address** : Mac Address display



<Figure 6.2.6>

- **SCAN** : Press the **RED** button to SCAN for the IP address and network details if they do not appear automatically.
- **WiFi Wizard** : When connecting to your home network using WiFi press the **GREEN** button to view the list of available wireless networks. Select the desired wireless network you wish to connect to using the **CH ▲** and **CH ▼** arrow buttons and press the **OK** button to select your network.
- **WiFi Setting** : Once you have selected the wireless network you wish to connect to in the WiFi Wizard press the **YELLOW** button to access the WiFi Setting menu. In this menu you can enter the network key to connect to your wireless home network. Highlight Key using the **CH ▲** and **CH ▼** arrow buttons and press the **OK** button to bring up the virtual keyboard. Using the **CH ▲**, **CH ▼**, **NUM** and **DEL** buttons select the characters of your wireless network security and press the **OK** button. Once you have entered your wireless network key press the **EXIT** button to save and exit. Now highlight connect and press the **OK** button to connect to your wireless network.
- **Firmware update** : Support download from a LAN.
 - ① **BLUE** button, appear input target IP address.
 - ② **RED** button to Scan after inputting a target IP.
 - ③ Choose a update software and **OK** button for downloading.

*** Note** : *The PC tool STB Daemon must be installed on your PC before you can connect your receiver the PC. Please refer to the “Connecting your receiver via LAN to a PC” section for PC Tool download instruction*



<Figure 6.2.7>



<Figure 6.2.8>

Connecting your receiver to Internet via your Wireless Network

Follow these instructions prior to connecting your receiver to your Wireless Network:

-Go to wifi settings - search for wifi networks - select your wireless network

please make sure you entered the right passcode of your wireless network

after enter the passcode press enter and wait a little time then will connect

automatically every time to your wireless network.

6.3 Channels

1) Setting Favorite Channels

This section allows you to select up to 16 groups of favorite channels in either TV or Radio.

- 1 Press **OK** on "Set Favorites" and the group lists will be displayed <Figure 6.3.1>
- 2 Press **OK** button to choose a group and a new menu will appear <Figure 6.3.2>
To change the name of the group press the RED button
- 3 Press **OK** to add or remove a channel from the list
- 4 Press **EXIT** button to return to the previous menu.



<Figure 6.3.1>

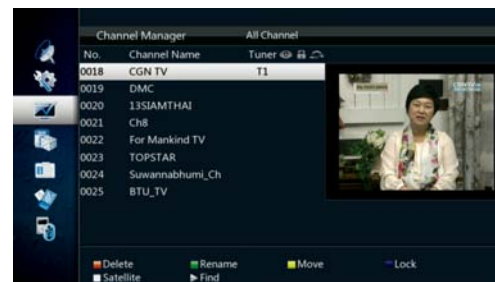


<Figure 6.3.2>

2) Edit Channels

This section lets you rename and edit channels. You can select from Radio or TV by pressing the **TV** button or a channel by pressing the **CH** button.

- 1 Press **OK** button on "Edit Channels" and a new menu will appear <Figure 6.3.3>
- 2 Press **OK** button on the desired channel
- 3 Press **OK** button on "Edit Name" to rename the channel using the displayed keypad

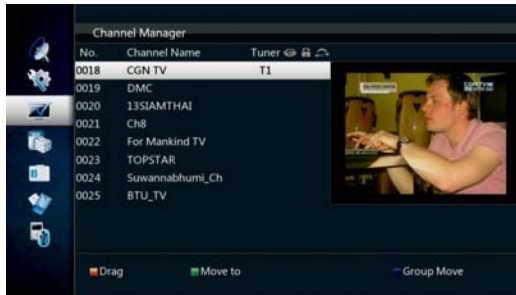


<Figure 6.3.3>

3) Move Channels

By navigating through this section you can change the channel sequence.



- 1 Choose the channel list by pressing the  button, use the cursor keys to select the desired options. <Figure 6.3.4>
- 2 Press the  button to return to the previous menu.



<Figure 6.3.4>

4) Lock Channels

This feature allows you to lock a specific channel so it will require a password to access it.

- 1 Press  button on the "Lock Channels" and follow the on-screen prompts to set the function. <Figure 6.3.5>
- 2 Press  to return to the previous menu.






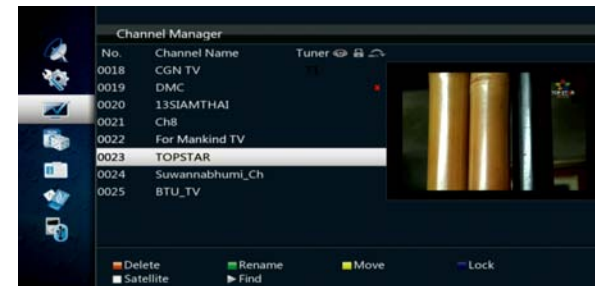
<Figure 6.3.5>

5) Delete Channels

This function allows you to delete a channel selection.

*** NOTE : Deleting a channel means you will not be able to access it until you rescan.**

- 1 Press the  on "Delete Channel" and follow the screen prompts to activate this feature. <Figure 6.3.7>
- 2 Press the  button to delete all channels in the current list; you will be asked to enter your password.
- 3 Press  to return to the previous menu.



