The User's Manual

X5

YouTube/Internet VOD/Gmail/Gmap supported Digital HD Satellite Receiver

Main MENU of EYEBOX X5

Table of Contents

1 System Description

1.1 Remote Controller

POWER: Press to switch between operation and standby mode.

MUTE: Press to mute the sound.

SLEEP: Press to adjust the sleep timer

Recording and PVR Keys: Mapped for PVR purposes as below;
REC | GOTO | A-B | = | ■ | ▶ | || | SLOW | ▶▶ | ◀◀ | ▶▶| | |◀◀

DEV and ZOOM keys: Press to display USB devices being plugged and zoom in/out

A/B/C function Keys: Mapped for unique functions as below;
  A: 5 Games and game download
  B: Quick Access Control
  C: Back Channels (Previous channels)

NUMERIC KEYS: Press to input Channel Numbers or Passwords.

USB: Press to go to USB Media for movie, photo, text and PVR recorded contents.

AUD: Select the item in the audio mode.

Mosaic (YELLOW) and Timer (BLUE): Display multi-pictures and timer lists for each channel

SUB (GREEN) and TXT (RED): Display the Subtitle and Teletext information.

CH＋/ CH－: Change the channel or move cursor in the menu.

VOL－/ VOL＋: Adjust volume or move cursor in the menu.

OK: Press to select the item in the menu or to list the TV/Radio channels.

EXIT: Press to return to the previous menu or to escape from the current mode.

MENU: Press to display the Main Menu.

PAGE＋/ PAGE－: Press to page up/down in the channel list.

EPG: Display the Electronic Program Guide.

TV/RADIO: Switch between TV or RADIO mode.

FAV: Press to display Favorite Channel List.

INFO: Display the information of the current program.

SAT: Press to display the satellite lists.

1.2 System descriptions by s/w version

FTA S/W Version (KD-9000 FTA) for restricted an network application

Item	Flash/SDRAM	Serial	Ethernet	USB	A/V Outputs
Description	8MB(SPI) / 2G bits DDR-3	RS-232 Built-in	None	2 ports	YPbPr & HDMI CVBS & RCA (R/L)

Note) Network can be connected via USB WiFi adapter in this version but it will be limited to use only for CCcam, Newcamd & MGcamd function.

High-end S/W version[1] (KD-9000E HD) for all network applications

Type	Flash/SDRAM	Serial	Ethernet	USB	A/V Outputs
Description	8MB(SPI) / 2G bits DDR-3	RS-232 Built-in	Built-in	2 ports	YPbPr & HDMI CVBS & RCA (R/L)

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[1] This version only supports all network applications like YouTube. Please check s/w version first for exact s/w features.

2 Getting Started

2.1 First Installation

When the power is ON at first time after the factory or reset, this menu shall be displayed for setting up some important configures. To skip this menu, press EXIT key and MENU key to bring up the main MENU directly.

2.2 Main MENU

Press MENU key, it will display 15 subsidiary icons as below; This MENU provides 32bits colors & graphics, simple UI structure and user-friendly icons in usage of it like Smartphone.
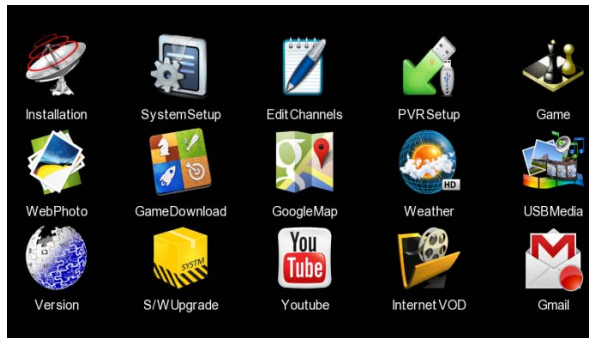

Figure 2.1 Main MENU

2.3 Shortcut Keys

a) **Swap TV/RADIO mode**: Press **TV/RADIO** key to change the program list mode between TV and Radio.

b) **INFO Banner:** Press **INFO** key to view the detailed information of current program. It will display SD/HD with H/V resolutions, audio encodings, audio mode, multi audio, Teletext/Subtitle, and FAV. Press INFO key twice, then it will display extended information of channel such as service provider name, network name, CA system, CA operation mode, and a detail EPG.
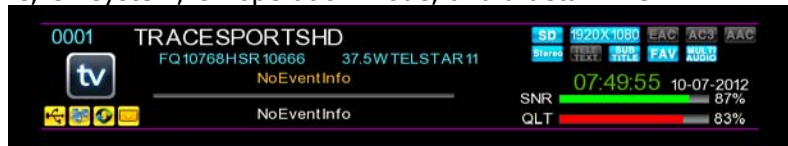

