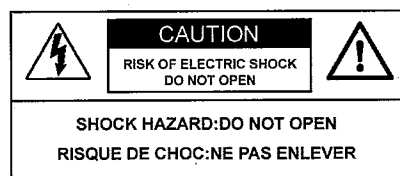# Instruction Markings:

CONSISTS OF TWO PARTS

General:

This marking appears on the rear panel of the receiver, painted prominently in contrasting color to the background.

PART I

This marking consists of two Graphical Symbols and warning message. The detailed specifications are as follows:

```
⚡   CAUTION      ⚠
    RISK OF ELECTRIC SHOCK
        DO NOT OPEN

    SHOCK HAZARD:DO NOT OPEN
    RISQUE DE CHOC:NE PAS ENLEVER
```

CAUTION: To reduce the risk of electric shock, don't remove cover (or back). Equipment service and maintenance should be undertaken only by trained personnel.

PART II

Each graphical symbol with an explanation of its meaning.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk to persons.

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

Table of Contents

1.General Information

The STB digital satellite receiver allows you to view a variety of satellite programs. This user's guide covers the installation of the STB and the necessary steps to operate various features. It also explains special features available only in this STB in detail, and will allow you to take full advantage of these features.

1.1 Main Features

- Fully MPEG2, DVB compliant
- Digital Audio with AC-3 support by SPDIF（Optional）
- PIG (Picture In Graphic) support DiSEqC1.2 positioner for multi-satellites (63 satellites)
- C/Ku band control for each antenna
- User Friendly and easy-to-use menu system
- Various channel editing functions (favorite, moving, locking, renaming, deleting and sorting)
- User programmable various satellite & transponder information
- Automatic search for newly added transponder (Network Auto Search)
- Stores up to 4000 channels
- Easy and fast software upgrade through RS-232 port
- Timer function, automatically turns On/Off by setting function
- Automatic reserved channel moving system
- Electronic Program Guide (EPG)
- OSD Teletext (DVB ETS 300 706) and Subtitle function support
- VBI support
- Antenna positioning help feature
- Multi video output – CVBS, RGB
- Provides various switch types, LNB types and NTSC/PAL monitor type
- SCPC/MCPC receivable from C/Ku band satellite
- Multi LNB controlled by DiSEqC 1.2 and 22KHz, 0/12 volt switching
- 256 color On-Screen-Display
- Automatic PAL/NTSC conversion
- Automatic last channel saving

1.2 For Your Safety

- Allow clear space around the STB for sufficient ventilation
- Do not cover the STB or place it on a unit that emits heat
- Use a soft cloth and a mild solution of washing liquid to clean the casing
- Do not connect or modify cables when the STB is plugged in
- Do not remove the cover
- Do not allow the unit to be exposed to extreme heat, cold or humid conditions
- Never allow liquids, spray or other materials to come into contact with the inside of the model.

1.3 Unpacking

Unpack the STB and check to make sure that all of the following items are included in the packaging.

- 1 x Remote Control Unit (RCU)
- 1 x User's Guide
- 1 x Digital Satellite Receiver

1.4 General Operation of STB

Throughout this manual you will notice that the everyday operation of your STB is based on a series of user friendly on screen display and menus. These menus will help you get the most from your STB receiver, guiding you through installation, channel organizing, viewing and many other functions.

All functions can be carried out using the buttons on the RCU, and some of the functions can also be carried out using the buttons on the front panel.

If at any time when using the menus you want to return to the normal TV mode, press the TV/AV button.

Please be aware that new software may change the functionality of the receiver.

Should you experience any difficulties with the operation of your unit, please consult the relevant section of this manual, including the Problem Shooting, or alternatively call your dealer or a customer service adviser.

1.5 Front Panel
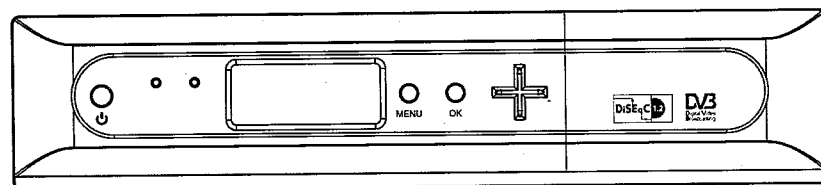
KEY	FUNCTION
MENU	Shows the main menu and command box on the screen.
OK	Execute the selected item in the menu.
⏻	Turns on and off the power of the receiver.
CH	When watching, changing to the previous and next channel, or moves to the next higher or lower item in the menu.
VOL	When watching a channel, adjust the volume or move to the left or right item in the menu.