<Figure 6.3.7>

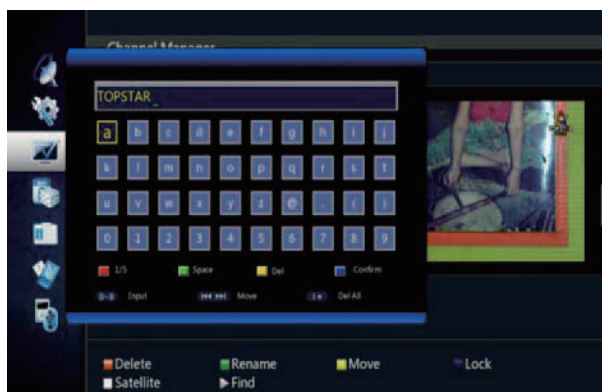
7) Add Channels

This Submenu allows you to add channels.

Press on Add Channels. The following menu will be displayed. <Figure 6.3.8>

Press **CH▲** **CH▼** to Change the parameter.

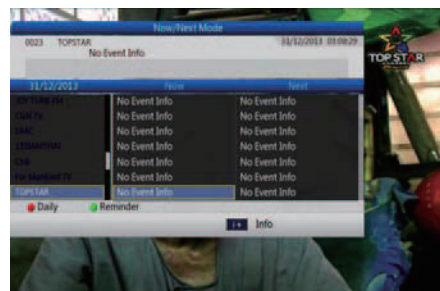
- **Frequency** : Select Frequency.
- **Channel Name** : Press to display Keypad pop-up; Edit a channels name.
- **Channel Type** : Select among TV / RADIO.
- You can add specific channel of the transponder by setting its PID data (Video, Audio and PCR).
- **Video Type** : Select the video type (MPEG1/2, H.264)
- **Audio Type** : Select the video type (MPEG1/2, HE-AAC Dolby Digital(AC3), MPEG4, ACC, Dolby Digital+(DD+)).



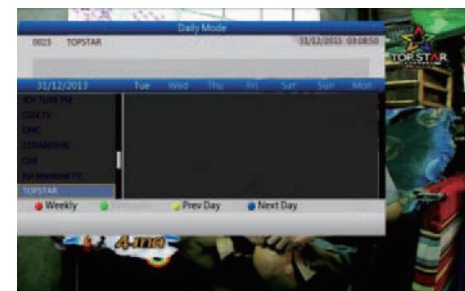
<Figure 6.3.8>

1) EPG

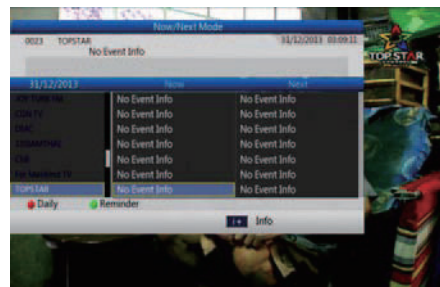
- 1) An EPG (Electronic Program Guide) is an on screen list displaying scheduling information for current and upcoming programming from broadcasters for next 7 days. EPG data will only be available if the channel provider is broadcasting the EPG information.
- 2) To access the EPG press the **EPG** button, the list of channels will be displayed in the left window and the programming information for the selected channel will be displayed in the right window
- 3) You can change the EPG mode by pressing **i** button. By pressing Info the EPG mode will change from single channel display. Please note single channel display is the default setting.
- 4) Use the **CH▲** or **CH▼** arrow buttons to select the desired channel. Press the **OK** arrow button to access the programming information for the desired channel
- 5) By selecting the desired program, detailed program information will be displayed in the top pane of the EPG screen
- 6) To Record a selected program press the **RECORD** button (Refer to the 'How To Record on your DVBS2 Digital Video Recorder section for recording instructions via the EPG
- 7) To Reserve a program for viewing, select the program by pressing the **OK** button. This will highlight the program. You receiver will now automatically display this program when it begins even if you are watching another channel



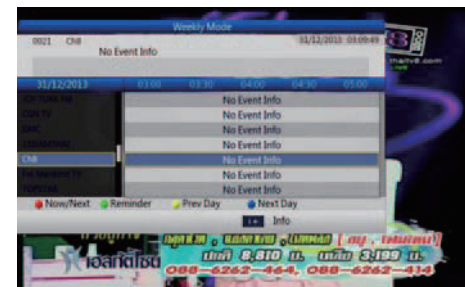
<Figure 6.4.1>



<Figure 6.4.2>



<Figure 6.4.3>



<Figure 6.4.4>

1) YOUTUBE

1 **CH A** / **CH V** : To select Youtube feature.

2 **OK** : To play desired clip.

- **Option** : Allows you to set search parameters by Category, Viewed, Time, Location.
- **Search** : Use this to search by key word. Use the virtual keyboard to enter the search name using the **CH A**, **CH V**, **VOL** and **VOL** arrow buttons and press the **OK** button to select. Once you have entered the search name press **EXIT** to save and **OK** to start search.
- **Next** : To move to the Next page of the search results.
- **Previous** : To move to the previous page of the search results.
- **Replay** : To replay the current clip.
- **PAUSE** : To pause the playing clip.
- **STOP** : To stop the clip.
- **Fullview** : To view the clip in full screen.