Figure 2.2 INFO banner display

c) **Undo Channel**: Press **RECALL** key or "**C**" key to show the information of previous channels being watched up to 10 channels.

d) **System Connection Recovery:** Press **ACCESS** or "**B**" key to recover the system connection when the connection is failed or not working of internet application.

e) **Timer:** Press **Timer**(Blue) key to set the time for reserved an each channel to view.

f) **Sleep Timer:** Press "**Sleep**" key. This function shuts off the power after a preset amount of time. There 7 time modes that can be selected such as OFF, 10, 20, 30, 60, 90, and 120 minutes. The default is OFF. User can toggle the "SLEEP" key to set the timer.

g) **FAVOURITE:** Press **FAV** key to bring up Favourite Groups window for detailed setup.

h) **AUDIO:** Press **AUD** key to select the multi audio such as language and stereo.

i) **Channel List with simple EPG**: Press "**OK**" key whilst watching a channel to open the Channel List as in figure 2.4. The Channel List supports four (4) categories for listing the channels. It shows not only channels but also Now/Next EPG to each channel.

Figure 2.3 Multi-Picture (Mosaic) display

j) **Teletext** & **Subtitle**: Press **TXT**(RED) or **SUB**(YELLOW) key, respectively. It will enable the function of Teletext and Subtitle as below, if available.

Figure 2.4a Teletext   Figure 2.4b Subtitle

k) **Device Selection**: Press **DEV** key to configure the USB memory device.
l) **EPG**: Press **EPG** key to enter into the EPG, if available.
m) **USB Multimedia**: Press **USB** key or select **USB Media** on Main MENU to enter the USB media player.
n) **II** (Pause): There are two functions when press **II**(pause) key as below;
　① Make a pause to the playback of a recorded program or pause a current watching video.
　② Start to recording for Timeshift when the mode of Timeshift is set to PAUSE in PVR Setup submenu.
o) **⟲(Repeat)**: There are two functions when press **REPEAT** key as below;
　① Repeat a playback of a recorded program in USB media content.
　② Show a signal/strength of selected channel for satellite installations when channel view

2.4 Recording (PVR)

Recording would be restricted in the transponder (TP) of the channel that is recording. That is, channel change is only enabling in a TP while recording. To go to other TP/satellite, then press "STOP" key to exit. This is inevitable limitation of single tuner recording method. Press "REC" key to start record, system will has 3 seconds for initialization as shown in the figure 2.5 and 2.6.

Figure 2.5 REC Initializing   Figure 2.6 REC Info

When initialization success, the screen lift top will show "REC" icon, recording and playing current program. Press "INFO" key to watch current recording information as shown in figure 2.11. Press "STOP" key while recording, will stop record and resume normal playback mode. In the recording, press "REC" key to set timer for subscribe stop record

(or reset the time optionally and can set the time length as cancel (00:00), or user define length).

【**Significant Tips**】

1. Press "INFO" key while recording, then it shows all lists being recorded on local storage. It can be playback pressing "OK" key and press "■" key for stop playing.
2. Press "▶▶" or "◀◀" while recording, then it moves fast forwards or fast backwards like **Timeshift** function. Also, press "▶" key for playback after forward/backward of recording content. To stop Timeshift, press "■" key and press it once again then it stops recording.

Remarks)

① When the USB/Card memory space is insufficient while recording, system will show prompt message then stop recording and resume normal play back mode.
② In the recording, if a write failure happened is by reason of storage bad track problems, system will show prompt message and try again.
③ In the recording, you also can operation Main MENU, EPG, TTX, Subtitle and so on function like normal play back mode.

2.5 **Timeshift (PVR)**

a) First, user need to set Timeshift function to be enabled. Go to PVR Setup and set Timeshift as Pause or Auto mode.

    1) Pause mode: It starts to record live stream when user press "**PAUSE**" key.

    2) Auto mode: It records live stream automatically.

b) Press "**PAUSE**" key can into Timeshift mode, then the "TIMESHIFT" icon will be shown at screen lift top area, and record program play will beginning at recording start time.

c) In time shift mode, when press "STOP" key will exit time shift mode and turn to playing current program.(recording is still going on)

d) In time shift mode, when operate fast forward, if playback time is catch up current program playing time, then system will automatic exit time shift mode and turn to playing current program. (recording is still going on)

e) In time shift mode, info banner looks like recording, but display time is dispersion of current playing content time with live program time, and use cursor prompt the relative position of current playing content in total recording content.

3 Installation

There are 5 options under this directory.

