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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 parts.

1.2 Main Features

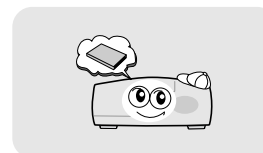
- ▶ DVR Ready via USB External Mass Data Storage Device
- ▶ Time Shift, Record & Playback
- ▶ USB 2.0 Host for JPEG Viewing & Firmware Update
- ▶ Embedded CONAX CAS7
- ▶ 10,000 Programmable Channels
- ▶ DVB-S / DVB-S2, MPEG-2/MPEG-4 Compliant
- ▶ On-screen display with true color full resolution
- ▶ Component Video (Y, Pb, Pr) Outputs
- ▶ Advanced Blind Scan
- ▶ Auto & Manual Channel Search
- ▶ Dolby digital bitstream audio out via S/PDIF
- ▶ 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
- ▶ Ethernet Port
- ▶ 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

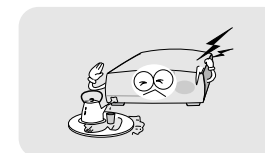
Safety/Precautions

2.1 Safety

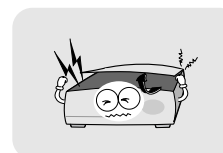
Be sure to read this user's manual before starting the operation of the unit.



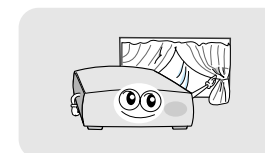
Do not touch the power cord with wet hands as it may cause electric shock.



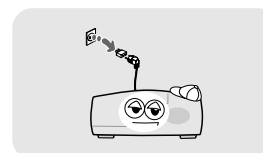
Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.



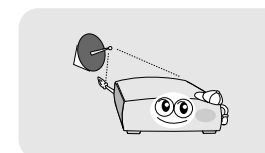
Place the unit in a well ventilated and no-heat environment.



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.



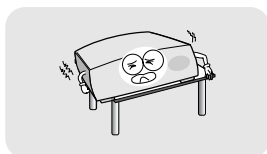
A professional installation is required. If reception is interrupted, contact your local service centre.



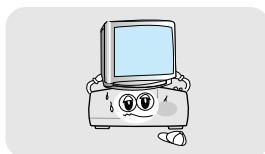
2.2 Precautions

When installing the unit

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



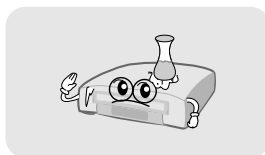
Do not put heavy items such as a TV set on the unit. That may damage the unit.



Do not leave the unit where the water drops or splashes.

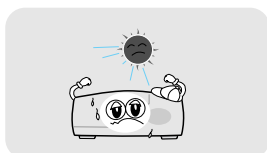


Do not put water holding items such as vases on the unit.

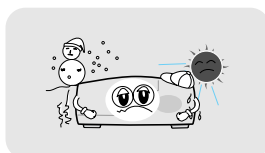


Do not install the unit:

- 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:

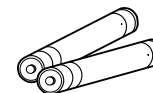
User's manual : 1



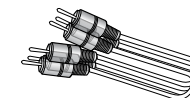
Remote control : 1



Batteries (AAA type) : 2



RCA Cable : 1



Warranty Card : 1



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

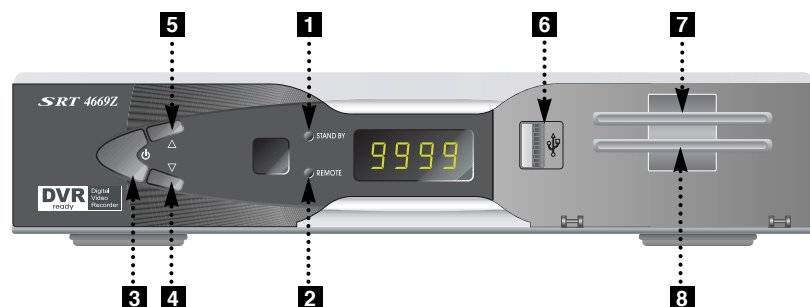
3.2 The Satellite dish

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.

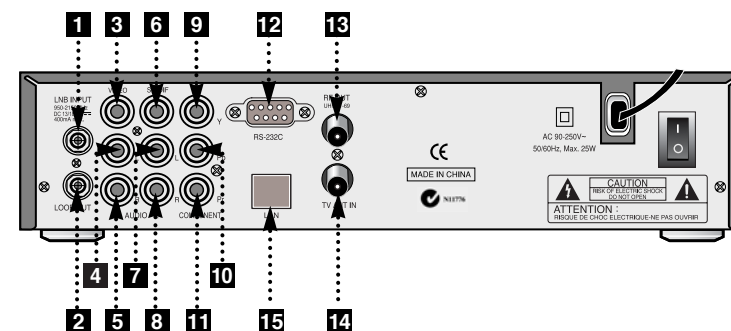
Controls/Functions

4.1 Front Panel



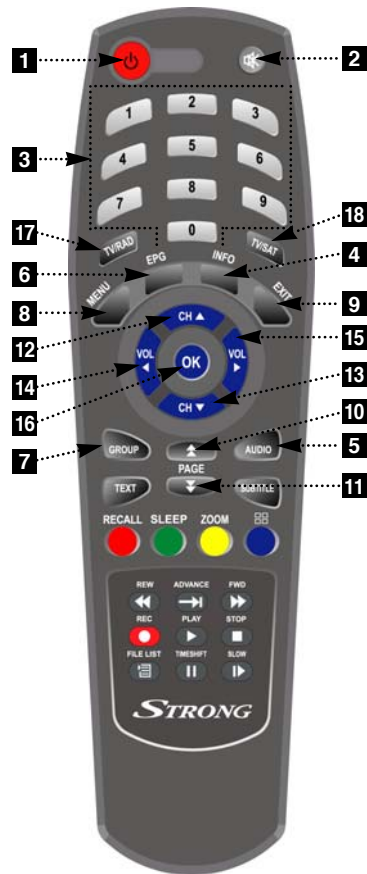
- 1 Standby/Power on Indications Lamp** : Flashes red light in 'Standby' mode and shows no light in 'Power ON' mode.
- 2 Indication Light** : Flashes when a key on the Remote Control Unit (RCU) is pressed.
- 3 Power** : Switches the receiver between 'Standby' and 'Power ON' modes.
- 4 - 5 CH. (▲/▼)** : To switch channels or change the cursor position on the application screen.
- 6 USB** : To connect USB devices such as Memory stick or external Hard Disk Drive.
- 7 - 8 Smart Card Reader(2 Slot)** : Insert smart card for encrypted channel access.