<Figure 6.5.1>

2) Internet Radio

- **Search** : Press the **OK** button to display the virtual keyboard to search by key word. Use the **CH A**, **CH V**, **VOL** and **VOL** arrow buttons, press the **OK** button to select. Once you have entered the search name press **EXIT** to save and then press the **RED** button to begin search.
- **Genres** : Press the **OK** button to view the list or use the **VOL** and **VOL** arrow buttons to select the Genre you wish to search by. Once you have selected the Genre press the **RED** button to begin search. Search results will be displayed in the Station List. Use the **CH A** and **CH V** arrow buttons to select the desired station and use the **VOL** and **VOL** arrow buttons to move to the next page of stations in the list. Once you have selected the station press the **OK** button to load this radio station. Playback will begin once buffering is complete.
- **Favorites** : To set favorite channels highlight the channel you wish to add to your favorites list and press the **GREEN** button. Channels you have selected as favorites will be added to your favorites list.
- **Record** : To record Radio that you are currently listening to press the Record button. To stop recording press the record button again.

Recorded radio programs can be accessed via the Media Manager menu under file manager and selecting Music.

- 1 Search Radio channel by Key word or Genre.
- 2 Select a channel by **CH A** / **CH V** <Figure 6.5.2> .
- 3 Press **OK** to play Radio.

* **To exit and return to the main menu press the **EXIT** button on the remote control.**



<Figure 6.5.2>



<Figure 6.5.3>

3) Weather

- 1 Press **BLUE** button to be begin search for a city.
- 2 Enter the City name using the virtual keyboard.
- 3 Press to save and exit the window.

Your selection will be displayed.

- **View List** : Press the **OK** button to view and select the saved list of cities.
- **Fahrenheit / Celsius** : To display the temperature in your desired measurement.
- **Add City** : Press the **YELLOW** button to add a City to the list.
- **Rename** : Press the **BLUE** button to modify the City name.
- **Save Info** : Press the Record button to save the added City name.

* **To exit and return to the main menu press the **EXIT** button on the remote control.**



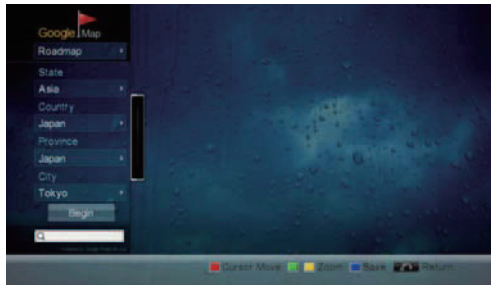
<Figure 6.5.4>

4) MAP

Searching the MAP for City.

- ① Press **BLUE** button to begin search.
- ② Enter the City or Country name using the virtual keyboard.
- ③ Press to save the search and exit the window.
- View List : Press the **OK** button to view the saved search list.
- Move : To move around the map use the **CH ▲**, **CH ▼**, **VOL ▲** and **VOL ▼** buttons.
- Zoom In : To enlarge the size of the MAP press the **RED** button.
- Zoom Out : To reduce the size of the MAP press the **GREEN** button.
- Add City : Press the **YELLOW** button to add a City to the saved list.
- Rename : Press the **BLUE** button to modify the City name.
- Save Info : Press the Record button to save the added City name.

* To exit and return to the main menu press the **EXIT** button on the remote control.



<Figure 6.5.5>

5) Picasa (Internet Photos)

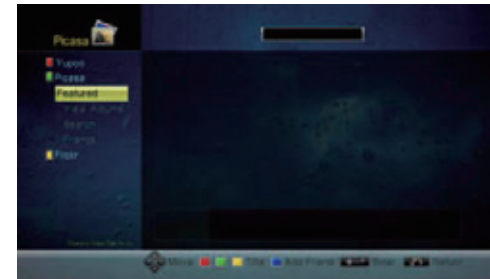
The DVBS2 has an inbuilt Picasa app.

As in the Entertainment you can navigate your Photo by either connecting to

Internet and watch so many photos through your internet without needs

USB Flash the photos can be watch online with many field as

Nature , Country , Cars and Etc. , all this included now with new



<Figure 6.5.6>

6) IPTV (Internet Television)

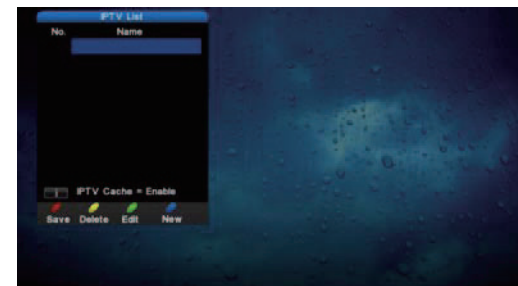
The DVBS2 has an inbuilt IPTV app.