- Satellite Setup
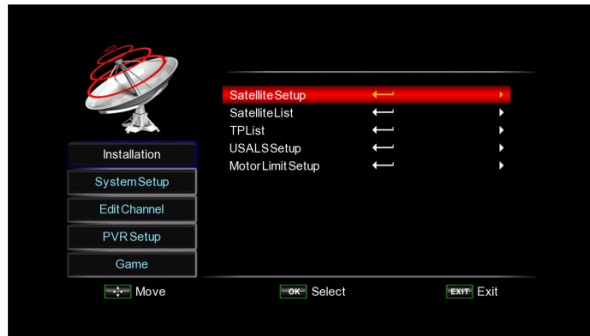- Satellite List
- TP List
- USALS Setup
- Motor Limit Setup

Figure 3.1 Installation submenu

Note) This can be entered via inputting passwords (default password is "0000").

3.1 **Satellite Setup**

On the installation menu, press UP/DOWN to select the item "Satellite Setup".

① Satellite：Choose a satellite from the database and set up the following parameters. There are 34 satellites being stored in default.

② LNB Frequency：Select the local oscillation frequency.

③ Transponder：This is a satellite frequency which is used to display the signal quality, facilitating to adjust relevant parameters.

④ 22K: set 22K tone signal to ON or OFF.

⑤ LNB Power: Set Power supply to ON or OFF for LNB use.

⑥ Tone Burst Mode: Set Tone Burst A, Tone Burst B and None. The default is OFF.

⑦ DiSEqC 1.0: Set Port A, B, C, D and Disable.

⑧ DiSEqC 1.1: Set Port 1, 2, 3, …16 and Disable.

⑨ Motor Type: Set DiSEqC1.2, USALS or Disable.

⑩ Motor Setup: This menu can be entered as selection of DiSEqC1.2 by Motor Type.

3.2 **Satellite List**

This "Satellite List" menu shows all satellites stored in system with (1) LNB type, (2) 22KHz setting, (3) DiSEqC1.0/1.1 and (4) Motor type. You can do ADD, EDIT, DELETE and SCAN action with Color Key on your IR.

Figure 3.2 Satellite List

3.3 **TP List**

You can move the cursor to "TP List" then press "OK" to enter into manual search page. TP List shows saved all the transponders in selected satellite, and every transponder maybe has some A/V channels. Then press the 4-color key on the remote controller: press the "RED" key to Add Transponder, the "GREEN" key to edit the TP, the "YELLOW" key to delete the TP, and the "BLUE" key to scan the TP in manual.
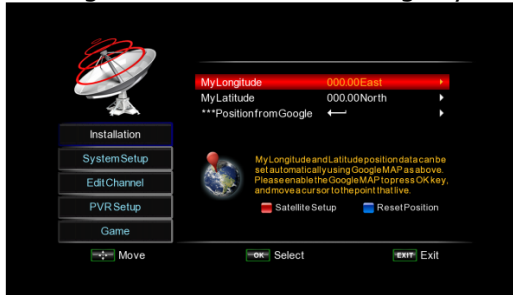
Note) Edit TP function is only possible on single TP. Move the cursor on the TP that want to edit, then press GREEN key to edit it. If press OK key to select TP, then edit key would be disappeared.

3.4 USALS Setup

There are three menus and 2 functional keys as below;

① Menus: (1)My Longitude, (2)My Latitude and (3)Position from Google

② Functional keys: RED key for satellite setup and BLUE key for reset the positions
USALS's setup is instant. It is an automatic method based on the entered Longitude and Latitude of your current location. Press OK to edit the position data on My Longitude and Latitude. The system will then automatically setup your motor. However, a satellite's position cannot be adjusted and saved. The only way to finely adjust the motor is to edit the Longitude and Latitude settings by trial and error.

Figure 3.3 USALS Setup with Google MAP

In order to avoid this error, the system supports "**Position from Google**" option as figure 3.3 to get the exact position data from Google MAP via internet.

Press **OK** on **position from Google** menu then, Google map function would be enabled and move the position. Zoom in & out and then, press **BLUE** key to get the position data that you want.

3.5 Motor Limit Setup

Motor Limit Setup: Set EAST/WEST extreme coordinate or disable it
1. Disable Limits: No extreme coordinate
2. Set East Limit: Set up the eastbound extreme coordinate
3. Set West Limit: Set up the westbound extreme coordinate

Continuing move: Set move direction continuously.
1. Move east: Rotate in the eastbound way
2. Move west: Rotate in the westbound way
3. Stop: Pause

Move Step: Press [LEFT] once and MOTOR rotates to the east by one step; Press [RIGHT] and MOTOR rotates to the west by one step.

Go to Reference: Go to a reference position.

Note) Audio/Video Channel can be scanned in Satellite Setup, Satellite List, TP List, or USALS Setup menu. Press "Blue" key in submenus and then, following would be popped up once scan is enabled, and press "OK" to start Channel Scan.

