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DiSEqC is a trademark of EUTELSAT

Important Safety Instructions

- ① Read these instructions.
- ② Keep these instructions.
- ③ Heed all warnings.
- ④ Follow all instructions.
- ⑤ Do not use this apparatus near water.
- ⑥ Clean only with dry cloth.
- ⑦ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- ⑧ Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus(including amplifiers) that produce heat.
- ⑨ Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- ⑩ Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- ⑪ Only use attachments/accessories specified by the manufacturer.
- ⑫ Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- ⑬ Unplug this apparatus during lightning storms or when unused for long periods of time.
- ⑭ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Caution - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

WARNING : To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Precautions



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

WARNING : To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the separation between the equipment and receiver.
- ▶ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ▶ Consult the dealer or an experienced radio/TV technician for help."

Introduction

1.1 Overview

This satellite receiver is designed for using digital free-to-air channel reception. Enjoy the rich choice of more than 10,000 different channels, broadcasting a large range of culture, sports, cinema, news, events, etc. This receiver is a technical masterpiece, assembled with the highest qualified electronic parts.

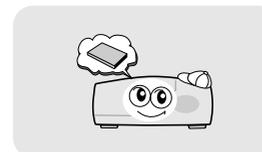
1.2 Main Features

- ▶ MPEG-II digital & fully DVB compliant
- ▶ On-Screen Display (OSD) with a 256-colors color resolution
- ▶ DiSEqC control version 1.0, 1.1, 1.2 and USALS compatible
- ▶ 16 renameable favorite channel groups
- ▶ Powerful channel control by Favorites, Lock, Skip, Move and Delete
- ▶ Channel sorting by Alphabet, Transponder and Conditional Access System (CAS)
- ▶ Multilingual language OSD & menu : English, Chinese, Italian, Turkish, Arabic, Parsi, German, French, Russian, Spanish, Portuguese, Dutch.
- ▶ Extended Electronic Program Guide (EPG) and program reservation through EPG
- ▶ Last channel memory function
- ▶ Total of 10,000 programmable channels
- ▶ Advanced 'Channel List' menu
- ▶ Multi-satellite search
- ▶ Games with stereo sound
- ▶ Software & channels database upgrades via RS-232C: PC to STB/STB to STB
- ▶ Parental Lock/ Installation Lock/Receiver Lock/Channel Lock/Lock Channel Confirm.
- ▶ Digital audio output [S/PDIF]
- ▶ Multi-picture display
- ▶ Zoom capabilities
- ▶ Advanced Blind Search Function
- ▶ Color Adjustment Function
- ▶ USB Interface
- ▶ Component output(Y/Pb/Pr)
- ▶ S-VHS video output.

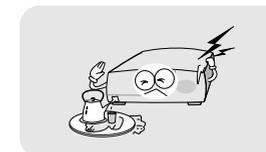
Safety/Precautions

2.1 Safety

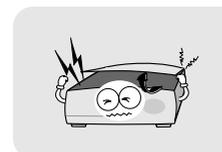
Be sure to read this user's manual before starting the operation of the unit.



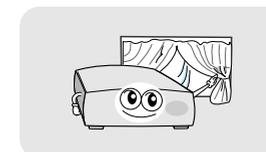
Do not touch the power cord with wet hands as it may cause electric shock.



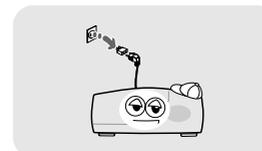
Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.



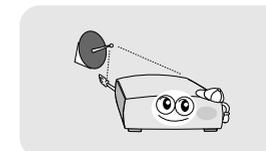
Place the unit in a well ventilated and no-heat environment.



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.



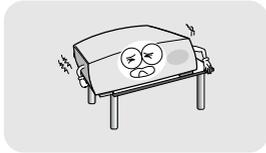
A professional installation is required. If reception is interrupted, contact your local service centre.



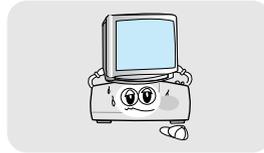
2.2 Precautions

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.

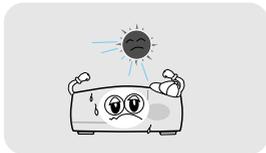


Do not put water holding items such as vases on the unit.

