SAMSUNG

USER MANUAL

DSR9000

Rev. 1.1

DIGITAL SATELLITE RECEIVER
EMBEDDED VIACCESS

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADEOF PLUG TO WIDE SLOT. INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.

The lightning flash with arrowhead symbol, with 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 of electric chock 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 product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

Important Safety Instructions

The important safety instruction shall include where applicable, the following information and warnings.

Read these instructions.
All the safety and operating instructions should be read before the appliance is operated.

Keep these instructions.
The safety and operating instructions should be retained for future reference.

Heed all warnings.
All warnings on the appliance and in the operating instructions should be adhered to.

Follow all instructions.
All operating and use instructions should be followed.

Do not use this apparatus near water.
Do not use this video product near water, for example near a bathtub, sink, in a wet basement or near a swimming pool and the like.

Clean only with cloth.
Unplug this video product from the wall outlet before cleaning. Do not use liquid cleners or acrosol cleaners.
Use a damp cloth for cleaning the unit.

Do not block any ventilation openings, Install in accordance with the manufacturer s instruction.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Unplug this apparatus during lightning storms or when unused for long periods of time.

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.

Important Safety Instructions

Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products(including amplifiers) that produce heat.

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.
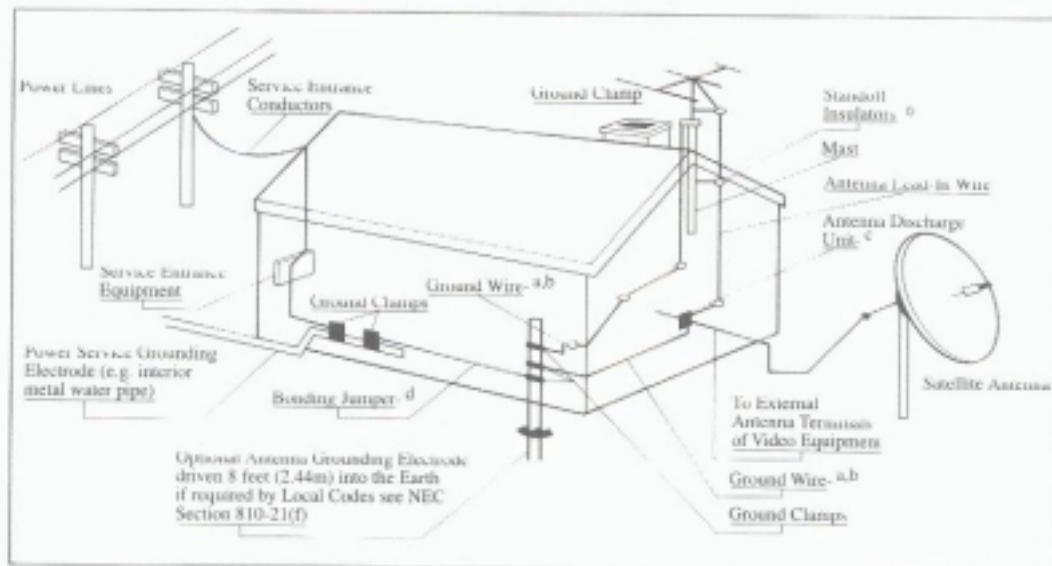
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equip-ment 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.

Outdoor Antenna Grounding

Be sure the antenna is properly grounded to provide some protection against voltage surges and built-up static charges.

Example of Antenna Grounding as per National Electrical Code

Note to CATV System Installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as paractical.

Note: NEC 810-21(i)

A bonding jumper not smaller than No. 6 AWG copper or equivalent shall be connected between radio and television equipment grounding electrode and the power grounding electrode system at the building or structure served where separate electrodes are used.

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- CHANNEL ORGANIZING(PROGRAMMABLE)
- RCA OUTPUT
- LOW POWER CONSUMPTION
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2. TUNER SECTION

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- IF OUTPUT WITH DC PASS LOOP FOR ANALOG RECEIVER
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- 2~45 MS/s SYMBOL RATE
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- 32, 44.1 AND 48 KHz SAMPLING FREQUENCIES
- VOLUME CONTROL AND MUTE FUNCTION THROUGH RCU

5. CONNECTING YOUR VCR

To connect a VCR, the DSR9000 has been provided with RCA at the rear marked 'VCR'. Using a RCA connector, the VCR can be connected to the receiver.