As in the Entertainment you can navigate your IPTV by either connecting to

Internet and watch so many channels through your internet without needs

Sattellite dish signal , just you need a high speed internet with the channels

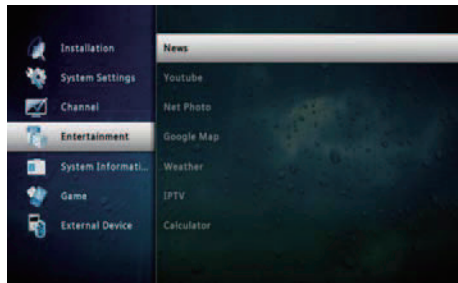
Http , protocol , the feature already App. already now available with



<Figure 6.5.7>

7) News

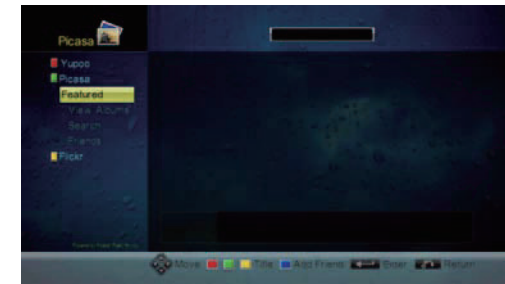
The DVBS2 has an inbuilt News app .
 As in the web browser you can navigate your Favorite News page by either connecting To Internet through built in Wireless Lincard and the an be controlled bt Android device .
 For instructions on how to turn your handheld device into a remote control and keyboard d please refer to the separate instructions supplied titled, Remote Apps .
 You can also access your favorite News page using the virtud remote control built in to your . Press the Menu button on the remote control to display the virtud keyboard on the screen. Using the CH▲, CH▼, VOL▲ and VOL▼ arrow buttons you can navigate around the screen and around the virtud keyboard .
 To select an option or an item from the virtud keyboard, place the cursor over the desired item and press the OK button.
 To dose the virtud keyboard, press the i button on the remote control.



<Figure 6.5.8>

8) Picasa

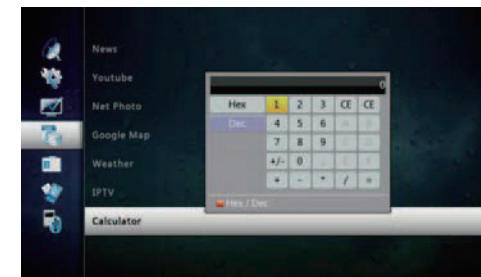
The DVBS2 has an inbuilt Picasa app .
 Picasa allows you to share your photos with friends and family online.
 As in the web browser you can navigate your Picasa account by either connecting and external USB wireless keyboard and mouse or via your iPhone/iPad or Android device .
 For instructions on how to turn your handheld device into a remote control and keyboard please refer to the separate instructions supplied titled, Remote Apps .
 You can also access your Picasa account using the virtual remote control built in to your . Press the i button on the remote control to display the virtud keyboard on the screen. Using the CH▲, CH▼, VOL▲ and VOL▼ arrow buttons you can navigate around the screen and around the virtud keyboard .
 To select an option or an item from the virtud keyboard, place the cursor over the desired item and press the OK button.
 To dose the virtud keyboard, press the i button on the remote control.



<Figure 6.5.9>

9) Calculator

The DVBS2 has an inbuilt Calculator app .
 You can calculate your accounts and numbers through bilut in Calculator App.



<Figure 6.5.10>

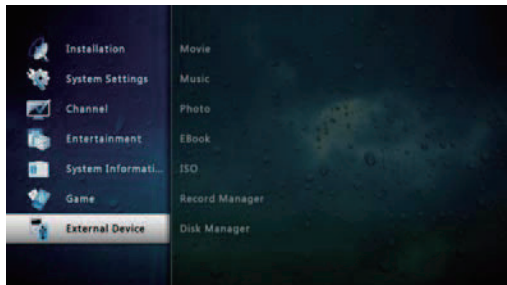
1) Disk Manager

Use the cursor keys to activate the desired functions from this menu.

- **Default Disk** : If you have an Storage devices connected to your receiver (i.e. USB HDD) you can select which storage device is to be the default drive for playback and recording
- **Disk Information** : Select USB device.
Information of the storage devices will be displayed (i.e. used size, total size, free size)
- **Check Disk** : Checks the status of the selected Storage device.
- **Format Disk** : Format disk enables you to delete all information stored on the selected storage device. There are 2 options in this section.
 - NTFS (Recommended) : Selecting NTFS will format the storage device to this format which is recommended for use with the .
 - EXT3 : EXT3 is a format used with the Linux operating system which the runs on. We do not recommend that you format storage devices in this format type if you wish to connect the storage device to a PC. If connected a separate program will be required for your PC to recognize the drive.