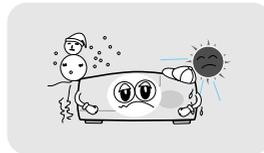


Do not install the unit:

- 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:

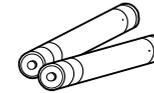
User's manual : 1



Remote control : 1



Batteries (AAA type) : 2



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

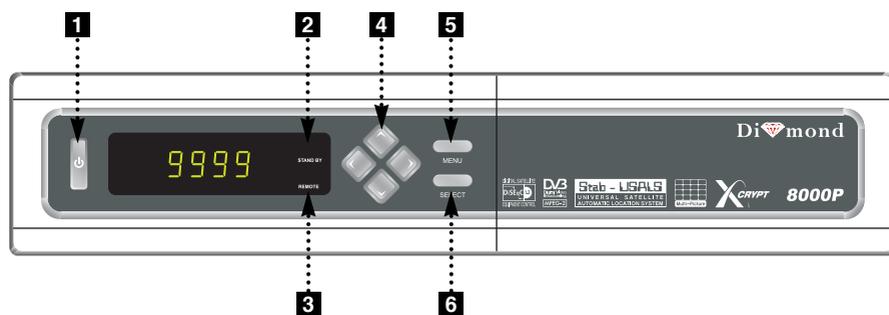
3.2 The Satellite dish

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.

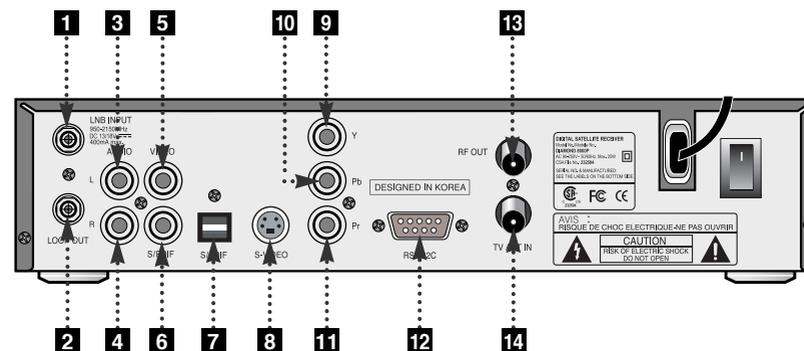
Controls/Functions

4.1 Front Panel



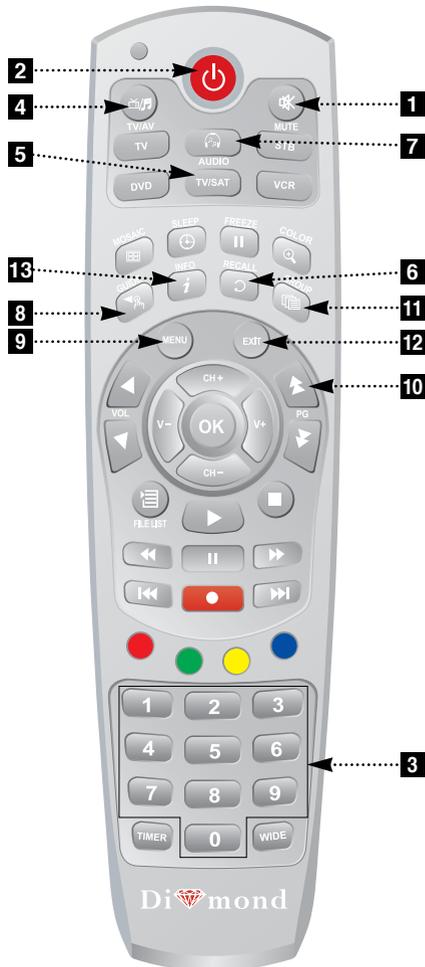
- 1 Power** : To switch the receiver in "standby" mode or in power on mode.
- 2 Standby/Power on Indication light** : Flashing red on "Stand By" mode and no light on "Power On" mode.
- 3 Indication light** : While pressing RCU key, this light will be flashing at the same time.
- 4 CURSOR** : To move the selection, change channels, increase/decrease volume, choose settings, etc.
- 5 MENU** : To display main menu on screen.
- 6 SELECT** : To choose current selection, confirm settings, etc.