1.6 Rear Panel
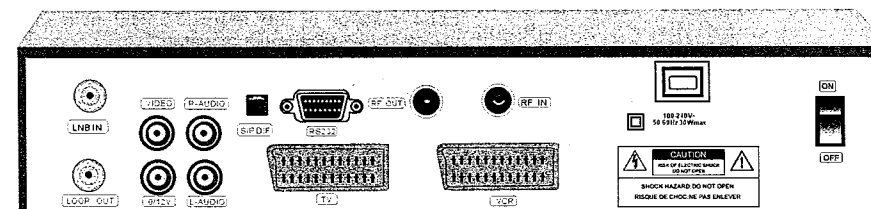
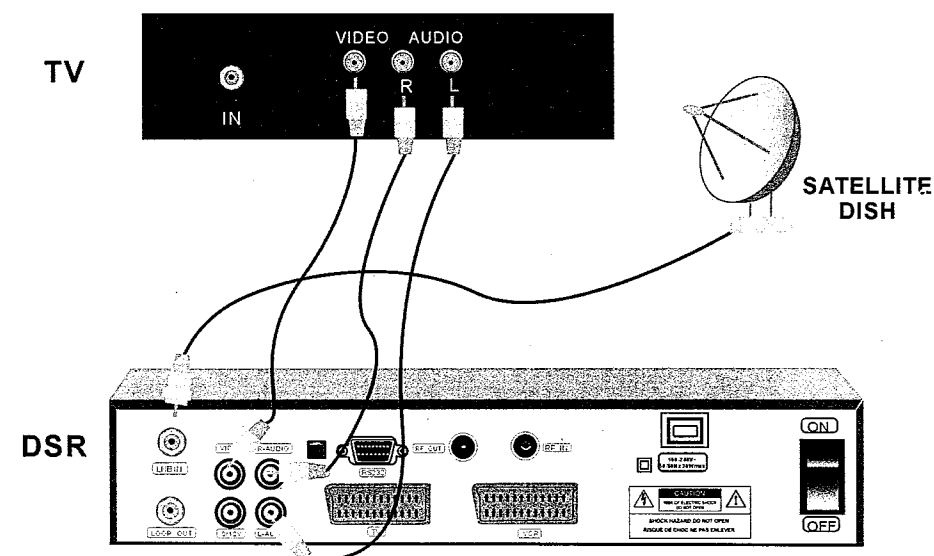| CONNECTOR	FUNCTION
LOOP OUT	Connect to another receiver (IF loop through output from digital tuner)
0/12V	Connect to an external 0/12V switch
R/L AUDIO	Connect to TV or audio tuner
TV	Connect to TV using scart cable
VCR	Connect to VCR using scart cable
LNB	Connect to satellite antenna (IF input from LNB to digital tuner)
VIDEO	Connect to the TV using RCA jack (CVBS output to TV)
S/P DIF	Connect to TV for digital audio output
RS232	Connect to a PC for software upgrade
RF OUT	UHF RF output to TV set's antenna in
RF IN	Signal input from local CATV network or outdoor TV antenna
ON/OFF	Main power switch