Scan	
Polarization	Horizontal or Vertical
Network Search	ON or OFF
Channel Type	All or FTA
Scan Type	Manual Scan, Auto Scan, or Blind Scan
Press OK to start	

4 System Setup

There are 9 options under this directory.

- OSD Setup
- Video Setup
- Audio Setup
- Time Setup
- Password Setup
- Access Control
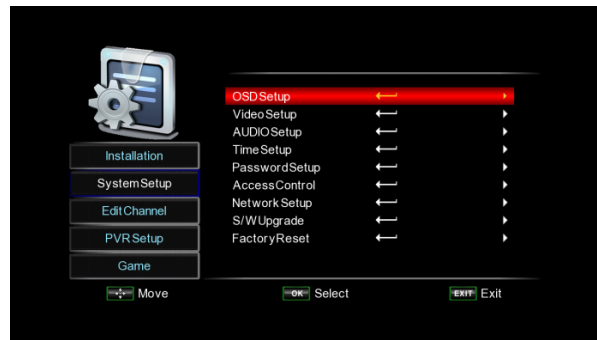- Network Setup
- S/W Update
- Factory Reset

Figure 4.1 System Setup submenu

4.1 OSD Setup

4.1.1 OSD Language

The system has the user interface supporting a couple of languages so that you can set language via OSD Language option:
"English", "German", "Italian", "Spanish", "Portuguese", "Dutch", "Russian", "Arabic", "Thailand", "French".

4.1.2 OSD Time Out

INFO banner will appear a time in 1 sec, 2 sec ,,,7 sec or OFF. The default is 5 sec.

4.1.3 OSD Transparency

OSD transparency set as 0 to 60%. The default is 0%.

4.1.4 1st /2nd Preferred Subtitle

To be set the 1st and 2nd preferred subtitle language.

4.1.5 Auto Subtitle Enable

Enables/Disables the "hearing impaired"

4.1.6 1st /2nd Preferred Audio

Sets the preferred audio to "English", "French", "German", "Italian", "Spanish"

4.2 Video Setup

Video setup provides convenient TV input mode.

4.2.1 Contrast/ Brightness/Saturation

You can set system contrast/brightness/saturation. The default is 12 for all.

4.2.2 HUE

The default is 0.

4.2.3 SPDIF

Used to select AVC mode –Mute，PCM and Bitstream.

4.2.4 Aspect Ratio

Video output mode can change the mode of video output, you can adjust TV mode according to the actual situation of you receiving equipment.

4.2.5 Video Output

Video Output mode can change the mode of video output, you can adjust TV mode according to the actual situation of you receiving equipment. The default value is YUV.

4.2.6 Video Resolution

Video Resolution mode can change the Resolution of video output, you can adjust TV mode according to the actual situation of you receiving equipment.

4.2.7 HDMI Color Space

HDMI Color Space can change the mode of video output, you can adjust TV mode according to the actual situation of you receiving equipment.

4.2.8 HDMI Deep Color

HDMI Deep Color can change the mode of video output, you can adjust TV mode according to the actual situation of you receiving equipment.

4.3 Audio Setup

It can set Digital Audio Setup such as SPDIF and HDMI audio.

4.4 Time Setup

It can set the time and date of the system in auto or manually. In auto, it is required to set the time using GMT in Time Zone. **Note)** If no PMT is coming in a stream, the time information might be not set in correct.

4.5 Password Setup

Password setup menu can provide convenient locked setup. User can set the system lock (in default is ON) and parental rating from 0 to 18. The default password is "**0000**" and it requires entering this menu for changing.

4.6 Access Control
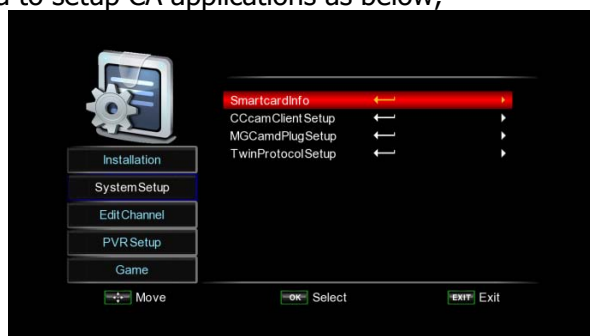
Select this submenu to setup CA applications as below;

Figure 4.2 Access Control submenu

- Smartcard Info: Select this submenu to check the smartcard being inserted.
- CCcam Client Setup: Select this submenu to setup CCcam client.
    a) Update Files by USB: Load a file(cccam.cfg, constant.cw or softcam.key) from USB memory.
    b) CCcam.cfg Edit: Edit cccam.cfg file and it is protected as 4 digits pin code. It is **0000** as default and it can be newly set in Password Setup.
        - CCcam Edit: Edit server and account.
        - Load Balance: Set server's connection load as ON or OFF.
    c) Constant.cw Edit: Edit a loaded constant.cw file as BISS.
    d) Softcam.key Edit: Edit a loaded softcam.key file.
- Mgcamd Plug Setup: Select this submenu to setup Mgcamd plug setup.
    a) Update Files by USB: Load a file(Newcamd.list) from USB memory.
    b) Newcamd.list Edit: Edit a loaded Newcamd.list file.
- Twin Protocol Setup: Select this submenu to setup RS-232 parameters for external STB.