4.2 Rear Panel



No.	Name	Connector	Function
1	LNB INPUT	IEC 169-24 FEMALE	IF input from LNB to digital tuner
2	LOOP OUT	IEC 169-24 FEMALE	IF loop-through output from digital tuner
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	AUDIO L	RCA cinch	Left audio output
8	AUDIO R	RCA cinch	Right audio output
9	Y	RCA cinch	Component video output (Y)
10	Pb	RCA cinch	Component video output (Pb)
11	Pr	RCA cinch	Component video output (Pr)
12	RS-232C	DB-9	Low speed serial port
13	RF OUT UHF 21-69	IEC 169-2 MALE	Output to TV
14	TV ANT IN	IEC 169-2 FEMALE	Input from terrestrial antenna
15	LAN	RJ-45	10/100Mbps Ethernet

4.3 Remote controller



- 1 POWER** : To turn the receiver On/Off.
- 2 MUTE** : To turn the sound On/Off.
- 3 Numeric Keys (0-9)** : To enter numerical settings (such as channel numbers) directly.
- 4 INFO** : To show information about the current program. Press twice to show detail.
- 5 AUDIO** : To show the Multilanguage audio track, the stereo-mono mode. Used for special functions in menu mode.
- 6 EPG** : To show the TV/Radio program guide.
- 7 GROUP** : To change the channel groups (Satellites or favorite groups).
- 8 MENU** : To enter or exit the main menu.
- 9 EXIT** : To exit from the present menu and move to the previous menu.
- 10 - 11 Double arrow UP/DOWN (ASPECT)** : To move to the next or previous page when many pages are available and to select a TV aspect ratio with Pan Scan, Letter-Box(4:3), Full Screen or Pillar-Box(16:9) in live mode.
- 12 - 13 Up & Down** : To switch channels in non-menu mode and move the cursor up/down in menu mode.
- 14 - 15 Left & Right** : To change the volume level in non-menu mode and modify a setting in menu mode.
- 16 OK** : To show the Channel List in non-menu mode and select an item or confirm in menu mode.
- 17 TV/RADIO** : To switch between TV and Radio.
- 18 TV/SAT** : To switch the TV output source between the satellite input and the UHF/VHF antenna input.

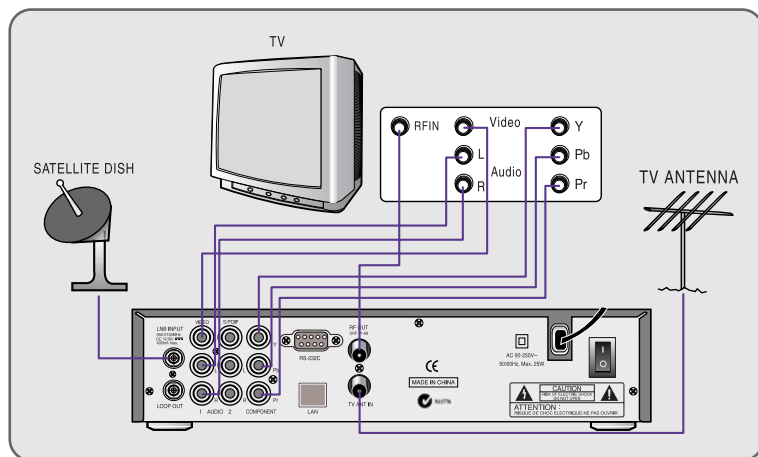
4.3 Remote controller



- 19 RECALL (RED)** : To move to the previous channel. Used for special functions in menu mode.
- 20 SLEEP (GREEN)** : To set the STB off after minutes.
- 21 ZOOM (YELLOW)** : To zoom in the screen picture. Press the ZOOM button and select a screen section, then press the OK button. (You can zoom in by 3 times)
- 22 BLUE** : To display multiple pictures.
- 23 TEXT** : To show the teletext contents if teletext is transmitted. Used for special functions in menu mode.
- 24 SUBTITLE** : To turn closed captions on or off.
- 25 RWD** : Playback in rewind mode.
- 26 ADVANCE** : Go to live channel.
- 27 FWD** : Playback in forward mode.
- 28 REC** : Start recording.
- 29 PLAY** : Play Content.
- 30 STOP** : Stop Playback.
- 31 FILELIST** : To display the filelist.
- 32 TIMESHIFT** : To pause the video. Press again to resume the video.
- 33 SLOW** : Playback in slow mode.

How to Connect

- 1** Connect the TV antenna to TV ANT IN
- 2** Connect the RF-IN of the TV to RF-OUT
- 3** When available, you may instead 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
- 4** When available, you may instead connect the Component Video of your TV to Component Video for best quality: connect the Y, Pb and Pr of your TV to Y, Pb and Pr respectively
- 5** 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  to proceed.

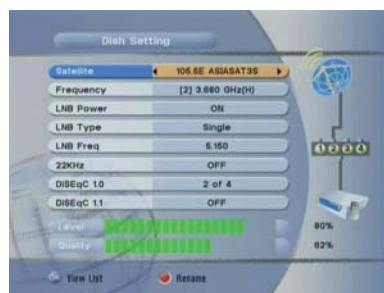


<Figure 6.1.1>

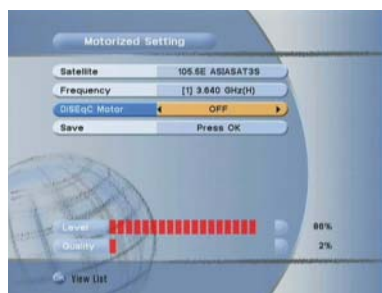
6.1 Getting Started

2) Antenna Setup

- ① Press the **MENU** button to display the main menu.
- ② Use / and / to move in the menu.
- ③ Press on 'Dish Setting'. The following window will appear. <Figure 6.1.2>
If you have a motorized dish, press 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>



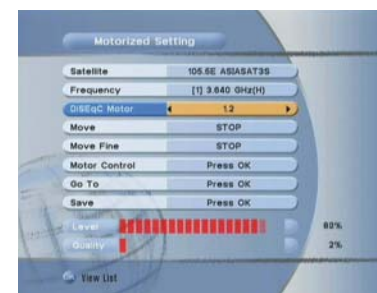
<Figure 6.1.3>

- ④ Select the item that you want to edit, and set its parameters as desired. <Dish Setting>
 - **Frequency** : If the default TP frequency is not appropriate, you can select another TP frequency at which to check for signal.
 - **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>
 - **DiSEqC Motor** : Select DiSEqC protocol among OFF/1.2/USALS as appropriate for your Motor.