1.7 RCU
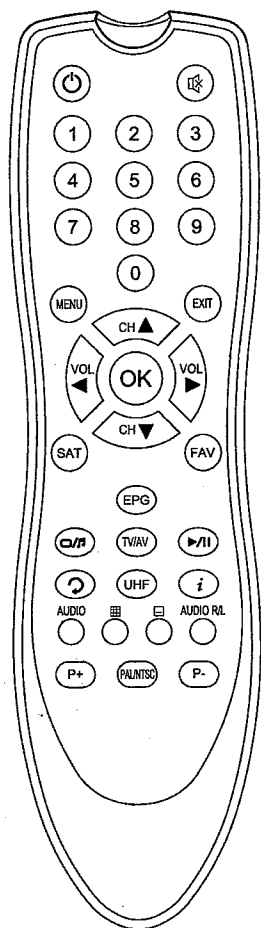
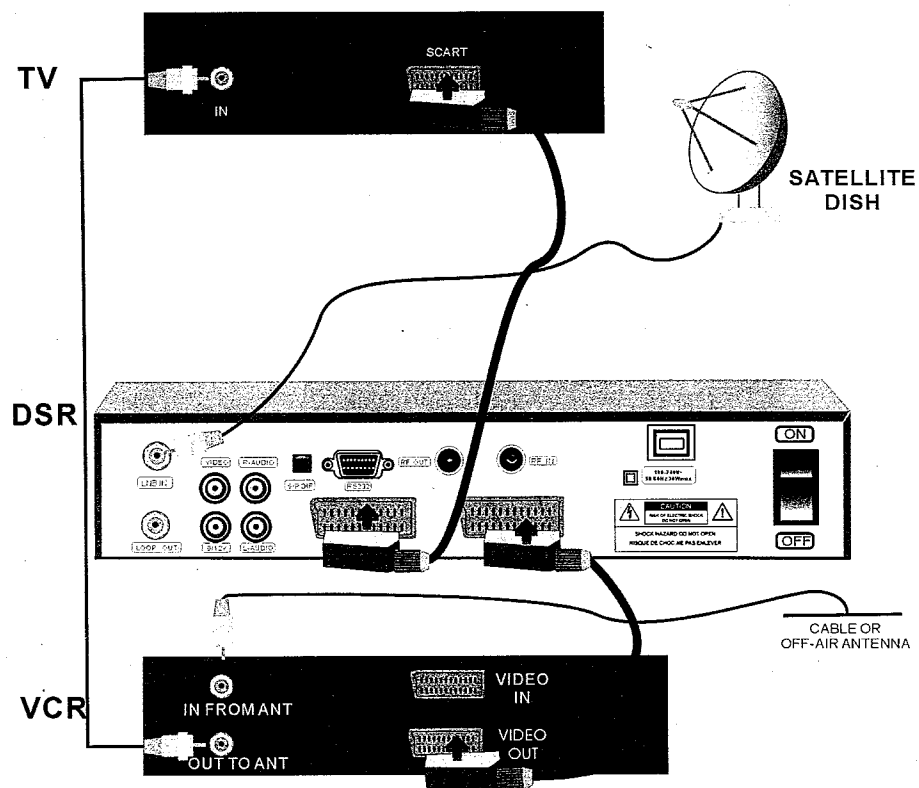| KEY	FUNCTION
◎	Turns power ON/OFF of the DSR
🔇	When watching a channel, mutes the sound
0-9	Enter number of the required menu item or select a channel number to watch
MENU	Press this key one time to run menu on screen, and call command box
EXIT	Return to the previous menu on the menu screen or escape from the item
VOL / CH	Move cursor up/down/left/right
OK	Executes the selected item in the menu screen, or enters the desired value in any input mode
SAT	Display the satellite list of searched channels
FAV	Display the favorite channel list
EPG	Calls up the EPG (Electronic Program Guide)
⊙/♫	Switch between TV and Radio mode
TV/AV	Switch between TV or AV mode
▶/❙❙	Pause/Play A/V
RECALL	Switch back to previous channel
UHF	Switches to UHF tuning mode
INFO	Shows information of the current channel
AUDIO	When watching a channel, switches the audio languages
⊞	16-Pictures-Preview
▢	Switches to teletext or subtitle mode
AUDIO R/L	Switches among left audio/right audio/stereo
P+/P-	Press to moves up/down a page
PAL/NTSC	Switches between PAL and NTSC