4.2 Rear Panel



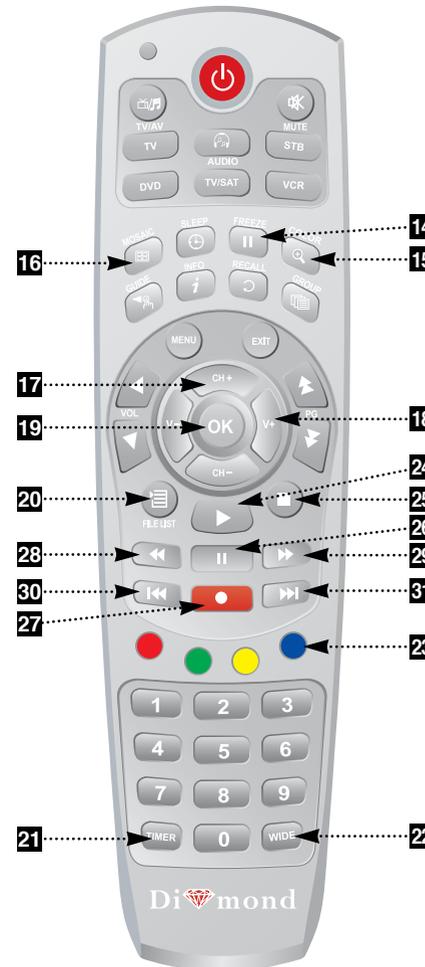
No	Name	Connector	Connector
1	LNB INPUT	IEC 169-24 FEMALE	IF input from LNB to digital tuner
2	LOOP OUT	IEC 169-24 FEMALE	IF loop-through output from digital tuner
3	AUDIO L	RCA cinch	Left audio output
4	AUDIO R	RCA cinch	Right audio output
5	VIDEO	RCA cinch	Composite video output
6	S/PDIF	RCA cinch	Digital audio output
7	S/PDIF	Fiber Optic	Digital audio output(Optic).
8	S-VIDEO	MINI-DIN	S-VHS video 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	IEC 169-24 MALE	Output to TV
14	TV ANT IN	IEC 169-24 FEMALE	Input from terrestrial antenna

4.3 Remote controller



- 1 MUTE** : To turn the sound on/off.
- 2 POWER** : To turn the receiver on/off.
- 3 Numeric Keys(0~9)** : To control the numerical operation and channel numbers directly.
- 4 TV/RADIO** : To switch between TV and Radio.
- 5 TV/SAT** : To toggle the TV output source between the satellite input the UHF/VHF antenna input.
- 6 RECALL** : To move to the previous channel.
- 7 AUDIO** : To show the multi-language audio track, stereo/ mono mode, closed caption information.
- 8 GUIDE (EPG:Electronic Program Guide)** : To show the TV/Radio program guide.
- 9 MENU** : To enter or exit the main menu.
- 10 Double arrow UP/DOWN** : To move to the next or previous page.
- 11 GROUP** : To display channel groups (satellites or favorite groups).
- 12 EXIT** : To exit from the present menu and move to the previous menu.
- 13 INFO** : To show the information of the current program. If you press once more, detail information will be shown.