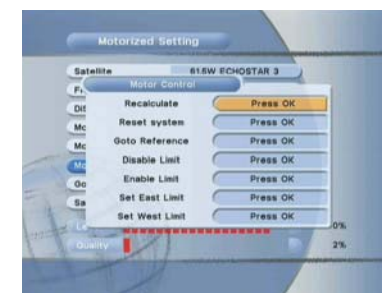
6.1 Getting Started

(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 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 buttons.
- ****Set West Limit** : Edit & Save limit by pressing / or buttons.
- **Go To** : Go to the position of the saved satellite.
- **Save** : Save the current setting of DiSEqC 1.2 system.



<Figure 6.1.4>



<Figure 6.1.5>

6.1 Getting Started

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

- **Sat Degree** : Satellite location.

- **Antenna Position** : Press  . <Figure 6.1.7>

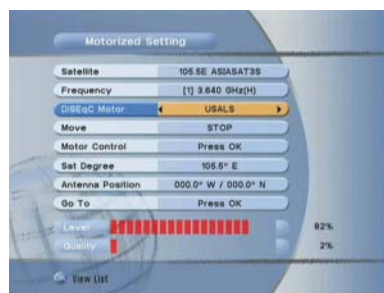
** **Goto Reference** : Move the dish to the reference 0 position.

** **Antenna Longitude** : Your longitude at present.

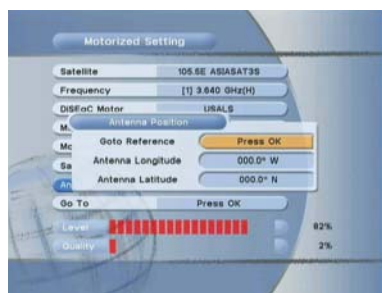
** **Antenna Latitude** : Your latitude at present.

* **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.



6.1 Getting Started

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

- **Search Type** : Select the type of channel search you want by pressing  /  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  under 'SCAN' to scan the selected satellites. <Figure 6.1.9>







<Figure 6.1.8>



<Figure 6.1.9>

6.1 Getting Started


► Blind Scan <Figure 6.1.10>

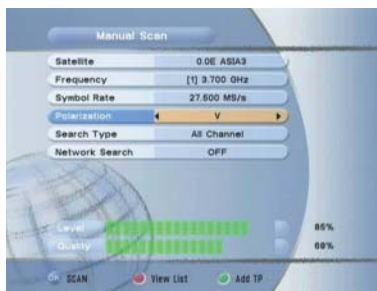
- ① Select the satellites you want to search by pressing the  button on the remote.
- ② Press  ,  /  to set the "Polarization" and "Scan Mode" options.
 - **TP** : Select TP Frequency
 - **Polarization** : Select among All / Vertical / Horizontal
 - **Mode** : Select among All / Free / TV
 - **SCAN** : 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 .



<Figure 6.1.11>

6.1 Getting Started

► Package Identifier (PID) Scan <Figure 6.1.12>

- 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  / . You can search a specific channel of the transponder by setting its PID data (Video, Audio and PCR).






<Figure 6.1.12>

*** Note :** If you cannot access programs after correctly completing a scan procedure, please contact your seller or your installer.

6.1 Getting Started






4) Channel Selection

You can use  /  to navigate between channels until you find the channel you want.

- ▶ If you know the channel number, you can enter it with the **NUMERIC** buttons and wait 2 seconds until the channel is changed.
- ▶ If you know the channel name or transponder or CAS, you can press  to display the channel list <Figure 6.1.13>







<Figure 6.1.13>

- ① In the right side of screen, detailed information about the selected channel will be displayed. (Satellite Name, Frequency(Polar) and Channel Name)
- ② You can use the following buttons to navigate between channels:
 -  /  : Moves one channel up/ down.
 -  /  : Moves one page up / one page down.
 - **RED** : Shows all channels in the current group.
 - **GREEN** : Shows all channels sorted alphabetically.
 - **YELLOW** : Shows all channels sorted by Transponder.
 - **BLUE** : Shows all channels sorted by CAS system.
- ③ Press  when the selection bar is positioned on the desired channel.

6.1 Getting Started

5) Other Functions of the Remote Control

▶ Volume Control

- ① While watching a program, press  or  to control the volume.
- ② You can press the  button to remove the sound of the program: the mute icon will be displayed. Press the  button again to turn the sound back on.

▶ Channel Information

- ① You can press the **INFO** button to display the information banner for a few seconds.
- ② If you then press the **INFO** button again, a detailed banner will be displayed.

▶ TV/ RADIO switching

You can press this key to change from a TV channel to a Radio channel or vice versa.

▶ RECALL(RED)

Press to return to the previous channel.

▶ Audio

Press to adjust the subtitle and/or audio status of the current channel:

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

*** Note : These subtitle and audio parameters are workable only when the desired channel supports these functions.**

▶ TEXT

The Teletext service is a text data service sometimes available from the Service Provider.

▶ TimeShift()

You can press this key to pause the video. Press it again to resume the video.
If the USB device is connected to a receiver, operate TimeShift function.

▶ GROUP

When watching TV or listening to Radio, you can press this button to view the list of satellites and/or favorite channel groups.

Only registered satellites and favorite groups are displayed.

6.1 Getting Started

► Multi Picture Display <Figure 6.1.14>

You can press BLUE button to display multiple pictures; you can choose the number of pictures such as 1X2, 2X2, 2X3 or 3X3.



<Figure 6.1.14>

► ZOOM

You can press YELLOW button to zoom in the video.

- ① Press the PAUSE button and press YELLOW button. You can zoom in sections of the paused picture. <Figure 6.1.15>
- ② While watching a program, press YELLOW button. You can zoom in sections of the image being viewed. <Figure 6.1.16>
- ③ To cancel the freeze status, please release the zoom status.



<Figure 6.1.15>



<Figure 6.1.16>

6.1 Getting Started

► SUBTITLE <Figure 6.1.17>

You can press SUBTITLE button to select the subtitle language of current channel.

► SLEEP <Figure 6.1.18>

You can set the your receiver to turn off after a few minutes. Press GREEN button to set the sleep timer.

- To cancel the sleep timer, please press GREEN button until you set time as "0 min". (Disable, 10, 20, 30, 60, 100, 120 Minutes)



<Figure 6.1.17>



<Figure 6.1.18>

► WIDE <Figure 6.1.19>

You can press  to change the TV aspect ratio.