*** Warning : If you select Format Disk all data on the storage device will be deleted**

- **Testing USB Speed** : Press to test USB speed for DVR.
- **Timeshift Rec Time** : Set the preferred Timeshift Recording Time.
(10Min/30Min/60Min/90min/120min)
- **Auto Timeshift** : Set Auto Timeshift to On or Off. When set to on unit will autom atically begin Timeshift for pre determined time set in the Timeshift Rec Time menu.
- **Skip Time** : Set the preferred amount of Skip Forward and Back time during playback
(5sec/10sec/30sec/1Min/2Min/3Min/5Min/10Min20Min/30Min)

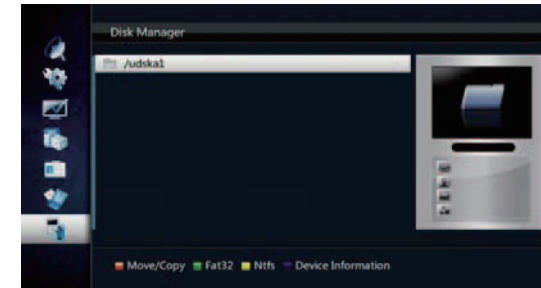


<Figure 6.6.1>

2) File Manager (Transferring Files from your DVBS2 to a PC or external USB HDD)

*** Note : Follow instructions in the "C onnecting your receiver to a PC via your network" section on page 25 if you have not already connected a PC to the DVBS2**

- ① Press the **YELLOW** button on the remote control to create a new Network Connection or to select the external USB HDD that you would like to transfer to.
Use the numeric keys to enter your PC's IP Address
- ② Press the **EXIT** button after inputting your IP address to add it into the File Manger section.
- ③ Select/HDD0 by pressing the **OK** button, use the arrow buttons to highlight records on the right hand side menu and press **OK** to view the list of recorded files on the receivers hard drive.



<Figure 6.6.2>

The File Manager menu gives you access to all Media files you have stored on any external storage devices you have connected to your .

To select the storage device you wish to access press the **YELLOW** button.

- To access an external USB HDD select / USB

Please note if you have no external device connected the receiver will display all the contents on the external USB HDD.

Once you have selected your storage device by pressing the **OK** button all files and folders will be displayed in the list.

To sort files into their appropriate types, use the Group button to select from MUSIC, PHOTO, VIDEO and SWDATA.

Once you have selected the file type you wish to access, these file types will be displayed in the list.

Use the **CH ▲** and **CH ▼** arrow buttons to select the file you wish to access and press the **OK** button.

- MP3 Playback

Using the GROUP button select MUSIC .

1 Select the MP3 file you wish to play using the **CH ▲** , **CH ▼** , **OK** in the file list.

<Figure 6.6.6>

2 Press the **EXIT** button to hide the file list. Select and optusing **VOL ▲** / **VOL ▼** **OK**

<Figure 6.6.7>

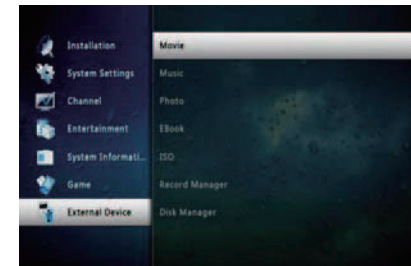
3 Adjust the volume using **▲** / **▼**

4 Press the **LIST** button to display the MP3 file list.

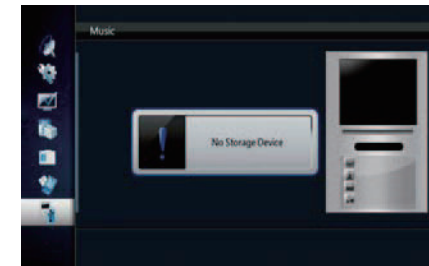
5 Press the **INFO** button to display information about the selected MP3 file

should further information be available.

- LIST : Displays / hides the file list.
- INFO : Displays information about the selected file should further information be available.
- **YELLOW** : Allows you to select which drive you wish to access should an external USB HDD be connected.



<Figure 6.6.6>



<Figure 6.6.7>

-JPG View

Using the GROUP button select MUSIC .

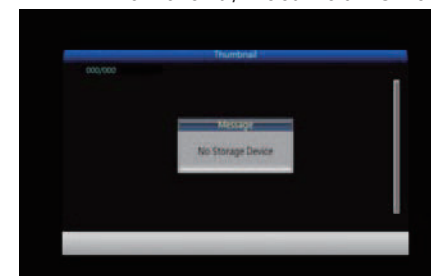
1 Press **CH ▲** , **CH ▼** to select a picture then press **OK** button to display the selected image <Figure 6.6.8>.

2 Press the **EXIT** button to hide the file list. Select and option use **VOL ▲** / **VOL ▼** **OK** <Figure 6.6.9>

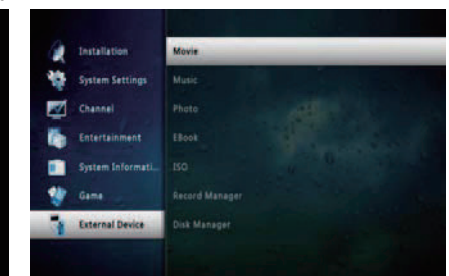
3 Press the **LIST** button to display the JPG file list.

4 Press the **INFO** button to display information about the selected MP3 file.

- HIDE infobar bar : Press the **RED** button to hide the info bar.
- -90 Degrees : Rotates the image anticlockwise.
- +90 Degrees : Rotates the image clockwise.
- **VOL ▲** : Press the Left arrow button to skip to the previous image.
- **VOL ▼** : Press the Right arrow button to skip to the next image.
- SLIDE : Select SLIDE using the arrow buttons and press the **OK** button to adjust the slide show interval time from 3 seconds, 5 seconds, 10 seconds and OFF.
- INFO : Shows information about the selected file.
- **YELLOW** : Selects the hard disk or USB device on which images are stored on.
- LIST : Shows / Hides the JPEG file list.