4.3 Remote controller

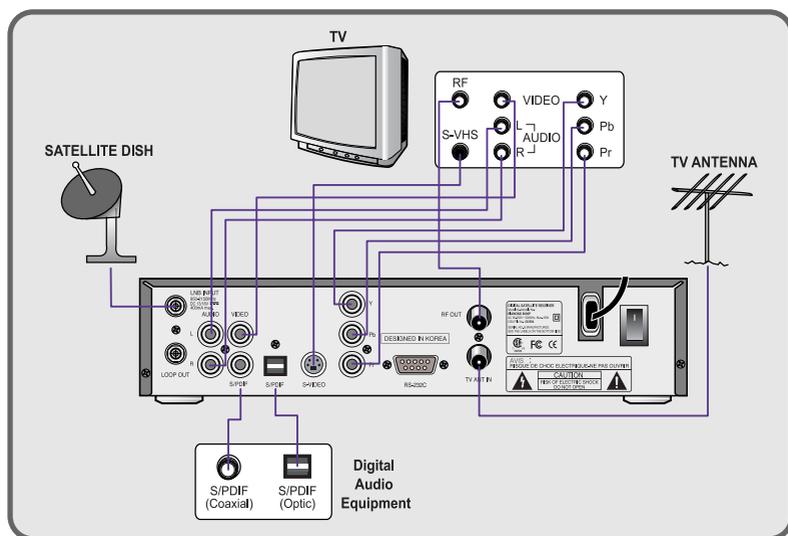


- 14 FREEZE** : To pause the video. Press once more to resume the video.
- 15 COLOR** : To control the brightness, contrast and color of a picture.
- 16 MOSAIC** : To show the multiple picture.
- 17 Up & Down** : To change channels in non-menu mode and move the cursor up/down in menu mode.
- 18 Left & Right** : To change the volume level in non-menu mode and change setting in menu mode.
- 19 OK** : To show the Channel List in non-menu mode and select an item or confirm in menu mode.
- 20 FILE LIST** : To show the File List of the USB device.
- 21 TIMER** : To enter the Timer Manager menu.
- 22 WIDE** : Wide : To select a TV aspect ratio with Pan Scan or Letter-Box(4:3) (Full screen or Pillar box(16:9)).
- 23 Color Buttons (Red, Green, Yellow, Blue)** : To use special functions in the menus.
- 24 ▶** : To playback.
- 25 ■** : To stop playback.
- 26 ||** : To pause playback.
- 27 ●** : To start recording.
- 28 ◀◀** : To rewind.
- 29 ▶▶** : To forward.
- 30 ◀◀** : To play previous content.
- 31 ▶▶** : To play next content.

How to Connect

5.1 When Connecting IRD to TV with RF, AV connectors

- 1 Connect the TV antenna to TV ANT IN
- 2 Connect the RF-IN of TV to RF-OUT
- 3 Connect the Video and Audio of TV to the Video and Audio. Connect Red and White connector to Audio R and Audio L, and Yellow into Video port respectively
- 4 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) Installation Wizard

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 the **OK** to proceed.

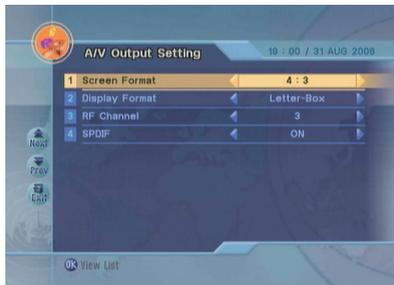


<Figure 6-1-1>

2) A/V Output Setting

This sub menu allows you to set audio/video output setting. <Figure 6-1-2>

- Screen Format : TV aspect 4:3 / 16:9
- Display Format : Scaling Format Pan Scan/Letter-Box/Full Screen/Pillar-Box.
- RF Channel : Sets the channel to display the audio and video signal on your TV(3~4)
If you select 3, receiver will be displayed at channel 3 on your TV.
- SPDIF : Set this ON to enable digital audio output.

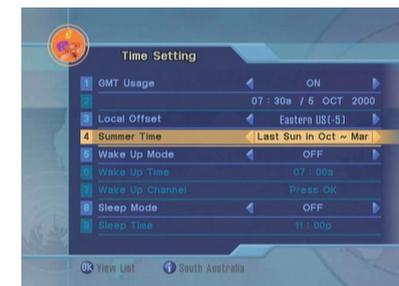


<Figure 6-1-2>

3) Time Setting

This sub menu allows you to set your local time, wake up time, wake up channel and sleep time. <Figure 6-1-3>

- **GMT Usage** : If you set ON, local time is determined by adjusting the differences from GMT (Greenwich Meantime) according to your location.
- **Current Date** : If GMT Usage ON, this date is determined by GMT. If GMT Usage OFF, you can modify this by pressing the  button. If you set OFF, receiver doesn't refer to GMT. Local time is determined by adjusting current date and current time.
- **Current Time** : If GMT Usage ON, this time is determined by GMT. If GMT Usage OFF, you can modify this by pressing the NUMERIC button.
- **Local Offset** : If GMT Usage ON, Local time is GMT time + Local Offset.
- **Summer Time** : you can set the summer time mode (Off/Last Sun in Oct~Mar/First Sun in Oct~Mar/Mar~Oct)
- **Wake Up Mode** : You can set the cycle of the wake up mode (Off/Once/Daily)
- **Wake Up Time** : You can set wake up time by pressing the NUMERIC button on the remote.
- **Wake Up Channel** : You can set wake up channel by pressing the  button on the remote.
- **Sleep Mode** : You can set the cycle of the sleep mode (Off/Once/Daily)
- **Sleep Time** : You can set sleep time by pressing the NUMERIC button on the remote



<Figure 6-1-3>

4) Dish Setup

- ❶ Press the MENU button to display the main menu.
 - ❷ Use / and / to move in the menu.
 - ❸ Press on 'Dish Setting'. The following window will appear. <Figure 6-1-4>
- * **Note** : Enter a 4-Digit password if need arise. The default password is '0000'.