- 4:3 : Pan-Scan or Letter-Box
- 16:9 : Full-Screen or Pillar-Box

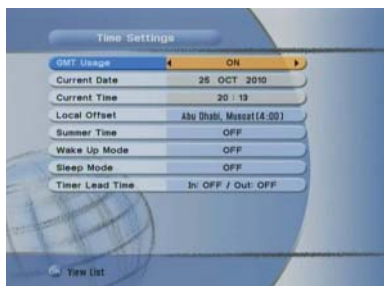


<Figure 6.1.19>

1) Time Settings

This submenu allows you to set your local time, wake up time, wake up channel and sleep time. <Figure 6.2.1>

- **GMT Usage** : Set this ON for the local time to be determined by adjusting the time difference with the GMT (Greenwich Meantime) according to your location.
- **Current Date** : If GMT Usage is OFF, you can modify the date by pressing .
- **Current Time** : If GMT Usage is OFF, you can modify the time using the **NUMERIC** buttons.
- **Local Offset** : If GMT Usage is ON, Local time is GMT time + Local Offset.
- **Summer Time** : Select the period during which Summer Time is in force.
- **Wake Up Mode** : Select the wake up frequency. (Off/Once/Daily/Mon~Fri)
- **Wake Up Time** : Set the wake up time using the **NUMERIC** buttons.
- **Wake Up Channel** : Press  to set the wake up channel.
- **Sleep Mode** : Select the Sleep frequency. (Off/Once/Daily/Mon~Fri)
- **Sleep Time** : Set the sleep time using the **NUMERIC** buttons.
- **Timer Lead Time** : Press  to set the Timer Lead In And Lead Out Time.

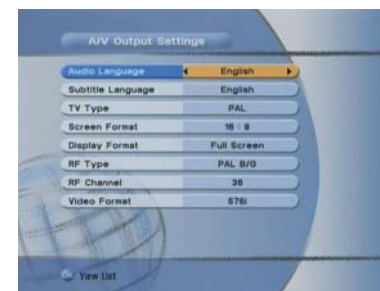


<Figure 6.2.1>

2) A/V Output Settings

This submenu allows you to specify the audio/video output. <Figure 6.2.2>

- **Audio Language** : Set the default audio language when selecting a channel.
- **Subtitle Language** : Set the default subtitle language.
- **Screen Format** : Select the screen format. (16:9 / 4:3)
- **Display Format** : Select the TV aspect ratio (Letter Box/Pan Scan, Full Screen/Pillar Box)
- **RF Type** : This receiver supports PAL B/G, PAL I, PAL D/K among PAL standards.
- **RF Channel** : Set the channel to display the audio and video signal on your TV 21~69. If you select 40, receiver will show channel 40 on your TV.
- **Video Format** : Select the Video format. (1080i, 720p, 576p, 576i)

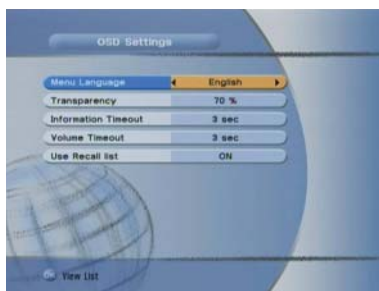


<Figure 6.2.2>

3) OSD Settings

This submenu allows you to set the menu language, OSD transparency and Information and Volume timeouts. <Figure 6.2.3>

- **Menu Language** : Select the desired language for the menu.
- **Transparency** : Set the OSD transparency of the menu. (1% ~ 100%)
- **Information Timeout** : Select the display duration of the information banner. (1, 2, 3, 5 or 10 seconds)
- **Volume Timeout** : Select the display duration of the volume box. (1, 2, 3, 5 or 10 seconds)
- **Use Recall list** : Stores previously viewed channels. If you press the recall key on the RCU it will display the recall list.



<Figure 6.2.3>

4) Security Settings

This submenu allows you to set password options and to lock or unlock access to menus (Note: PIN code and password are the same. The default password is 0000). <Figure 6.2.4>

- **Receiver Lock** : Set ON to require entering a PIN code at powering on.
- **Install Lock** : Set ON to require entering a PIN code to access the installation menu.
- **Channel Lock** : Set ON to require entering a PIN code to access the channels menu.
- **Lock Channel Confirm** : Set ON to require entering a PIN code to access a locked channel.
- **Age Limit** : Set to prevent children or unauthorized people from watching programs. Select among (Free / 8 above / 12 above / 15 above / 18 above). When program information (age limit) is available from broadcaster and this age limit exceeds the selection, a PIN code is required to access the channel/program.
- **Current Password** : To change your password, first enter your current password.
- **New Password** : Enter the new password that you want to set.
- **Verify Password** : Enter the new password again for confirmation.

* **Note** : The default password is '0000'.



<Figure 6.2.4>

6.2 System Setting

5) Database Reset

This submenu allows you to restore the factory set values (useful when encountering problems after changing settings). <Figure 6.2.5>

- **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.



<Figure 6.2.5>

6.2 System Setting

6) IP Setting

If the Network supports DHCP, IP settings can be allocated automatically. If the Network does not support DHCP, the Addresses must be entered manually (Static IP).<Figure 6.2.5>

- **DHCP Usage** : On/Off to receive IP settings automatically
- **IP Address** : Here enter the IP address
- **Subnet Mask** : Here enter Subnet Mask Number from your Network
- **Gateway** : Here enter IP address of Gateway (e.g. router)
- **DNS** : Here Enter IP address of main DNS Server
- **Mac Address** : Mac Address display



<Figure 6.2.5>

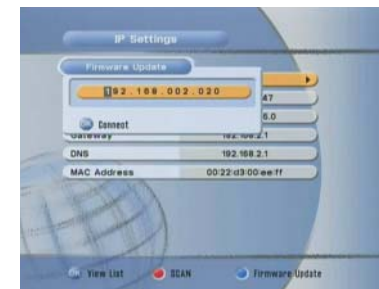
- **Firmware update** : Support download from a LAN.

① BLUE button, input target IP address in the field displayed.

② button to connect after input a target IP.

③ Choose a update software and button for downloading.

*** Note : PC tool must be running before connecting to your PC.**



<Figure 6.2.7>



<Figure 6.2.8>

1) Set Favorites

This submenu allows you to set up favorite groups of channels. You can select **TV** or **Radio** channels in an alternative way by pressing the **TV/RADIO** button. The receiver supports 16 favorite groups.