2. Installation of STB

This section explains the installation of the STB. Refer to the manuals supplied with the equipment for the installation of outdoor equipment such as the dish antenna. When adding new equipment, be sure to refer to the related parts of the manual for the installation.
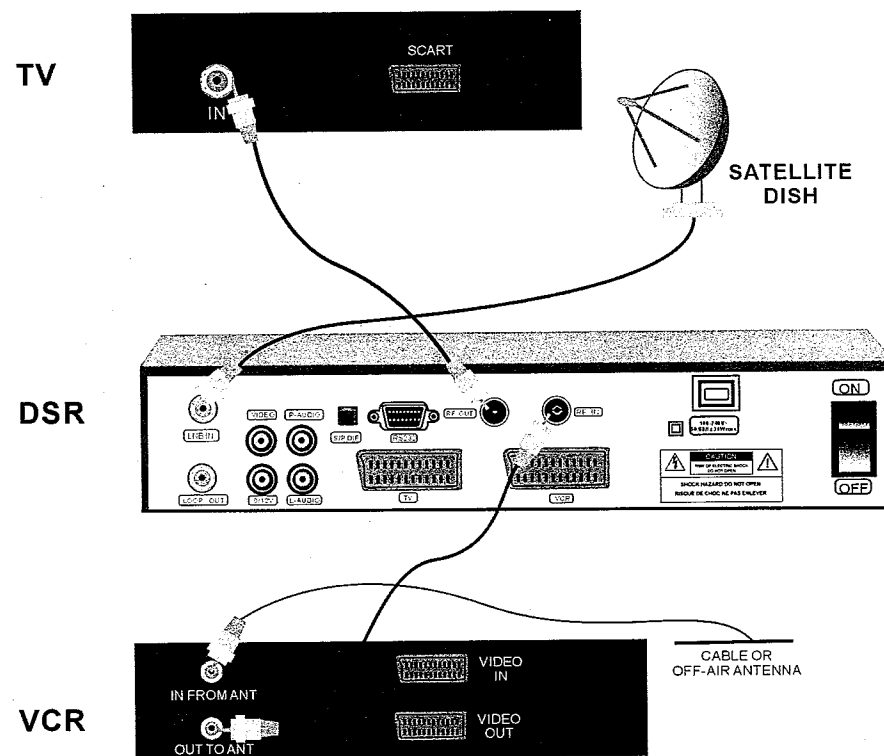
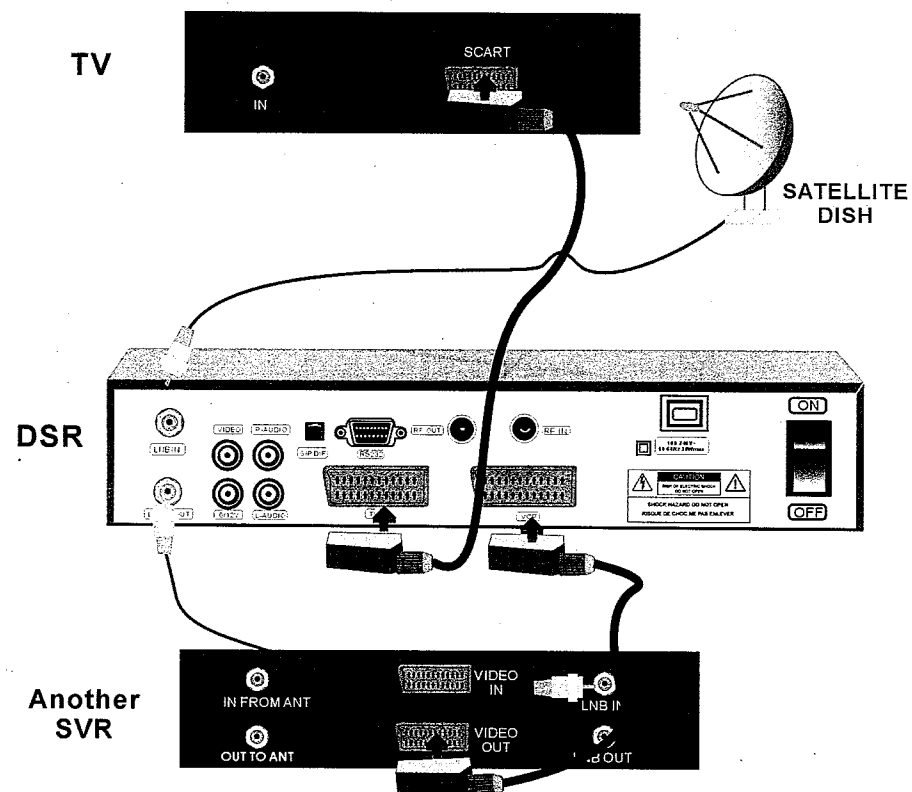### 2.1 Connecting to TV using RCA Support