<Figure 6-1-4>



<Figure 6-1-5>

- ❹ Select the item that you want to edit, and set its parameters as desired. <Dish Setting>
 - **Satellite** : Select any satellite by pressing / buttons.
 - **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 Universal/OCS/OCS-DP/Legacy Twin LNB1/ Legacy Twin LNB2/ Legacy Quad LNB1/ Legacy Quad LNB2/Single.
 - **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 / 1.1** : Select DiSEqC protocol among OFF/1.0/1.1 as appropriate for your configuration. <Figure 6-1-5>
 - **DiSEqC Motor** : Select DiSEqC protocol among OFF/1.2/USALS as appropriate for your Motor. <Figure 6-1-6>
- ❺ **Auto Scan** : Press Green button the remote to begin Auto Scan.

(When the DiSEqC Motor parameter is set as 1.2)



<Figure 6-1-6>

- **Motor Step** : Select Motor Step
- **Move** : Move the dish position to west/east by pressing / buttons.
- **Go To** : Go to the position of the saved satellite.
- **Motor Control** : Control motor by press button of the remote.
- ** **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.
- ** **Set West Limit** : Edit & Save west limit by pressing / or buttons.
- ** **Set East Limit** : Edit & Save east limit by pressing / or buttons.
- ** **Enable Limit** : Enable the saved east and west limit.
- ** **Disable Limit** : Disable east and west limit.
- ** **Save** : Save the current setting of DiSEqC 1.2 system.

6.1 Getting Started

(When the DiSEqC Motor parameter is set as USALS)

- **Move** : Move the dish position to west/east by pressing / buttons.
- **Motor Control** : Control motor by press button of the remote.
- ** **Goto Reference** : Goto reference by pressing button.
- ** **Set West Limit** : Edit & Save west limit by pressing / or buttons.
- ** **Set East Limit** : Edit & Save east limit by pressing / or buttons.
- ** **Enable Limit** : Enable the saved east and west limit.
- ** **Disable Limit** : Disable Limit by pressing button.
- ** **Save** : Save the current Setting of USALS system.
- **Sat Degree** : Displays the current degree of the selected satellite. Edit degree by pressing / buttons and numeric buttons.
- **Position Setting** : Select position setting by pressing button.
- ** **Goto Reference** : Move the dish to the 0 position.
- ** **Antenna Longitude** : Edit antenna longitude by pressing / buttons and numeric buttons.
- ** **Antenna Latitude** : Edit antenna latitude by pressing / buttons and numeric buttons.
- **Go To** : Save the current setting of USALS System.

6.1 Getting Started

5) Channel Search

► Auto Scan <Figure 6-1-7>

- ① To select more than one satellite, press the button when the selection bar is positioned on the satellite.
- ② Press on the names of the satellites that you want to scan under 'Satellite List'. Press the EXIT button to close the 'Satellite List'.
- ③ Press / and set the 'Search Type' and 'Network Search' parameters.
 - **Search Type** : Decide for which channels to search (All channels/ Free channels only/ TV channels only).
 - **Network Search** : Set ON to find more transponders (frequencies) through a Network Information Table (NIT) scan. That is, when the broadcaster is sending a NIT through a given transponder, the receiver will also scan for transponders listed in the NIT and not otherwise recognized. (this can happen when a transponder is new)
- ④ Press **RED button** under 'SCAN' to scan the selected satellites. <Figure 6-1-8>



<Figure 6-1-7>



<Figure 6-1-8>

6.1 Getting Started

► Blind Scan <Figure 6-1-9>

- 1 Select the satellite you want to search by pressing / buttons on the remote. You can select more satellites by pressing OK button on the remote.
- 2 Select the options by pressing / , / buttons on the remote.
 - Symbol Rate : Select FAST / DETAIL / 7.5M Over / 7.5M Under / 3.7M Under
 - Polarization : Select ALL / Vertical / Horizontal
 - Search Type : Select ALL / FREE / TV
- 3 Press RED button on the remote to begin blind scan of all of the satellite in the satellite list. <Figure 6-1-10>



<Figure 6-1-9>



<Figure 6-1-10>

6.1 Getting Started

► Manual Scan <Figure 6-1-11>

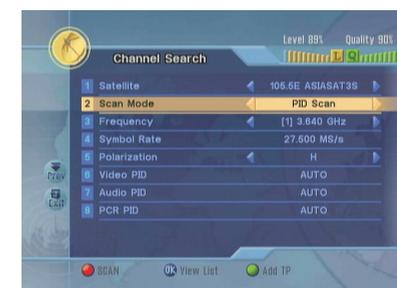
- 1 Select a transponder.
- 2 To change a transponder's information (Frequency, Symbol Rate), use the **NUMERIC** buttons.
- 3 To add a new transponder, press the **GREEN** button.
- 4 To delete a transponder, press the **YELLOW** button with the cursor next to the Frequency parameter.
- 5 To search a transponder, set its different parameters and **RED** button.