- ① Press **OK** on 'Set Favorites'. The list of groups will be displayed. <Figure 6.3.1>
- ② Press **Left** / **Right** and **OK** to choose a group. The following menu will be displayed. <Figure 6.3.2>
If you want to change the name of a favorite group, press the **RED** button.
- ③ Press **OK** to add (or remove if previously added) the selected channel to/from the favorite channel group.
- ④ Press the **EXIT** button to return to the previous menu.



<Figure 6.3.1>



<Figure 6.3.2>

2) Edit Channels

This submenu allows you to rename channels and input user PID. You can select **TV** or **Radio** channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

- ① Press **OK** on 'Edit Channels'. The following menu will be displayed. <Figure 6.3.3>
- ② Press **OK** on the channel that you want to edit.
- ③ Press **OK** on 'Edit Name' to rename the channel; the keypad will be displayed.
- ④ Similarly, you can edit the PID data using the **NUMERIC** keys.

*** Note :** The **VIDEO PID**, **AUDIO PID** and **PCR PID** are very important for optimal satellite signal reception. We recommend you get professional advice where available.



<Figure 6.3.3>

6.3 Channels

3) Move Channels

This submenu allows you to move channels.

You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button.

You can choose a channel list group by pressing the **GROUP** button.

- 1 Press **OK** on 'Move Channels'. The following menu will be displayed. <Figure 6.3.4>
- 2 Press **OK** on the channel that you want to move; a 'move' icon will be displayed.
- 3 After pressing **INFO**, use the **←** / **→** / **↑** / **↓** / **NUMERIC** buttons to move the selected channel.
- 4 Press **OK** again to place the channel in the desired position.
- 5 Press the **EXIT** button to return to the previous menu.



<Figure 6.3.4>

6.3 Channels

4) Lock Channels

This submenu allows you to lock channels to control access to them. Once a channel is locked, you will be asked to enter a password whenever you try to watch it. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

*** If you set 'Lock Channel Confirm' (refer to <6.2>security setting) to OFF, you will not be asked to enter a password even if the channel is locked.**



- 1 Press **OK** on 'Lock Channels'. The following menu will be displayed. <Figure 6.3.5>
- 2 Press **OK** on the channel that you want to lock/unlock; the lock icon will be displayed/removed.
- 3 Press the **EXIT** button to return to the previous menu.





<Figure 6.3.5>

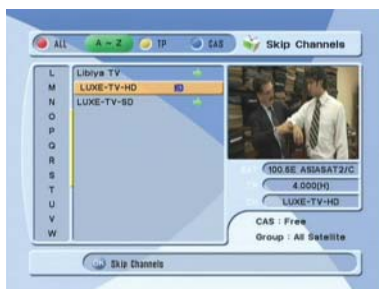
6.3 Channels

5) Skip Channels

This submenu allows you to skip channels. Once a channel is set to be skipped, it will be whenever you navigate channels using  /  in non-menu mode. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

*** Note :** *You can still access a 'skipped' channel if you enter its number using the **NUMERIC** buttons in non-menu mode.*

- 1 Press  on 'Skip Channels'. The following menu will be displayed.<Figure 6.3.6>
- 2 Press  on the channel that you want to skip/un-skip; the skip icon will be displayed / removed.
- 3 Press the **EXIT** button to return to the previous menu.





<Figure 6.3.6>

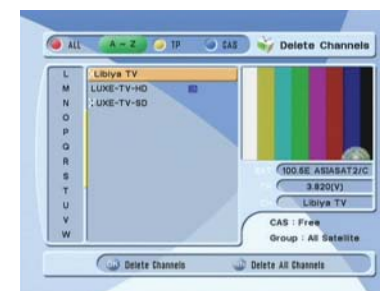
6.3 Channels

6) Delete Channels

This submenu allows you to delete channels. You can select TV or Radio channels in an alternative way by pressing the **TV/RADIO** button. You can choose a channel list group by pressing the **GROUP** button.

*** Note :** *Be careful! If you delete a channel, you will not be able to access it again until you rescan.*




- 1 Press  on 'Delete Channels'. The following menu will be displayed. <Figure 6.3.7>
- 2 Press  on the channel that you want to set/unset for deletion; the delete icon will be displayed/removed.
- 3 Press the **INFO** button to delete all channels in the current list; you will be asked to enter your password.
- 4 Press the **EXIT** button to return to the previous menu and confirm deletion.



<Figure 6.3.7>

7) Add Channels

This submenu allows you to add channels.









- ① Press on 'Add Channels'. The following menu will be displayed. <Figure 6.3.8>
- ② Press  /  to change the parameters.
 - **Frequency** : Select TP Frequency
 - **Channel Name** : Press  to display Keypad pop-up; Edit the channel's 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, AAC, Dolby Digital+(DD+))



<Figure 6.3.8>






1) EPG

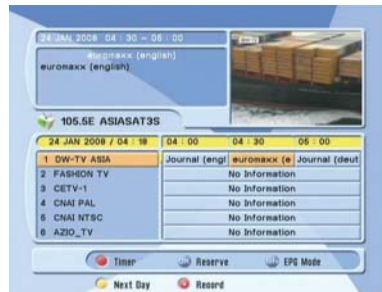
This submenu allows you to access the electronic program guide when available.

- ① Press the **GUIDE** button to display the guide menu. <Figure 6.4.1>
- ② Press  /  to see the previous/next guide.
- ③ Press  /  /  /  to select another channel. <Figure 6.4.1>
- ④ Press  to watch the selected channel and access its EPG data.
 - If you press  in the right side of the screen (Event display list).
 - If the current time EPG is selected, you will return to the previous menu and get signal from the selected channel.
 - If a future time (next) EPG is selected, the selected program will be reserved and the event color will change.
- ⑤ You can select TV or Radio channels by pressing the **TV/RADIO** button
- ⑥ You can choose a channel list group by pressing the **GROUP** button.
- ⑦ You can access the timer menu by pressing the **RED** button. <Figure 6.4.2>

2) Timer

This sub menu allows you to set the on/off time of your receiver.

- ① This submenu allows you to set on/off times of your receiver. To display the timer menu, press the **RED** button while in the guide menu. <Figure 6.4.2>
- ② Press  to select a timer's parameter.
- ③ Press  /  to change the parameter.
 - **Timer No** : Select the timer that you want to modify. (1- 8)
 - **State** : Select the timer frequency. (off/once/daily/Mon~Fri/weekly)
 - **Date** : Press  to display a Calendar pop-up; Select a date
 - **Start Time** : Input the time for your receiver power-on; use the **NUMERIC** buttons
 - **End Time** : Input the time for your receiver power-off; use the **NUMERIC** buttons
 - **Channel** : Press  to display a Channel list pop-up; Select a channel
 - **Record** : To record program. (Off / On, This functions is available when USB device is connected)
 - **Power off** : Select operation of Power-off after you finish recording.