2.2 Connecting to TV/VCR using SCART Support

TV

DSR

VCR

SCART

IN

SATELLITE
DISH

VIDEO
IN

IN FROM ANT

VIDEO
OUT

OUT TO ANT

CABLE OR
OFF-AIR ANTENNA

2.3 Connecting to TV using RF Support

TV

DSR

VCR

SCART

IN

SATELLITE
DISH

VIDEO
IN

IN FROM ANT

VIDEO
OUT

OUT TO ANT

CABLE OR
OFF-AIR ANTENNA

2.4 Connecting to another SVR

TV

SCART

IN

SATELLITE DISH

DSR

VIDEO P.AUDIO

S/P D.F   RS-232

RF OUT   RF IN

ON
OFF

CAUTION

SHOCK HAZARD DO NOT OPEN
RISQUE DE CHOC NE PAS ENLEVER

Another SVR

IN FROM ANT
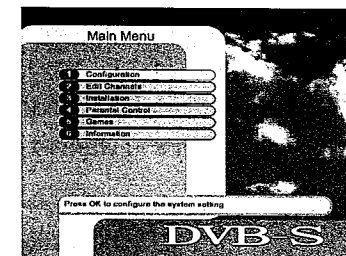
VIDEO IN

LNB IN

OUT TO ANT

VIDEO OUT

.d OUT

3. Menu Information

Press "Menu" button on RCU, enter main menu:

This menu consists of 5 menu options as shown below.

✧ Configuration

✧ Edit channels

✧ Installation

✧ Parental control

✧ Information

During the installation the **OK** key confirms a selection and ◄► key shows the Drop Down List Box. You can also use the numeric keys on the RCU to enter a numeric value for watching TV.
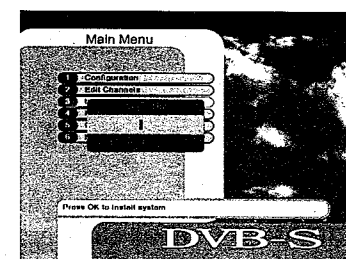
Use the ▲▼ keys to move up or down from one line to another line. Use the ◄► keys to move the cursor up or down in the sub-menu.

To escape the menu system at anytime, press **EXIT** key on the RCU.

4. Installation

This menu consists of 3 sub-menus as shown below. (default password "0000")

✧ Program Satellites

✧ Reset

✧ Firmware Transfer

## 4.1 Program SATELLITES

1) Satellite : Select first satellite you want.
2) Longitude : Choose SAT Longitude
3) LNB FREQ1 : Choose 1st Frequency
4) LNB FREQ2 : Choose 2nd Frequency
5) LNB POWER : Choose LNB power supply
6) LNB 22KHZ: You can select the switches with which you want to configure the antenna.
7) DISEQC SWITCH: You can select the switches with which you want to configure the antenna.
8) DISEQC MINI: You can select the switches with which you want to configure the antenna.
9) POSITIONER:
10) 0/12 Volt: You can select the switches with which you want to configure the antenna.
11) PROGRAM TYPE: Chosse different porgram type which you want to search
12) TRANSPONDER: choose transponders
13) SEARCH: choose search type from Search TP, Search NIT, or Search SAT;

● POSITIONER

1) TRANSPONDER: choose Transponder
2) GOTO REF: Move Antenna to reference position
3) MOVE: move eastwards or westwards
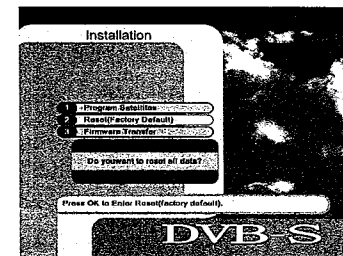4) SET LIMIT: set positioner east limit or west limit
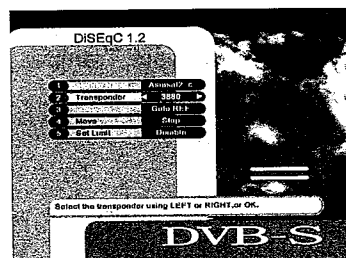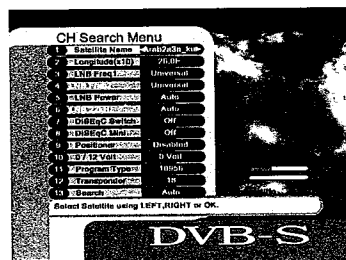
4.2 RESET(FACTORY DEFAULT):

All personal settings will be eliminated only factory presetting remains.