<Figure 6.6.8>



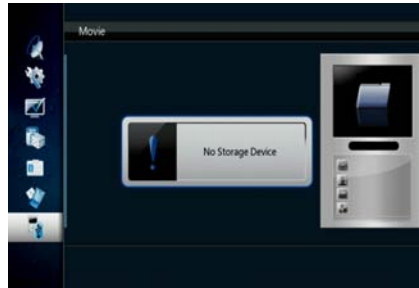
<Figure 6.6.9>

6.6 Media Manager

- MOVIE Playback

Using the **GROUP** button select **MOVIE**.

- 1 Select the video file you want to play using the **CH ▲** / **CH ▼** , **OK** in the file list.
Press the **OK** button to begin playback of the selected video file. Once playback has commenced all standard DVR buttons are active, Play, Pause, FF, RW, Skip Fwd, Skip Back and Stop.



<Figure 6.6.10>



<Figure 6.6.11>

- Update (Firmware, Channel)

- 1 Select the software you want to download by using **CH ▲** / **CH ▼** in the menu.
<Figure 6.6.12>
- 2 Press the **OK** button to start the download.

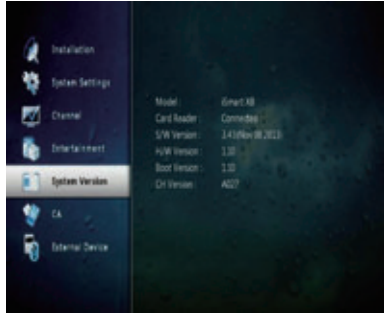
Warning : Do not switch off your receiver before the download is complete.



<Figure 6.6.12>

6.7 System Information

Your receiver displays current information <Figure 6.7.1> regarding model name, software version and date of manufacture. This info is useful when downloading new software. Please note if you have performed a software update you must also perform a factory reset of the receiver. Please see Database Reset section in the Systems settings menu for instruction on page 23.



<Figure 6.7.1>

6.8 DVR

1) Record on your DVBS2 Digital Video Recorder using an external HDD via USB










This allows you to record 3 channels simultaneously while watching a 4th or a previously recorded program via one transponder.

There are 4 ways to record TV programs on your DVBS2:

- You can expand the storage capacity of your DVBS2 by connecting an external HDD via the front or rear USB ports
- Before connecting the external HDD you will need to format the drive. Instructions on how to do this can be found on our website www.iSmart.com.au in the FAQ section.
- To record to the external HDD you will need to select it in the Menu. Press **MENU** button and using the **CH ▲** and **CH ▼** arrow buttons select Media Manager by pressing **OK** button. This will display the Media Manager Menu. Using the **CH ▲** and **CH ▼** arrow buttons select Disk Manager and press the **OK** button. This will display the Disk Manager Menu. The first item in the list is Default Disk. To set the default disk to your external HDD press the **VOL ▲** or **VOL ▼** arrow buttons until /USB0 is displayed. This corresponds to your external HDD. Once you have selected /USB0 press **EXIT** button, you will be prompted to save the changes made. Select Yes using **VOL ▲** or **VOL ▼** arrow button and press the **OK** button. The default disk is now set to the external HDD
- You can now perform all the recording options listed above using the external HDD
- To set the default HDD back to the internal drive simply remove the external HDD.
- Should you wish to have the external drive permanently connected follow the above instructions to select which HDD to record onto.









- Instant Recording

This method can be used if the program you wish to record is currently showing.

- Switch your to the channel that you wish to record.
- Press the  button on your iSmart remote. The receiver will automatically begin recording.
- Please note that the default record duration is 3 hours. If you wish to change this, press the  button again and a banner will appear where you can set your desired record start and stop duration using the  or  arrows.
- To stop the recording press the  button on the remote control. You will be prompted to confirm that you wish to stop recording. Select Yes and press  button.
- If you are recording more than one program, select the recording you wish to stop by pressing the  button on that recording. A tick will be placed in the box next to that recording. Once you have selected the recording(s) you wish to stop, press the  button. You will then be prompted to confirm the stop operation. Select Yes using the arrow buttons and press the  key to stop recording

- EPG (Electronic Program Guide) Series Recording

















This method of recording is unique feature that allows you to set the receiver to record a whole series with the touch of button.

- Press the  button on your iSmart remote.
- Use the  or  buttons to highlight the channel for the program you wish to record. Press .
- Use the  button to highlight the program name section of the EPG menu.
- Use the  or  buttons to highlight the program you wish to record.
- Press the **BLUE** button while this program is highlighted. The selected program will then appear in red. All subsequent programs in this series will have a blue dot with a white S next to the program name indicating that it is set to record as part of the series. This series will record every program when it is aired until the series record is cancelled. A series recording can be cancelled by either selecting the program in the EPG and pressing the **BLUE** button again or by deleting the timer setting in the Timer Manager menu.
- Once you have set the series record press  key to return to normal viewing.



*** Please Note : Setting series recordings may create undetected timer conflicts as EPG data is only available for 7 days in advance.**

- Manual Timer Record






This method can be used to record at specific times.