► 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 6-1-11>



<Figure 6-1-12>

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

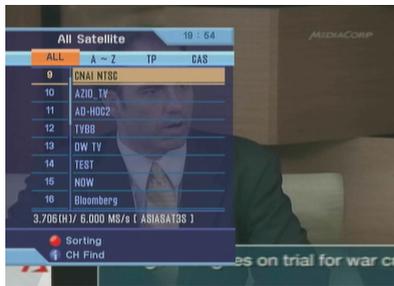
(2) To View Program

1) 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>

- ❶ Detailed information about the selected channel will be displayed. (Satellite Name, Frequency(Polar) and Channel Name)
- ❷ You can use the following buttons to navigate between channels:
 -  /  : Moves one channel up/ down.
 -  /  : Moves one page up / page down.
 - **RED** : Press RED button on the remote to use channel sorting.
- ** **ALL** : Shows all channels in the current group.
- ** **A~Z** : Shows all channels sorted alphabetically.
- ** **TP** : Shows all channels sorted by Transponder.
- ** **CAS** : Shows all channels sorted by CAS system.
- ❸ Press  when the selection bar is positioned on the desired channel.

(3) Electronic Program Guide

1) EPG

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

- ❶ Press the **EPG** button to display the guide menu. <Figure 6-1-14>
- ❷ Press  /  to see the previous/next guide.
- ❸ Press  / ,  /  to select another channel. <Figure 6-1-14>
- ❹ 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.
- ❺ You can select TV or Radio channels by pressing the **TV/RADIO** button
- ❻ You can choose a channel list group by pressing the **GROUP** button.
- ❼ You can access the timer menu by pressing the **RED** button. <Figure 6-1-15>

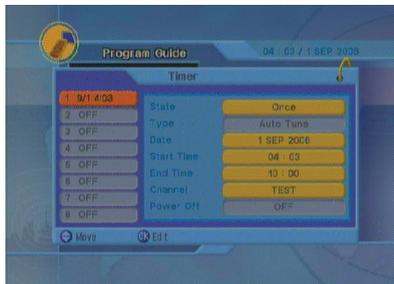


<Figure 6-1-14>

2) Timer

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

- ❶ 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 6-1-15>
- ❷ Press  /  to select a timer's parameter.
- ❸ 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/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



<Figure 6-1-15>

(4) Other Functions of Remote Control

▶ Volume Control

- ❶ While watching a program, press  /  control the volume.
- ❷ You can press the **MUTE** button to remove the sound of the program: the mute icon will be displayed. Press the **MUTE** button again to turn the sound back on.

▶ Channel Information

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

▶ TV/ SAT switching

You can press TV/SAT to select the source of the signal to receive:

- **TV Mode** : Signal from TV ANT INPUT will be out. (Front will display 'TV')
- **SAT Mode** : Signal from Satellite will be out. (Front will display the channel number)

▶ TV/ RADIO switching

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

▶ RECALL

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, Low/Medium/High
- **Close Caption** : Select between, On/Off

6.1 Getting Started

▶ PAUSE

You can press this key to pause the video. Press it again to resume the video. When video is paused, you can zoom in sections of it.

- 1 Select a section using  /  /  / .
- 2 Press to zoom in. Press again to zoom out.

▶ 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.

▶ Multi Picture Display <Figure 6-1-16>

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



<Figure 6-1-16>

6.2 System Setting

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>

- See <Figure 6-1-3> for detailed description.

2) Timer Manager

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 6-2-1>
- 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/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



<Figure 6-2-1>

3) OSD Setting

This submenu allows you to set the menu language, OSD transparency and Information and Volume timeouts. <Figure 6-2-2>

- **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)



<Figure 6-2-2>

4) Parental Control

This submenu allows you to set password options and to lock or unlock access to menus

*** Note : PIN code and password are the same). <Figure 6-2-3>**

- **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.
 - **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 6-2-3>

6.2 System Setting

5) Language Setting

This submenu allows you to specify the audio/video output <Figure 6-2-4>

- **Menu Language** : Set the default Menu language.
- **Audio Language** : Set the default audio language when selecting a channel.
- **Subtitle Language** : Set the default subtitle language.



<Figure 6-2-4>

6) A/V Output Setting

This sub menu allows you to set audio/video output setting.
See <Figure 6-1-2> for detailed description.