4.3 FIRMWARE TRANSFER:

Upgrade from receiver to receiver

5. CONFIGURATION

This menu consists of 5 sub-menus as shown below

5.1 VIDEO/AUDIO SETTING:

5.1.1 AUDIO OUTPUT: choose type of audio output
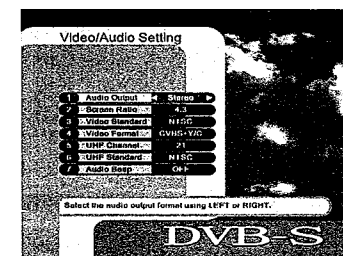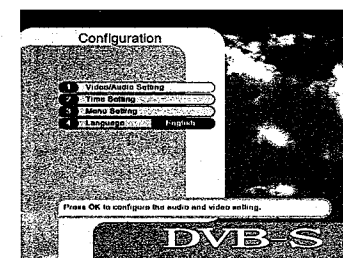
5.1.2 SCREEN RATIO: Choose between 4/3,16/9

5.1.3 VIDEO STANDARD: Choose video output standard from PAL, NTSC or AUTO

5.1.4 VIDEO FORMAT: choose video format from CVBS+YC, CVBS+RGB

5.1.5 UHF CHANNEL: Choose RF output channel from Ch21 to Ch69

5.1.6 UHF STANDARD: Choose RF output format from PAL-I, PAL-G, PAL-K, NTSC.

5.1.7 AUDIO BEEP: Button sound Select

5.2 TIME SETTING

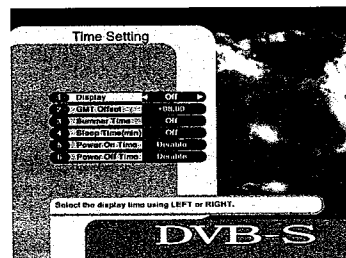5.2.1 DISPLAY: time display

5.2.2 GMT OFFSET: time zone setting

5.2.3 SUMMER TIME : choose summer time

5.2.4 SLEEP TIME: set time to make receiver Sleep
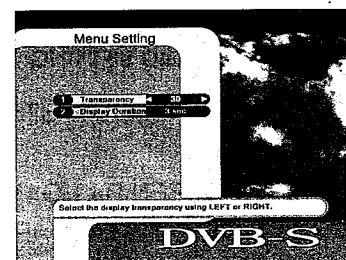
5.2.5 POWR ON TIME: set time for auto power on

5.2.6 POWER OFF TIME: set time for auto power off.
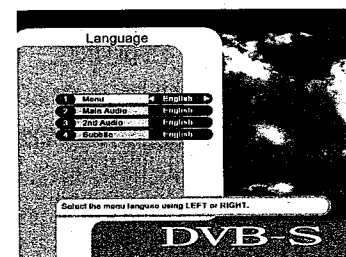
5.3 MEUN SETTING

5.3.1 TRANSPARENCY: adjust OSD transparency

5.3.2 DISPLAY DURATION: Adjust Info banner display time.

5.4 LANGUAGE

5.5 INPUT CODE

6. Edit channels

This menu consists of 2 sub-menus as shown below

6.1 EDIT TV CHANNELS

6.1.1 Move
In the EDIT TV CHANNELS page, press OK key on the RCU.
Select a channel by pressing OK key and move the cursor to the location where you want to move the selected channel and press OK key. Then, you will find that the selected channel has moved to the desired location and channel the number has changed accordingly.
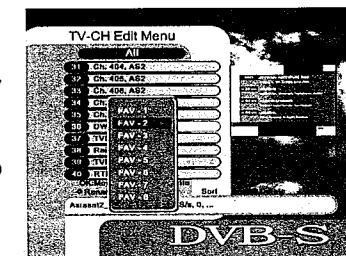Check whether the channel number has changed on the channel list.
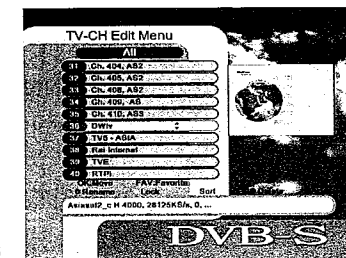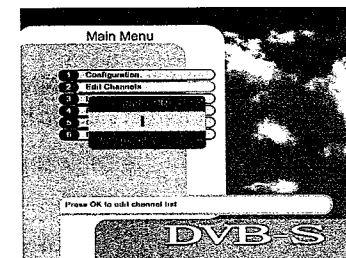
6.1.2.Fav
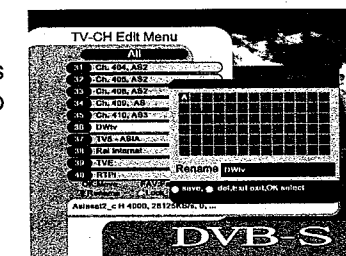
In the EDIT TV CHANNELS page, pressFAV key on the RCU.