- Press the  button on your DVBS2 remote.
- Press the **RED** coloured key on your DVBS2 remote.
- Use the  or  buttons to highlight a slot that is "OFF".
- Press  on your DVBS2 remote to select this timer slot.
- Use the  or  to change the "State" to how often you want the to record at the desired time (Once, Daily, Weekly, Mon-Fri or Series).
- Use the  button to highlight the next option, and the  or  buttons to change the setting for each option.
- If you want the receiver to power off once the recording has finished, in the Power Off section select Yes by pressing the  or  arrow keys
- Once the last option is set and the  button is pressed, you will see "Do you want to save?".
- Use the  or  buttons to highlight Yes and press the  button.
- Press the  key twice to return to normal viewing.


2) Timer Lead In and Lead Out Times


- Lead In and Lead Out Times can be set on your to apply to all Timer recordings. Lead In and Lead Out times add specified amounts of time to the beginning and the end of Timer recordings so you don't miss the beginning or end of recorded programs.
- To set Lead In & Out times press  and select System Settings, then select Time Settings. Then highlight Timer Lead Time and press the  button. This will allow you to set the Lead In & Out times to either 5, 10 or 15 minutes


3) Playing Recorded TV programs:


- To access any programs you have recorded press the  button on your remote control. The full list of the programs you have recorded will be displayed on the screen.
- To play these programs highlight them by using the  and  arrow buttons and select them by pressing the  button, this will preview the program. To watch the program full screen press the  button again.
- Your recorded program will begin playback

During Playback the Following Options are available



- 

This displays the time- banner showing the progress of the recorded program
- 

This button will pause playback of the program. To resume viewing either press the PAUSE or PLAY button
-  (Fast Forward)

When playing a file you can search through the program by pressing the FF Button. By pressing the FF Button multiple times you can adjust the speed from x2, x4, x8, x16 and x32. To resume normal playback press the PLAY button.
-  (Rewind)

When playing a file you can search back through the program by pressing the RWD Button. By pressing the RWD Button multiple times you can adjust the speed from x2, x4, x8, x16 and x32. To resume normal playback press the PLAY button.
- Slow Motion(1/2x, 1/4x)



While playing back a file you can select slow motion. By pressing the  Button multiple times you can adjust the speed to slow motion 1/2 or 1/4 speeds. To resume normal playback press the  button again.





• Skip FWD & BCK

You can skip forwards or backwards through a file by pressing the SKIP FWD & SKIP BCK buttons.






The default skip time is 30 seconds.

You can adjust the amount of skip time from 30secs, 1Min, 2Min, 3Min, 5Min, 10Min, 20Min and 30Min

To set the desired skip time press , select Media Manager using the arrow keys and then select Disk Manager by pressing the  button.

Highlight Skip Time. Using the  and  arrow buttons select the desired Skip Time. To store this setting press the  button and select Yes using the  button.

4) Deleting Recorded TV programs:

- To delete a recorded TV program press the  button, when the list of recorded files is displayed select the file you wish to delete by pressing the  or  arrow buttons.
- Press the **BLUE** button to enter delete mode. Now press the  button and d'X" will be placed next to the file you have selected to delete. (You can select more than one program at a time to delete)
- Press the **BLUE** button again to delete the file. You will be then prompted to confirm the deletion of file(s). To confirm deletion select Yes and press the  button. You will now be returned to normal viewing.

6) Lock Recorded TV programs:

- To protect a recorded program from accidental deletion or to restrict the viewing of recorded programs to specific audience, programs can be locked.
- To Lock a program press the **RECALL** button to display the recorded programs
- Press the **GREEN** button, you will be prompted to enter your PIN (the default PIN is "0000"), this will put the receiver into File Lock Mode. (To set your own personal PIN number for the receiver please refer to the Security Settings, Parental Lock Section in this manual on page 23.
- Select the recorded program you wish to lock use the arrow buttons and press the **OK** button. A padlock will appear next to the selected file. This file is now locked.
- To return to normal mode either press the **EXIT** button or the **RED** button
- Once a recorded file has been locked you will be required to enter the PIN number to view or delete this program

7) Rename Recorded TV programs:

- Recorded programs can be renamed once recording is complete
- To Rename programs press the **RECALL** button to display the recorded programs
- Select the recorded program you wish to rename by using the arrow keys and press the **Yellow** button
- The file name will be highlighted. Now press the **OK** button to bring up a virtual key board.
- Using the arrow keys select the desired letters to make up the new file name and press the **OK** button
- Once you have completed the new file name press **EXIT** button. You will be prompted to save the changes, select Yes and press **OK** to save




8) Bookmarking Recorded Programs

- The DVBS2 will set auto bookmarks to each recorded program. Once a recorded program has been viewed, a bookmark will be set at the position playback was stopped. If the recorded program is watched in full a bookmark position will not be set. If selected to be viewed again playback will begin at the beginning of the program.
- When the program is re selected for playback it will resume from the last viewed position.
- You can also set manual bookmarks during playback of recordings
- During playback press the **RED** button, a red triangle will appear on the playback progress bar indicating the bookmarked position. You can set multiple bookmarks in a program. (Maximum 20)
- Press the **GREEN** button and the current position will jump to the first bookmarked position and commence playback from this point.
- Press the **YELLOW** button and the current position will jump to the next bookmarked position and commence playback from this point.
- To delete the bookmarks press the **RED** button again and the red triangle will be removed. This needs to be performed for each bookmark