4.7 Network Setup

Select network connection method in **wired** or **wireless** via Link Type menu.The defualt is **wired** mode. After chosen of link type as wired mode, then press **Config** option for setting the way of obtaining IP address either DHCP, Sattic IP or PPPoE. The default is DHCP mode.

    a) DHCP mode : Select DHCP mode and then the system will get the IP from DHCP server automatically.
    b) Static IP mode : IP address, Netmask, Gateway and DNS server shall be edited by user manually.
    c) PPPoE mode : If an external modem(xDSL or Cable) is used, then this option would be required.

In case of wireless, insert USB wifi adapter first and press **Config** option then it shows all availabe **SSID**s of wireless LAN to be connected with encrypted passowrd. Select a proproetary **SSID** and press **OK** to set all required parameters such as password, if required. After finish to set all, then scroll donw to **Link** and press **Link** to connect. If it needs to set static IP configurations, press **More** to set IP. The default is DHCP mode same as wired. Please see **Reference** for available USB WiFi adpaters.

4.8 **S/W Upgrade**

The software of the STB can be updated in three ways via **RS-232**[2], **USB** or **Internet**.

(1) Upgrade via USB

USB/Card upgrade is a fast and convenient way to upgrade, User simply copy the upgrade file into the USB disk, and push the USB device into the system USB interface, then you can upgrade by the following step as below:

(2) Upgrade via Network (KD-9000E HD S/W version only)

S/W upgrade via network is using internet line.

a) Press "OK" on Upgrade via Network page, and then the Network Upgrade message would be popped up as in figure 4.7.

b) The Network Upgrade message shows the version of s/w being available on the server and current s/w version on the system for comparison by user whether it needs to update.

c) If the new s/w is available then user can press **YES** to start the update the s/w via internet.

New S/W Version in FTP Server
YJ-7000E-011CP-r8p246build:03/04/2012 12:37:24

Current S/W Version in STB
YJ-7000E-011CP-r8p246build:05/04/2012 17:20:13

Do you wish to update?

Yes   No

Figure 4.7 Network Upgrade

⚠ CAUTION	Please pay attention to followings. It may be cause of s/w damage.
	☹ Do not turn off the power during upgrade.
	☹ Do not unplug the network cable.

4.9 **Version** (FTA S/W version only)

View the information about the software and hardware.

Version

MainChip	Sunplus 1512-216pins
H/W Version	YJ_HD_S2(SZ-11089C)
S/W Version	YJ_9000E_HD
BuildDate	18/09/2012 14:02:42

Security   Certified with protection chip

EXIT Exit

- Used main chip
- Security: If security chip is inside, then s/w is copy protected.
- H/W version
- S/W version
- S/W Build Date

Figure 4.8 Version

Note) This version information is only available on Main MENU for Ethernet built-in model such as KD-9000E HD s/w version.

4.10 **Factory Reset**

This function deletes all settings and channels from your product and restores factory default settings. It can save all satellites and channels after factory reset is selected.

Note) Information in CCcam.cfg will not be deleted during factory reset.

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[2] The STB software can be updated by **RS-232 interface** as well, if STB has a RS-232 connector. In this case, the **UART upgrade tool.exe** shall be required to download the s/w. To start download, start download at PC and turn on STB. However, this upgrade way is not recommended but may be feasible in the case of software recovery from the damage. To get **UART upgrade tool** software, please contact local sellers.