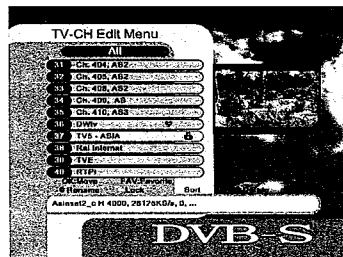Select a channel by pressing FAV KEY to selected Favorite group

6.1.3 Rename

In the EDIT TV CHANNELS page, press RENAME key (red color key) on the RCU to rename channels

6.1.4 Lock

In the EDIT TV CHANNELS page, press LOCK key (GREEN color key) on the RCU to lock or unlock

6.1.5 Sort

In the EDIT TV CHANNELS page, press SORT key (YELLOW color key) on the RCU to sort channel.
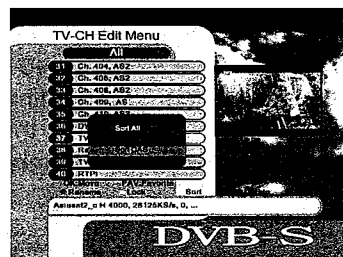
6.1.6 Delete

In the EDIT TV CHANNELS page, press DELETE key (BLUE color key) on the RCU delete channels

6.2 EDIT RADIO CHANNELS

EDIT RADIO CHANNELS page is same with EDIT TV CHANNELS page .

7.PARENTAL CONTROL

This function allows you to lock the channel with a password in order to prevent children from accessing the channel.

You can also protect your installed data and information using the Install Lock.
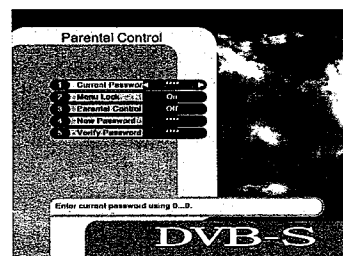
● **How to change the Password**

7.1 Enter the current password.
7.2 Select ON of MENU Lock
7.3 Select ON of Parental Lock.
7.4 Enter new password
7.5 Confirm your new password entering new password again

8.GAMES

Two games preset in receiver TETRIS,PUSH BOX

9. Information

In the Main Page, select **Information** and press **OK** key on the RCU to enter the sub menu, In this menu you can view the following receiver information, such as product name, SW version, HW version and so on

10. Technical Specification

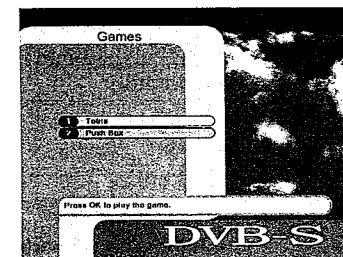| TRANSMISSION STANDARDS	
DVB, MPEG-2	
INPUT/ DEMODULATION	
Connector Type	2 X F Type, 3/8-32UNEF-2A (1 input/1 loop through)
Input Frequency	950 to 2150 MHz
Signal Input level	-65 to – 25 dBm
Band Switch control	22 KHz
LNB Supply	13.0 + 0.5 V / 18V + 0.7 V, max 400 mA
Demodulation Type	QPSK / FEC Coding (DVB prETS 300 421)
Symbol Rate	2 < Rs < 45 Mbaud (SCPC/MCPC)
TV SCART	
Video output	CVBS/ 75 Ω unbalanced
RGB bandwidth	5MHz
Fast blanking	0V to 3V
Function switch	0V to 12V 　　0V - television broadcast reproduction 　　6V - 16:9 aspect ratio image (AV Mode) 　　12V - 4:3 aspect ratio image (AV Mode)
Audio output	"Left, Right"/ 600 Ω unbalanced
Level	1.0V rms ± 2dB into 10k Ω
VCR SCART	
Video output	CVBS/75 Ω unbalanced/5MHz
Video input	CVBS/75 Ω unbalanced/5MHz
Function switch	0V to 12V 　　0V - No VCR playback 　　10 - 12 V – VCR playback
Audio output	"Left, Right"/600 Ω unbalanced
Level	1.0V rms±2dB into 10k Ω
Audio input	"Left, Right"/10k Ω unbalanced
Level	1.0V rms±2dB into 10k Ω
DIGITAL AUDIO （reserved）	
Connector Type	1 X RCA
Output	S/PDIF encoded with AC-3 (Optional)
Sampling Frequency	32, 44.1 or 48 KHz