9) Editing Recorded Programs**- File Cut Feature**

- The DVBS2 allows you to cut sections out of recorded programs.
- While playing back a recorded program press the **F** button twice. A menu will appear at the bottom of the screen.
- Press the **BLUE** key will place the unit into the File Edit mode.
- Pressing **OK** will input the start position of the file to be cut or copied.
- A small window will be displayed in the top left hand corner showing the time and frame of when the cut was started. You can now fast forward or skip to the desired position you wish cut or copy.
- Press the **OK** button to mark the end of the section to be cut or copied. You will then be asked whether you wish to Cut or Copy.
- By selecting Cut the selected portion will be deleted. Selecting Copy, copies this portion into a separate file in the File List.
- This file will be listed by the same name as the original file but will have E and digit in front of the name (e.g. E2-ONE HD)

10) Time Shift (Pause & Rewind Live TV)

- Timeshift allows you to Pause and Rewind Live TV. Timeshift can be set to Automatic or manual and can be activated as required
- To set TimeShift to Automatic press  and select Media Manager, then select Disk Manager using the arrow buttons. Here you can set the AutoTimeshift function to ON or OFF.
- With Auto Timeshift set to ON your DVBS2 will allow you to Pause or Rewind the current channel you have been viewing for a pre determined time. The default Timeshift time is 60 minutes. You can adjust this time in the same Disk Manager menu under Timeshift Record Time. The options are 10min, 30min, 60min, 90min and 120 min
- To activate Timeshift manually press the  button on the remote control.
- This will pause the currently viewed program and allow you to resume watching from this point by pressing the  button.
- YourDVBS2 will record the program to a buffer for the default time you have set in the menu
- Please note that if you have Auto Timeshift on it will reset every time you change the channel

Playing Media Files On Your DVBS2:

- The DVBS2 is compatible with most PC type media files
- These files can be played back on your receiver via the USB ports
- To Playback media files, firstly connect the storage device where files are stored
- Then press the XVID button on the remote control, this will bring up the list of connected storage devices. Select the desired storage device by pressing the  button
- The list of files on the storage device will now be displayed on the screen. Select the file by pressing the  or  **arrow buttons** and to play press the  button. If the file is supported playback will begin. If the file is not supported you will be returned to the Media file list
- To stop playback press the  button, this will bring you back to the list of files on your storage device
- Please note as there are many variations of file types and various audio codecs within certain file types, all media files may not be supported

Troubleshooting

There may be various reasons for the abnormal operation of the unit. Therefore, if the unit does not work properly, check it according to the procedures shown in the table below:

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

Specifications

System capabilities	Fully DVB compliant	
satellite LNB/Tuner input	Connector	IEC 169-24, female
	Frequency range	950MHz ~ 2150MHz
	Signal level	-65dBm ~ -25dBm
	LNB supply	DC 13/18V, max 400mA
	LNB switch control	22KHz
	DiSEqC	Ver 1.0/1.1/1.2/USALS Compatible
Demodulator	Front end	DVB-S/S2 QPSK, 8PSK
	Symbol rate	DVB-S : 2~45Msps
		DVB-S2 : 10~30Msps(QPSK) 10~30Msps(8PSK)
	SCPC and MCPC Capable	
	Spectral inversion	Auto conversion
System resource	Processor	32bit processor (450MHz)
	DDR SDRAM	64Mbyte X 2
	FLASH	NOR : 8Mbyte, NAND : 256Mbyte
	EEPROM	256Kbit
	Video decoder	MPEG 2
Video decoder	Data Rate	up to 15M bits/s
	Resolution	1920 X 1080P/i, 1280 X 720P, 720 X 576P/i
	Video format	PAL
	Aspec Ratio	4:3,16:9
	Teletext	DVB compliant
MPEG Audio	MPEG 1 layer I/II, MPEG 2 layer II, AC3 Dolby Digital	
	Type	Mono, Stereo, Joint Stereo
	Sampling rates	32, 44.1 and 48 KHz
	Serial data interface	Connector
Remote control	Code	NEC-IR
	Operating condition	up to 7 Meter
USB	USB Supply	DC 5V Max 500mA

Conditional Access Interface	Smart Card Reader	2 Slot	
	Power supply	Power consumption	max 30W
		Supply voltage	AC 90V ~ 250V
Supply frequency		50Hz ~ 60Hz	
Rear Panel connectors	Video	1 X RCA cinch	
	Audio L/R	4 X RCA cinch	
	Component(Y/Pb/Pr)	3 X RCA cinch	
	Serial data	9pin D-sub	
	Digital tuner input	IEC 169 - 24	
	Loop-through Digital tuner	IEC 169 - 24	
	S/PDIF	1 X RCA cinch	
	HDMI	Digital Video/Audio Output	
	LAN	RJ-45	

Physical Specification	Size (W X H X D)	260 X 232 X 54(mm)
	Weight (Net)	1.4 Kg



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European Countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



HIGH DEFINITION DIGITAL SATELLITE RECEIVER

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