<Figure 6.4.1>



<Figure 6.4.2>

- If you want to record a program in the right side of the screen, you can select a program by using . The selected program will be reserved and the event colour text will change to red. <Figure 6.4.3>.
- You can also see the change in the timer menu. <Figure 6.4.4>



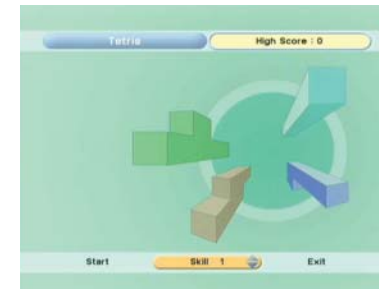
<Figure 6.4.3>



<Figure 6.4.4>

1) Tetris

- 1 Press on 'Tetris'. The following menu will be displayed. <Figure 6.5.1>
- 2 You can choose a skill level using / .
- 3 Press to start the game <Figure 6.5.2>, or press the **EXIT** button to return to the previous menu.
- 4 Press to rotate a block.
- 5 Press / to move a block.
- 6 Press to drop a block.
- 7 You can see the next block in the top-right small window.
- 8 Press the **EXIT** button to quit the game.



<Figure 6.5.1>



<Figure 6.5.2>

2) Sokoban

How to play Sokoban: you have to push the balls to their correct positions. The balls can only be pushed, never pulled, so you have to be careful not to push them into a corner where you can't get them out from. You can only push one ball at a time.

- ① Press **OK** on 'Sokoban'. The following menu will be displayed. <Figure 6.5.3>
- ② You can choose a skill level using **←** / **→**.
- ③ Press **OK** to start the game <Figure 6.5.4>, or press the **EXIT** button to return to the previous menu.
- ④ Press **←** / **→** / **↶** / **↷** to move.
- ⑤ Press the **RED** button to undo the previous move. You can undo only one step.
- ⑥ Press the **GREEN** button to restart the game.
- ⑦ Press the **YELLOW/BLUE** buttons to jump to the previous/ next level. You can jump only between completed levels.
- ⑧ Press the **EXIT** button to quit the game.



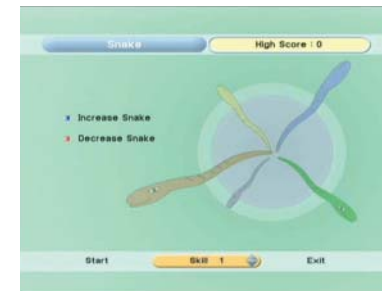
<Figure 6.5.3>



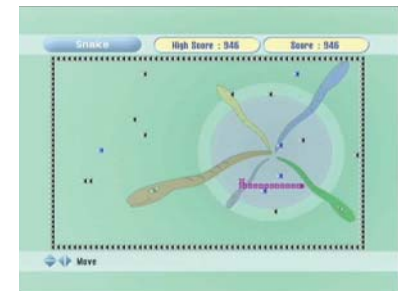
<Figure 6.5.4>

3) Snake

- ① Press **OK** on 'Snake'. The following menu will be displayed. <Figure 6.5.5>
- ② You can choose a skill level using **←** / **→**.
- ③ Press **OK** to start the game <Figure 6.5.6>, or press the **EXIT** button to return to the previous menu.
- ④ Press **←** / **→** / **↶** / **↷** to move.
- ⑤ Pass through the **BLUE** icon to increase your score; the length of the snake increases.
- ⑥ Pass through the **RED** icon to decrease the snake's length.
- ⑦ Avoid the **BLACK** icons. If you hit a **BLACK** icon (block), the game ends.
- ⑧ Press the **EXIT** button to quit the game.



<Figure 6.5.5>



<Figure 6.5.6>

4) Calculator

This submenu allows you to use a calculator on the screen. <Figure 6.5.7>

- You can switch between Hex (Hexadecimal) and Dec (Decimal) basis for arithmetic with the **RED** button of the remote control unit.
- Use the Numerical and the **←** / **→** / **OK** buttons on the remote control unit.



<Figure 6.5.7>

6.6 Storage

This submenu allows you to play various MP3 files, view JPG files or download a new software by connecting your USB flash drive.

1) MP3 menu

- 1 Select the MP3 file you want to play back by using / , in the file list.
<Figure 6.6.1>
- 2 Press the EXIT button to hide the file list. You can then select an option using / , . <Figure 6.6.2>
- 3 You can then change the volume by pressing / .
- 4 Press on **LIST** to display the MP3 file list.
- 5 Press on **INFO** to display information about the selected MP3 file.
 - **FILELIST** : Shows/Hides the MP3 file list
 - **INFO** : Shows information about the MP3 file you selected.
 - **YELLOW** : Choose the Hard disk volume or USB device with USB hub.



<Figure 6.6.1>



<Figure 6.6.2>

6.6 Storage

2) JPG menu

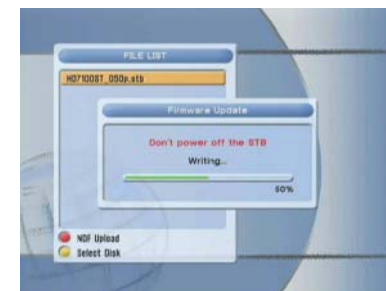
- 1 Press / to select a picture. <Figure 6.6.3>
- 2 Press to show the picture you want to display.
 - **RED** : Sets the time interval between slides.
 - **GREEN** : Selects slide show.
 - **YELLOW** : Choose the Hard disk volume or USB device with USB hub.
 - **FILELIST** : Shows/Hides the JPEG file list.



<Figure 6.6.3>

3) Data Transfer menu



- 1 Select the software you want to download by using / in the list
<Figure 6.6.4>
 - 2 Press to start software downloading
 - **YELLOW** : Choose the Hard disk volume or USB device with USB hub.
 - **FILELIST** : Shows/Hides the file list
- * **Warning** : Please do not switch off your receiver before software downloading is completed.



<Figure 6.6.4>

4) Disk Manager



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

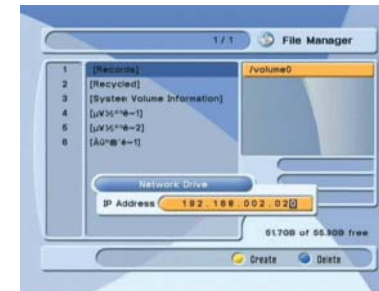
- **Default Disk** : Set the DVR disk.
- **Disk Information** : Choose the Hard disk volume or USB device with USB hub. You can view a information of the USB devices (used size, total size, free size)
- **Check Disk** : Choose the Hard disk volume or USB device with USB hub. You can check the USB devices.
- **Format Disk** : Allows you to format USB devices.
- * **Warning** : All data will be deleted on the disk.
- **Testing USB Speed** : Press  to test USB speed for DVR function.
- **Timeshift Rec Time** : Set the Timeshift Recording Time.(10Min/30Min/60Min)
- **Skip Time** : Press  to set the Skip Time.