AUDIO/ VIDEO PROCESSING	
Audio Decompression	MPEG-1 layer I and II / Musicam
Audio Outputs	Stereo Channel/Dual Mono/Joint Stereo/ Mono
Video Decompression	MPEG-2 Main Profile @ Main Levels With Letter
Video buffer	64 Mbits of SDRAM is provided
Data rate	up to 15Mbits/s (Max. burst rate: 228 Mbits/s)
Video output	PAL-25 frame @720 x 576 NTSC-30 frame @720 x 480
Video format	4:3, 16:9
DATA SERVICE PORT	
Connector	9-pin D-sub female
Data protocol	RS232C interface. The DVB-DSR is seen as the Data Communication Equipment (DCE) and the PC (or other terminal) is seen as the Data Terminal Equipment (DTE).
Data rate	Maximum of 625K bits/s
POWER SUPPLY	
Type	Switching mode
Main input voltage	100 - 240V AC @ 50Hz/60Hz±5%
Nominal power consumption	30W
SAFETY	
Insulation resistance	more than 10M Ω at 500Vdc Ambient conditions of 28±2% & 70%RH
Withstand Voltage (Hi-Pot)	I/p to O/p:3kV(1 min)
Temperature Rise	<75 on winding & core; <50 on casting At 264Vac @ 50Hz
Safety Standard	Designed to meet IEC 9
MICROPROCESSOR	
Microprocessor	NEC uPD61110
Clock frequency	166MHz
SDRAM Memory	8Mbyte
Flash memory	2Mbyte
PHYSICAL CHARACTERSTICS	
Front Panel	
Keys	7 Keys

Indicators	Power on/off
Remote control input	Infra-red receiver
Display	4Digit (7Segment)
Rear Panel	
Connectors	1 LNB Input / 1 Loop through output (2F-type) 2 x Scart (TV/VCR) 1 x 0/12 Volt (RCA) 2 x Audio L/R (RCA) 1 x Video SIGNAL (RCA) 1 x RS-232 (9-pin D-sub female) 1 x RF Modulator (IEC169-2) 1 x S/PDIF

11. Trouble Shooting

Problem	Possible Causes	What To Do
The display on the front panel does	Main cable is not connected.	Check that the main cable is plugged into
No sound or picture, but the front panel red light is ON.	The unit is in standby mode.	Press the standby button.
No sound or picture.	The satellite dish is not pointing at the satellite.	Adjust the dish. Check the Signal Level in the Antenna Setup menu.
	No signal or weak signal.	Check the cable connections, LNB and other equipment connected between the LNB and the receiver, and/or adjust the dish.
Bad picture/ Blocking error.	The satellite dish is not pointing at the satellite	Adjust the dish.
	Signal is too strong.	Connect a signal attenuator to the LNB input.
	Satellite dish is too small.	Change to a larger dish.
	LNB noise factor too high.	Change to an LNB with lower noise factor.
	The LNB is faulty.	Change the LNB.
No picture appears on the TV screen.	The system is connected by SCART leads and TV is not in AV/EXT mode.	Check the UHF channel fixed in your system and tune the UHF channel properly.

There is interference on your digital satellite channel.	The system is connected using RF leads and the output channel of the receiver interferes with an existing terrestrial channel or Video signal.	Change the receiver output channel to a more suitable channel, or connect the system using SCART leads.
The RCU is not working.	Battery exhausted.	Change the battery.
	RCU is incorrectly aimed.	Aim the RCU at the unit, or check that nothing blocks the front panel.

Note: If you have tried all of the actions suggested above, and cannot solve the problem, please contact your dealer or service provider.