6. CONNECTING EXTERNAL AUDIO HI-FI SYSTEM

To connect any external Audio Hi-Fi system, the receiver has been provided with two RCA connectors at the back of the receiver, marked with Audio L and R respectively to connect the left and Right Audio.

7. INSERTING SMART CARD FOR VIACCESS SERVICES

In order to view a scrambled service, you need to have the appropriate Conditional Access Module and a valid smart Card. This DSR9000 has the Viaccess CAM embedded. To view Viaccess scrambled services you just need a valid smart card inserted into either card slot.

Insert the smart card gently into the slot. Depending on the service selected DSR9000 will automatically detect the appropriate smart card.

Note: Insert the smart card with the gold colored chip downwards While the IRD is working do not insert/remove the smart cards.

Connection Figure

TV

VIDEO AUDIO

VCR

VIDEO AUDIO
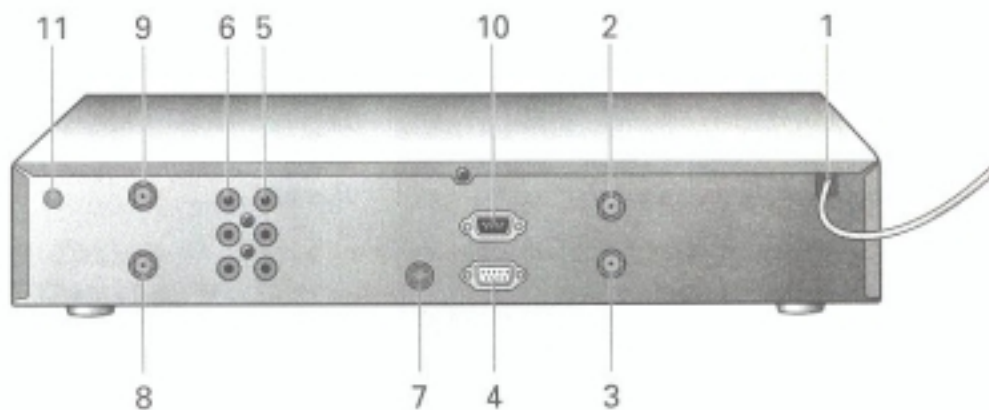
DESCRIPTION

FRONT PANEL

1. ⏻ : This key is used to turn the receiver on and off (stand by).

2. ▲ , ▼ : These keys are used to change the Channels

3. ◄ , ► : These keys are used to increase and decrease the volume level manually.

4. 7 SEGMENT DISPLAY:

This LED display will show the Current Channel number. While the receiver is in Stand by mode, the Display will show the Current Time.

5. INFRARED SENSOR:

This is to receive the IR commands from the RCU.