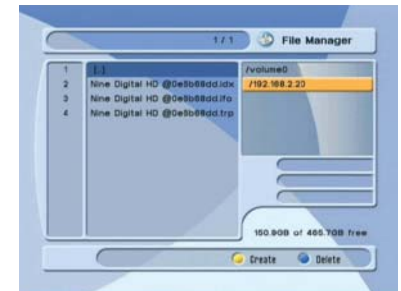
<Figure 6.6.5>

5) File Manager

- ① Press the **YELLOW** button to connect to your PC.
- ② Press  once you have inputed your IP address.
- ③ Press  after selecting the target file.




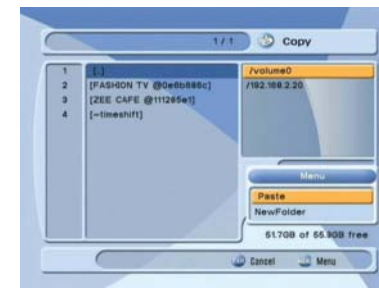
<Figure 6.6.6>



<Figure 6.6.7>

- * **Note** : Follow these instructions prior to connecting your receiver to your PC
- A. Run the PC Tool program before connecting to your PC (STB Daemon exec)
 - B. Select a sharing folder in your PC <Figure 6.6.10>
 - C. Press "OK" then select STB Daemon and the window will be hidden. You can still see the icon on the bottom right of the windows screen <Figure 6.6.11>
 - D. To quit the program, right click on the icon using your PC mouse, then click "EXIT" <Figure 6.6.12>

- ④ Press the right button and press **RED** to select files.
- ⑤ Press  to select Move/Copy/New Folder/Delete/Rename after pressing the "Menu" button
- ⑥ If selecting Move or Copy press the button to move the target to paste.
- ⑦ Press **MENU** to paste to target
- ⑧ Select paste for copying or moving files.



<Figure 6.6.8>



<Figure 6.6.9>

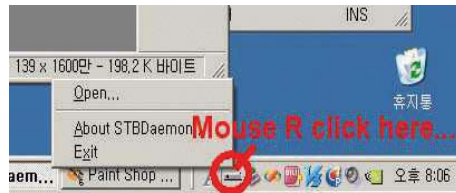
6.6 Storage



<Figure 6.6.10>



<Figure 6.6.11>



<Figure 6.6.12>

6) Timer Manager

- ① Press the after selecting the timer number <Figure 6.6.13>
 - ② Press / to select timer parameters
 - ③ Press / to change parameters
- **Timer No** : choose the desired timer (1-8)
 - **State** : Select timer frequency (off/daily/Mon-Fri/Weekly)
 - **Date** : Press to display a calendar and select a date
 - **Start Time** : Using the NUMERIC buttons input the required start time
 - **End Time** : Using the Numeric buttons input the end time
 - **Channel** : Press to display the channel list and select a channel
 - **File Name** : Press on 'File Name' to rename the file; the keypad will be displayed.
 - **Record** : Set the record mode (ON/OFF)
 - **Power Off** : Select operation of Power Off after finishing recording



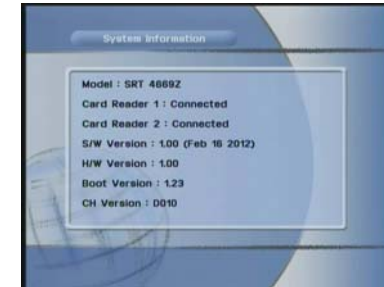
<Figure 6.6.13>

6.7 System Information

You can check the current information about your receiver such as receiver model name, S/W (software) version, H/W (hardware) version, manufacturing date, etc.

<Figure 6.7.1>

*** Note : This information is useful to download new software and/or repair the receiver.**



<Figure 6.7.1>

1) Card Initializing

To Enjoy CONAX CAS7 scrambled channels, you will need a Smart Card from the service provider (program distributor). If you are subscribing to services from more than one service provider, you will need a Smart Card from each one. Since a Smart Card is connected to a single service provider, a limited range of channels will be available via it.




*** Note : Without the Smart Card, you can watch only Free-To-Air programs.**

- ❶ Insert the Smart Card into the receiver's slot designed for it.
- ❷ The message 'Smart Card Initializing' will appear on the screen. <Figure 6.8.1>
- ❸ After the message 'Smart Card Initializing' has disappeared, you will be able to watch the channels offered by the service provider.



<Figure 6.8.1>

2) The Status of the Smart Card

- ❶ You can access detailed information about the Smart Card using the  /  keys in the Main Menu to select 'CA' and pressing . <Figure 6.8.2>
- ❷ Proceed with further instructions displayed on the screen to check more detailed information depending on the Smart Card in use.






*** Note : Further detailed information is not mentioned in this manual since the information depends on the Smart Card in use.**



<Figure 6.8.2>

1) File List

► File Playback

- ① Press  to show the file list. Select the file you want to play back by using  / .
 - ② Press . In the right side of screen, detailed information about the selected file will be displayed. (Recorded Date/Time, Used size, Total Size) <Figure 6.9.1>
- To see a full screen, press  once more. And then the following time-bar will appear. <Figure 6.9.2>




<Figure 6.9.1>







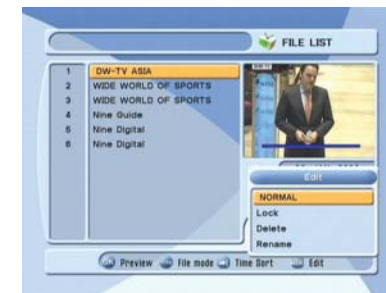
<Figure 6.9.2>

► Edit Menu

You will be asked to enter a password whenever you try to enter it. Press . The pop-up menu for selection will appear <Figure 6.9.3>.

Select the item that you want to edit, and set its parameters as desired

- ① Normal Mode : Press  on the file that you can see the preview of a selected file.
 - ② Lock Mode : Press  on the file that you want to lock/unlock.
 - ③ Delete Mode : Press  on the file that you want to delete.
- **GROUP** : Select between, File Mode ↔ Dir Mode
 - **ADVANCE** : Shows all sorted files. Select between, Sort by name ↔ Sort by time.
- * If you set 'Channel Lock' (refer to <Figure 6.2.4> security setting) to OFF, you will not be asked to enter a password even if the channel is locked.*
- ④ Rename Mode : Press  on the file tha you wish to rename.