5 Edit Channel

There are 7 options under this directory.
- Edit Channel
- Edit Favorite
- Edit PIDs
- Edit Boot Channel
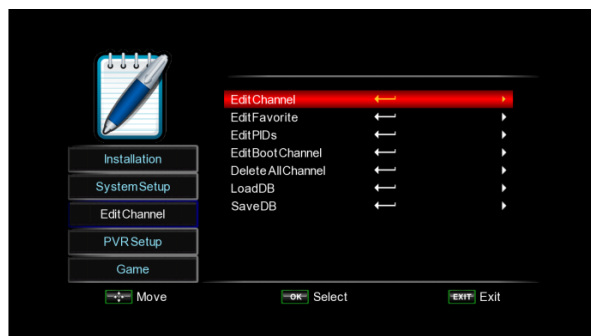- Delete All Channel
- Load DB
- Save DB

Figure 5 Edit Channel submenu

5.1 Edit Channel
- Satellite Selection: Press the **SAT** key to select a satellite. The default is all satellites.
- Other Selections: Press **INFO** key to select followings;
    a) Rename: Move the cursor that you want to rename a channel, and then press INFO key and select Rename.
    b) Group: Select channels being sorted as FTA, Scrambled, 0~9, A to Z, and others.
    c) Select All: Select all channels in the list.
    d) Unselect All: Unselect all channels in the list.
    e) Select TP: Show channels that you select TP. **Note**) This function is not working on All Satellites. Select a satellite first.
- Lock: Select channels that you want to lock. Press OK key to select channels and RED key to lock selected channels.
- Skip: Select channels that you want to lock. Press OK key to select channels and GREEN key to skip channels.
- Move: Select channels that you want to move. Press OK key to select channels and move the cursor that you want to locate, then press YELLOW key to move selected channels.
- Delete: Select channels that you want to delete. Press OK key to select channels and BLUE key to delete selected channels.

5.2 Edit Favorite
Setup favorite lists/groups of channels accessible from the FAV button while watch a channel.
- Press **SAT** key to select the satellite prefers to edit.
- Press **1**-**8** to add a channel to a favourite group.

5.3 Edit PIDs
Add or change the PIDs of the channel for audio and video.
- Add: Press the **RED** key to add new channel with PIDs.
- Edit: Press **YELLOW** key to change PID of channel being stored.

5.4 Edit Boot Channel
This allows you to set the preferred channel after boot-up.

5.5 Delete All Channel
This allows you to delete all channels being scanned.

5.6 Load DB
This allows you to load DB from USB.

5.7 Save DB
This allows you to save DB to USB.

6 PVR Setup

There are 7 options under this directory.

- PVR File Format
- Max File Size
- Default PVR Storage
- Timeshift Mode
- Timeshift Length
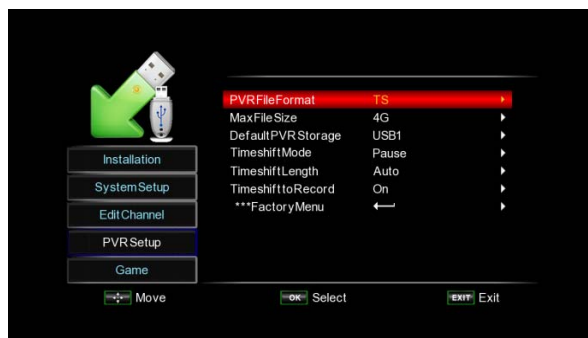- Timeshift to Record
- ∗∗∗Factory Menu

Figure 6 PVR Setup submenu

6.1 PVR File Format

Either of options, TS/PS, can be selected to set the format of the file to be stored; if TS mode is selected, related PSI/SI table information in code stream can be recorded during the record of the program, or if PS mode is selected, AV data are recorded only.

6.2 Max File Size

Any of options, 4G/3G/2G/1G, can be selected to set the size of the file to be recorded; if the size of the file exceeds the setting size(up to 4GB) during the record of the program, the record program will divide the file into plurality of files with the set sizes.

6.3 Default PVR Storage

Any of options, USB1/USB2, can be selected to determine USB equipment for storage of the file to be recorded.

6.4 Timeshift Mode

Any of options, AUTO/OFF/ PAUSE, can be selected to set the status of the current Timeshift, if AUTO is selected, Timeshift operation will perform automatically on the background, can change channel but discard previous Timeshift buffer and restart a new one; if OFF is selected, Timeshift operation will stop; if PAUSE is selected, Timeshift operation will be manual start by PAUSE key, screen freeze at once, can resume by PLAY key, allow channel change only in the same TP, Timeshift buffer only record first channel; and if the preceding three options are changed when the AUTO is selected, Timeshift will restart.

6.5 Timeshift Length

Any of options, AUTO/30min/1h/2h, can be selected to set the time depth of the Timeshift; if AUTO is selected, the time depth of the Timeshift is depended on the available size of USB equipment; if any of options, 30min/1h/2h, is selected, the usable time depth of the Timeshift is 30min/1h/2h in the case that the available size of USB equipment is big enough, whereas, the usable time depth of the Timeshift is depended on available size of USB equipment.

6.6 Timeshift to Record

Either of options, ON/OFF, can be selected. If ON is selected, Timeshift operation will stop and the recorded file buffered by the Timeshift will be stored in USB equipment; if OFF is selected, Timeshift will operate continuously and the recorded file buffered by the Timeshift will not be stored in USB equipment.