6.3 Channel Manager

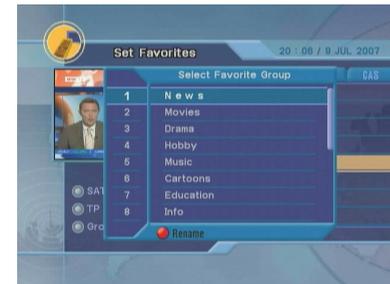
1) Set Favorites

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 on 'Set Favorites'. The list of groups will be displayed. <Figure 6-3-1>
- 2 Press and 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 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) 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.

- ❶ Press  on 'Lock Channels'. The following menu will be displayed. <Figure 6-3-3>
- ❷ Press  on the channel that you want to lock/unlock; the lock icon will be displayed/removed.
- ❸ Press the **EXIT** button to return to the previous menu.



<Figure 6-3-3>

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.

- ❶ Press  on 'Move Channels'. The following menu will be displayed. <Figure 6-3-4>
- ❷ Press  on the channel that you want to move; a 'move' icon will be displayed.
- ❸ Use the  / ,  /  **NUMERIC** buttons to move the selected channel.
- ❹ Press  again to place the channel.
- ❺ Press the **EXIT** button to return to the previous menu.



<Figure 6-3-4>

4) 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 6-3-5>
- 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 6-3-5>

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>

6.4 Installation

1) Dish Setting

Select the item that you want to edit, and set its parameters as desired. <Dish Setting>
See <Figure 6-1-4> for detailed description.

2) Channel Search

Through this function, the receiver searches for all the available channels and saves them in Memory. Chose Auto Scan to search using transponders (frequencies) in memory, or chose Blind Scan to look for new satellite/transponders.
See <Figure 6-1-8> for detailed description.

3) Data Transfer

This submenu allows you to transfer the software from a receiver to another receiver. You can select and transfer Firmware/ Channel Data/ Games. <Figure 6-4-1>

- **Firmware** : Transfer the firmware of a receiver to another receiver.
- **Channel Data** : Transfer the channel data of a receiver to another receiver.



<Figure 6-4-1>

6.4 Installation

4) Database Reset

This submenu allows you to restore the factory set values (useful when encountering problems after changing settings). <Figure 6-4-2>

- **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.

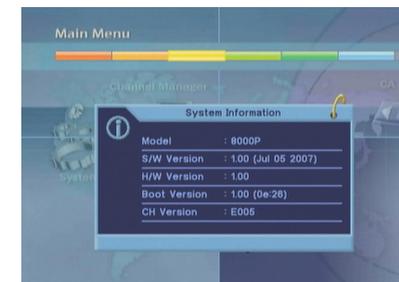


<Figure 6-4-2>

5) 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 6-4-3>

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



<Figure 6-4-3>

1) Calendar

This submenu allows you to use a calendar on the screen <Figure 6-5-1>



<Figure 6-5-1>

2) Calculator

This submenu allows you to use a calculator on the screen. <Figure 6-5-2>

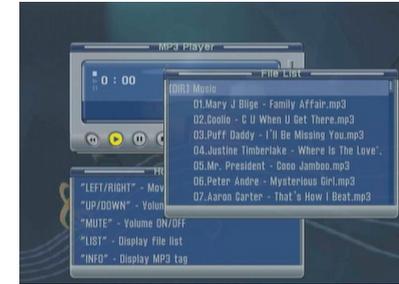
- You can switch between Hex (Hexadecimal) and Dec (Decimal) basis for arithmetic with the **RED** button of the remote control unit.
- Use the Numerical and the / / buttons on the remote control unit.



<Figure 6-5-2>

3) MP3 menu

- 1 Select the MP3 file you want to play back by using / , in the file list.
<Figure 6-5-3>



<Figure 6-5-3>

- 2 Press the EXIT button to hide the file list. You can then select an option using / , .<Figure 6-5-4>
- 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.
 - **GROUP** : Shows the MP3 file list
 - **INFO** : Shows information about the MP3 file you selected.



<Figure 6-5-4>

4) JPG menu

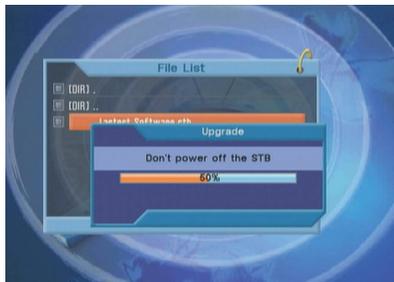
- 1 Press  /  to select a picture. <Figure 6-5-5>
- 2 Press  to show the picture you want to display.
 - **RED** : Shows/ Hides the JPG file list.
 - **GREEN** : Selects slide show.
 - **YELLOW** : Sets the time interval between slides.