<Figure 6.9.3>



2) Trick Mode

You can operate the trick mode while you are playing the recorded files. These functions are available in playback mode or time-shift mode.



► PLAY

This button will display a time- banner. If you want to show the play list while playing the file by using .


► PAUSE

This button will pause the playing file until you play again with  or . <Figure 6.9.4>

► ADVANCE

- If the time-shift mode is enabled, You can press  to jump the live program.
- If the playback mode is enabled, You can press  to stop the current playing file and then skip forward to the live program.

► FWD(Forward)

- When playing the file, you can press  to adjust the playing speed.<Figure 6.9.5>
- The speed will change to x2, x4, x8 and x32.



<Figure 6.9.4>



<Figure 6.9.5>

► RWD(Rewind)

When playing the file, you can press  to adjust the playing speed. <Figure 6.9.6>

The speed will change to x2, x4, x8 and x32.

► Slow(1/2x, 1/4x)

When playing the file, you can press  to adjust the playing speed. <Figure 6.9.7>





<Figure 6.9.6>





<Figure 6.9.7>

► Jump

- You can locate the control position to the desired position by using the  / .
- If you press this key continuously, You can locate the control position to the desired position immediately.

► Skip

- You can skip forward in 15 second increments using the .
- You can skip backward in 15 second increments using the .

*** Note : Jump & Skip functions are accessible when the time bar is displayed.**

► **Bookmark**

To mark a specific place in a file for later retrieval. <Figure 6.9.8>

- **RED** : Press this button and a small red triangle cursor will be placed at that position. If you want to delete the bookmarked position, press a this button again when the small red triangle cursor appears.
- **GREEN** : Press this button and the current position will jump to the next bookmarked position and playback will begin from this point.
- **YELLOW** : Press this button and the current position will jump to the pre-bookmarked position and playback will begin from this point.

* **Note** : *The maximum number of the bookmarks in a file is 20.*



<Figure 6.9.8>

3) **Instant Recording**

- ❶ You can record a current channel by using . If you then press , a time-banner will be displayed. <Figure 6.9.9>
- ❷ Press once more. The following picture shows that you can select the item when recording the current channel. <Figure 6.9.10>
 - **Channel** : Displays the current channel.
 - **Name** : Displays the current channel program name.
 - **Duration** : You can change the duration of recording time by using the / . Current recorded time will appear.
 - **Stop** : To stop the recording, Press .




<Figure 6.9.9>






<Figure 6.9.10>

- * **Note** : 1. *Do not remove the USB device while recording a program.*
 2. *You can't change to another channel while recording a program.*

4) Timer Recording

This function is available when USB device is connected. You can choose a channel to record the Program Guide menu by using . (Refer to 6.4 Electric Program Guide, 2)Timer)

5) Time Shift

- ① If you want to pause and resume live TV channel, press  button. The default time of Time-Shift is 30 min in your STB. <Figure 6.9.11>
- ② If you want to resume live TV channel, press  button. <Figure 6.9.12>
- ③ The trick-mode operations are provided. If you want to jump to live channel, please press .



<Figure 6.9.11>



<Figure 6.9.12>

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 RF cable(s), SCART 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	Connector	F-type, IEC 169-24, female
LNB/Tuner input	Frequency range	950MHz ~ 2150MHz
	Signal level	-65dBm ~ -25dBm
	LNB supply	13V/18V, max. 400mA
	LNB switch control	(22±2)KHz, (0.6±0.2)V
	DiSEqC	Ver 1.0/1.2/USALS Compatible
	FFC decode	DVB-S : 1/2, 2/3, 3/4, 5/6 and 7/8
		DVB-S2 : 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10(QPSK) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10(8PSK)
Demodulator	Front end	DVB-S/S2 QPSK, 8PSK
	Symbol rate	DVB-S : 1~45Msps
		DVB-S2 : 10~30Msps(QPSK) 10~30Msps(8PSK)
	SCPC and MCPC Capable	
	Spectral inversion	Auto conversion
System resource	Processor	STI5211
	DDR SDRAM	128Mbyte
	FLASH	8Mbyte
	EEPROM	256Kbit
Video decoder	MPEG 2	MPEG-2, MPEG-4
	Data Rate	Max. 15Mbit/s
	Resolution	1920 X 1080i, 1280 X 720P, 720 X 576P/i
	Video format	4:3 : Letterbox, 4:3 Pan & Scan, 16:9 : Full-Screen or Pillar-Box
Teletext	DVB compliant	
MPEG Audio	Decoding	MPEG/ Musicam layer I & II
	Type	Mono, Stereo, Joint Stereo
	Sampling rates	32, 44.1 and 48 KHz
Serial data interface	Connector	9pin D-sub male, Max 115K bps
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. 25W
	Supply voltage	AC 90 ~ 250V
	Supply frequency	50Hz ~ 60Hz
	Type	SMPS (Switching Mode Power Supply)
	Protection	Separate internal fuse (The input shall have lightning protection)
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
	LAN	RJ-45
RF-Modulator	RF connector	75Ω, IEC 169-2, Male / Female
	Frequency	470MHz ~ 860MHz
	Output channel	CH 21 ~ 69 for the demodulator
	TV standard	PAL B / G / I / D / K selectable by menu
	Preset channel	CH 36 (or TBD) Software changeable by menu

Physical Specification	Size (W X H X D)	260 X 54 X 232(mm)
	Weight (Net)	ca 1,800g
	Operating temperature	0℃ ~ +45℃
	Storage temperature	-10℃ ~ +70℃



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.

Warranty Information

This product comes with a 12 month manufacturer's warranty from the date of purchase.

This unit has a 30 day replacement warranty for manufacturing faults.

Within this period please return the faulty product with all its supplied accessories to either the place of purchase or STRONG Australia accompanied by the original purchase receipt.

After this 30 day period the unit must be returned to STRONG Australia for testing, and if deemed faulty, will be repaired or replaced at the discretion of STRONG Australia Pty Ltd.

The faulty product can either be sent to STRONG Australia directly or via your place of purchase for evaluation.

STRONG Australia will cover any costs incurred in returning the faulty product for evaluation should the product be deemed as genuinely faulty. If the product is found to have no fault, the costs incurred in delivering product to and from STRONG Australia will be incurred by the customer.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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