6.7 ***Factory Menu

This is not user's function. Do not use this function and it is only for special purpose by factory. It requires a password to enter this function. Please contact local sales to know the password, if necessary.

7   Game & Multimedia

This submenu gives user to enjoy various multimedia services such as native game, game download, web-based applications, YouTube, Google mail and internet VOD.

7.1   Native Games

Press **MENU** and select **Game**. There are 5 native games (Sodoku, Gobang, Tetris, Boxman, Hitrat) being provided as default.

Figure 7.1 Native 5 games page

7.2   Game Download

There is the specified website(www.native32.com) that supports hundreds of 32bits games to be downloadable.

Game Download

Figure 7.2 Native32 games being downloaded

Go to **MENU** and select **Game Download** icon to enter the function. download the games into the USB storage.

After finish the download, go to **USB** and select **Native32 Games** mode. Select the game and play.

Notes) USB storage shall be plugged before game download.

7.3   Google MAP, Yahoo Weather and Web Photo

There are 3 data API-based internet applications as below, and it can be accessed by pressing the icon on Main MENU when it has selected.

■   **Icons for Google MAP, Yahoo Weather and Web Photo**

Google MAP   Weather   Web Photo

■   **Screenshot of Google MAP**

Figure 7.3 Google MAP and Yahoo Weather

7.4   YouTube

YouTube

Go to **Main MENU** and select **YouTube** icon to enter the function. There are 7 options under this function.

■   4 Video Groups (Most Popular, Most View, Top Rated, and Category)
■   Search YouTube Contents by keypads
■   My Video (Move the cursor on the video and press **FAV** key to assign it as favorite)
■   Setup the country that you live

Press II key to pause the video palying.
Press ▶ key to play the video from pause.
Press **MUTE** key to off the audio.
Press **FAV** key on Video list to assign the video into MY Video as Favorite.
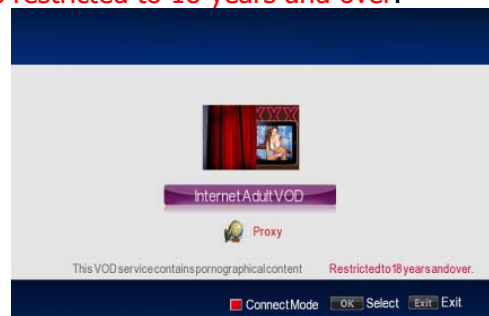Press **REPEAT** key to play it again when video is playing.

Figure 7.4 YouTube Video Lists

7.5 Internet VOD

This is an internet VOD service that offers the best in streaming **video on demand** only for adult and so it is restricted to 18 years and over.

Internet VOD

☞ **Remark**
Selection to connect mode of it in either direct or proxy. Press **RED** key on this MENU.

Figure 7.5 Internet VOD

Note) Pin codes (**0000** as default) requires entering this MENU.
The VOD site is locked with pin codes and can be connected in either direct or proxy mode due to some reasons.

7.6 Google Email (Gmail)

 Google Email

Gmail is a free, advertising-supported email service provided by Google. Users accesses **Gmail** as secure webmail, as well via POP3. In this s/w, Gmail is provided on embedded UI as below. Press **Gmail** icon in **MENU** and then, firstly setup menu will be displayed as figure 7.6.

Figure 7.6 Gmail Setup

When Gmail is entered, Setup menu will be shown that it is mandated to be filled. .

- **User Name**: Arbitrary name of email account
- **Gmail Address**: User's Gmail address
- **ID**: User registered email ID
- **Password**: User registered email password

Note) If user doesn't have Gmail account, then user firstly registers the email account on Gmail website. Please visit **http://mail.google.com** and register the Gmail account first.

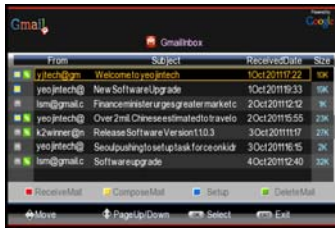After success to setup the Gmail, user can use it as below.
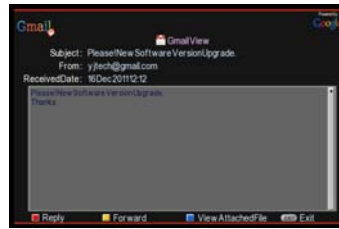
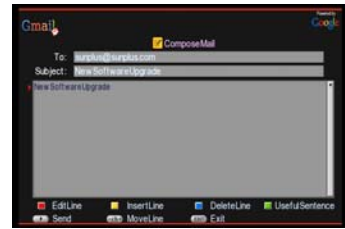| Figure 7.7(a) Gmail Inbox | Figure 7.7(b) Gmail View | Figure 7.7(c) Gmail Compose |

Note) Gmail message inbox is unlimited to use in USB memory size. It can process the attachment file of email to USB memory.