<Figure 6-5-5>

5) Data Transfer menu

- 1 Select the software you want to download by using  /  in the list <Figure 6-5-6>
- 2 Press  to start software downloading
 - Please do not switch off your receiver before software downloading is complete.



<Figure 6-5-6>

1) Tetris

- 1 Press  on 'Tetris'. The following menu will be displayed. <Figure 6-6-1>
- 2 You can choose a skill level using  / .
- 3 Press  to start the game <Figure 6-6-2>, 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 6-6-1>



<Figure 6-6-2>

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  on 'Sokoban'. The following menu will be displayed. <Figure 6-6-3>
- 2 You can choose a skill level using  / .
- 3 Press  to start the game <Figure 6-6-4>, 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 6-6-3>



<Figure 6-6-4>

3) Snake

- 1 Press on 'Snake'. The following menu will be displayed. <Figure 6-6-5>
- 2 You can choose a skill level using / .
- 3 Press to start the game <Figure 6-6-6>, or press the **EXIT** button to return to the previous menu.
- 4 Press / , / to move.
- 5 Pass through the **GREEN** 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 6-6-5>



<Figure 6-6-6>

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.**

- 1 Insert the Smart Card into the receiver's slot designed for it.
- 2 The message 'Smart Card Initializing' will appear on the screen. <Figure 6-7-1>
- 3 After the message 'Smart Card Initializing' has disappeared, you will be able to watch the channels offered by the service provider.



<Figure 6-7-1>

2) The Status of the Smart Card

- ① You can access detailed information about the Smart Card using the  /  keys in the Main Menu to select 'CA' and pressing . <Figure 6-7-2>
- ② 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 6-7-2>

Trouble Shooting

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
LED on front panel does not light.	AC power cord is not connected.	Make sure that power cord is connected properly into the power socket. Make sure power switch is on.
No Picture or sound	The video/audio output of the receiver with TV is connected.	Make sure that video/audio cable is connected to the TV.
	The aerial is not connected to the receiver.	Make sure that the aerial is connected properly to the receiver.
	Menu setting is not done properly.	Make sure that menu setting is done properly on each menu. If you are not sure about proper menu setting, please contact your local dealer.
Black-and-white screen	Your TV mode is different from broadcasting mode.	Use TV of same mode. Use the NITSC/PAL converter connected to the receiver and TV.
The remote controller is not working.	Battery exhausted. Remote controller is incorrectly aimed.	Change the batteries of remote control. Aim the remote control at the Receiver correctly.

Specifications

LNB/Tuner input	Connector	IEC 169-24, female
	Frequency range	950MHz ~ 2150MHz
	Signal level	-65dBm ~ -25dBm
	LNB supply	DC13/18V, max 400mA
	LNB switch control	22KHz
	DiSEqC	Ver 1.0/1.1/1.2/USALS Compatible
Demodulator	Front end	QPSK
	Symbol rate	2Msps ~ 45Msps
	SCPC and MCPC Capable	
	Spectral inversion	Auto conversion
System resource	Processor	32bit processor (150MHz)
	SDRAM	32Mbyte
	FLASH	2Mbyte
	EEPROM	32Kbit
Video decoder	MPEG 2	Main Profile @Main Level
	Data Rate	up to 15M bits/s
	Resolution	720 X 576, 720 X 480
	Video format	NTSC
	Aspec Ratio	4:3,16:9
Teletext	DVB compliant	
MPEG Audio	MPEG 1 layer 1 &2	
	Type	Mono, Dual 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 150mA

Power supply	Power consumption	max 25W
	Supply voltage	90V ~ 250V
	Supply frequency	50Hz ~ 60Hz
Rear Panel connectors	Video	1 X RCA cinch
	Audio L/R	2 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
	Terrestrial ant input	IEC 169 - 24
	RF modulator output	IEC 169 - 24
	S-VIDEO	Mini-DIN
	Digital Audio	Fiber Optic 1 X RCA cinch

RF modulator	Connector	IEC 169-24, Female
	Frequency	CH 3 : 61.25MHz
		CH 4 : 67.25MHz
	Output channel	CH3 / CH4
	TV Standard	NTSC-M
Physical Specification	Size (W X H X D)	260 X 54 X 232(mm)
	Weight (Net)	1.8 Kg