7.7 USB Media Player

Select and play a movie, photo, music, EBook, etc from a list of them that are stored in the USB storage device.
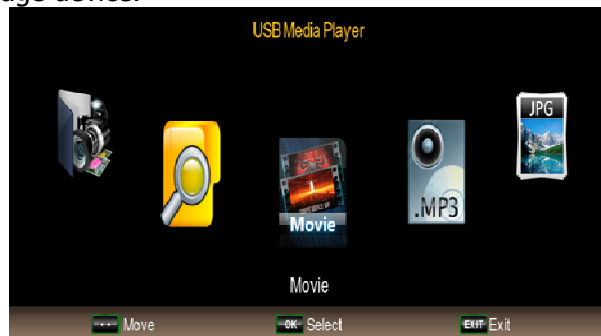

Figure 7.8 USB Media Player page

Press **USB** key or **USB media** icon on **Main MENU**, and then above menu would be shown. Move MOVIE, Photo, Music or EBook using left/Right key and press **OK** to enter the sub-directory of files.

- ■ MOVIE: Select **MOVIE** icon and press **OK** to enter the USB device. It shows all video files and previews the video that the cursor is on it. It supports formats such as MPG, AVI, VOB, DAT, ASF, MKV, RM, WMV, TSF, and QuickTime (QT).
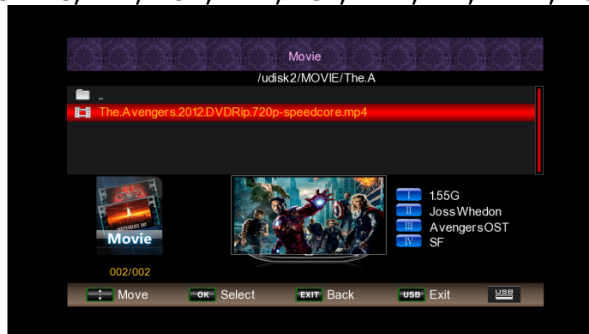

Figure 7.9 MOVIE on USB Media Player

- ■ MUSIC: Select **MUSIC** icon. It supports formats such as WMA, WAV, DTS, RA and MP3.
- ■ PHOTO: Select **PHOTO** icon. It supports formats such as JPG, TIF, PNG, GIF and BMP.
- ■ Native32 GAME: Select **Game** icon. It supports NES and Native32 games.
- ■ EBOOK: Select **EBOOK** icon. It supports .txt file.
- ■ PVR File Manager: Edit only recorded files. It supports Delete, and Rename.
- ■ File Manager: Edit all files. It supports Delete, Rename, Move, and Copy.

Note) Press **DEV** key to change the mode from/to Local storage/Network Storage.

Reference: USB WiFi Adapter

The system supports USB WiFi adapters as below;
- **Ralink** RT3070 WiFi USB WLAN Adapter
- **Ralink** RT5370 WiFi USB WLAN Adapter
- **D-Link** DWA-125 WiFi USB WLAN Adapter

| RT3070 | RT5370 | DWA-125 |

To setup USB WiFi adapter, go to **Network Setup** and select **Wireless** as Link Mode. Press **Config** and then available access points(AP) will be displayed in the list as figure A.
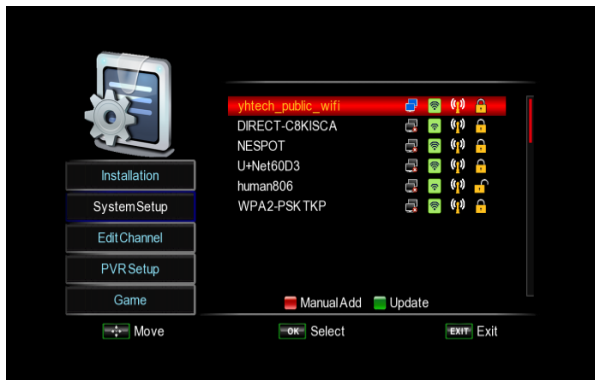

Figure A. Access Points for WiFi

Note) WiFi connection may not work well due to weakness of signal strength. Select the SSID that has strong signal strength for better network connection.

Select one of SSIDs in the lists and press **OK** to configure. Then, following configuration options will be displayed.
- Password: Press **OK** to edit password.
- Auto Link: Press **OK** to select auto link with DHCP mode. In this case, press **Link** button to connect. Otherwise, press **More** button.
- Config Mode: Select IP address mode either **DHCP** or **Static**. The default is **DHCP**.

Icons as connect and disconnect

Icon as network signal strength

Icons as free to use or protected