6. CARD SLOT A. Not used
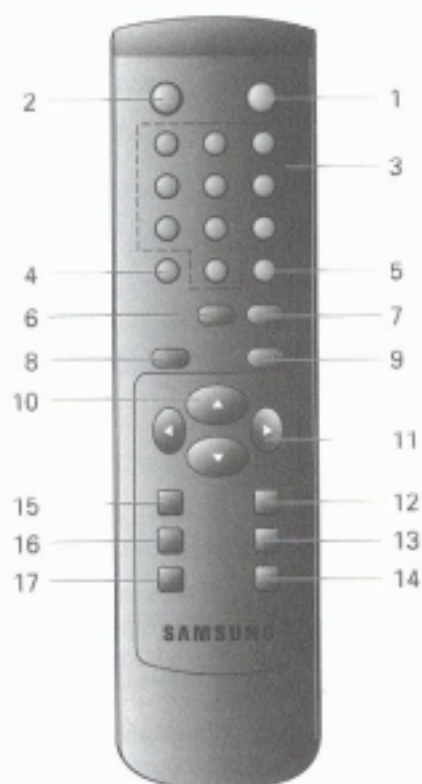
7. CARD SLOT B: Slot for Viaccess smart card.

REAR PANEL

1. AC MAINS:	This is to plug in the AC mains power cord. The input AC volts range is 95V to 240V, 60Hz supply.	
2.LNB:	This port is to connect the coaxial cable from LNB of your Dish. The IF input is provided through this port and the input frequency range is 950-2150 MHz. Also the voltage switching 14V and 18V is passed through this port.	
3. LOOP:	To enable the connection of an Analog receiver, The receiver is provided with this 'LOOP' port.	
4. RS 232 DATA PORT:		
	This is used to connect your receiver with computer through a serial cable.	
5. TV RCA:	This is used to connect your TV through RCA.	
6. VCR RCA:	This is used to connect your VCR through RCA.	
7. S-VIDEO:	This is used to connect your TV.	
8. OUT TO TV:	This is used to connect your TV through RF cable.	
9. IN FROM ANT:	This is used to connect your local RF channels to your TV through Loop.	
10. EXT MODEM:	This is for the external modem for future purposes only.	
11. CH 3/4:	This is used to select RF output channel.	

REMOTE CONTROL UNIT

1. ⏻ :   This is used to switch the receiver ON/STANDBY mode

2. ALT: This button is used to switch between the Audio tracks(if transmitted)

3. 0-9 NUMERIC KEYS: These keys are to enter numeric values and to select the channel
                             directly by entering its number.

4. TV: This key used to toggle between the video channel and the radio
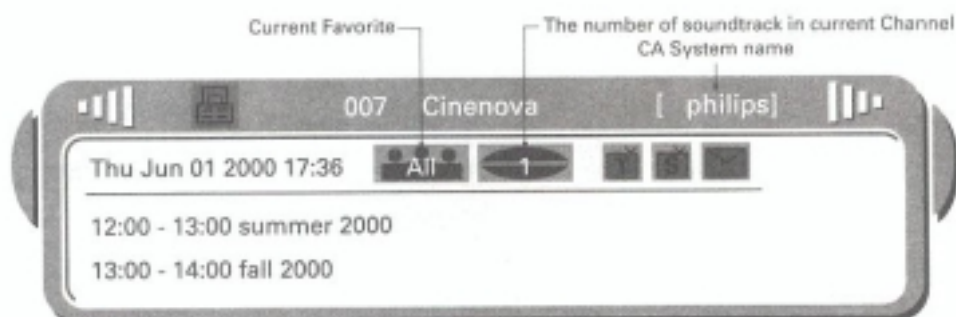   channel.

5. RA: Not used

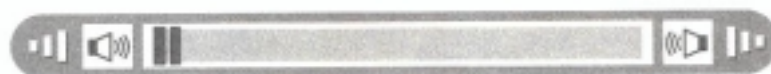|	
6. LAST:	Use this button to call up directly whatever channel you were watching last.
7. FAV:	Use this button to switch between favourite lists.
8. i:	This key is used to view the channel information if transmitted by the service provider.
9. EPG:	This key is used to open up the Electronic Program Guide. This information will be shown only if the program information are transmitted by the service provider.
10. Channel ▲, ▼:	These keys are used to vary channels and to change the cursor options i the Menu.
11. Volume ▲, ▼:	These keys are used very the volume level and to change the cursor options in the Menu.
12. OK:	This key is used to enter and confirm any data to the receiver in the Menu systems. The channel list can be accessed directly by pressing this button in the normal view mode.
13. MENU:	This key is used to open up the menu.
14. EXIT:	Used to remove on-screen display, exit Meun System and return to normal program viewing.
15. SYS:	This key is used to change the Audio to the left or right or Both.
16. MUTE:	This key is used to toggle between the normal and muted Audio.
17.	Not used.

Description for display

Banner

This banner will be displayed when you press the i key in view mode or when you change the channel.

Current Favorite ——

The number of soundtrack in current Channel
CA System name

| | | 007 Cinenova [philips] | |

Thu Jun 01 2000 17:36 All 1

12:00 - 13:00 summer 2000
13:00 - 14:00 fall 2000

Channel change? Press 0~9 key or up/down key and select TV key to move to TV or Radio channel.

Volume Control

Press Left / Right key to control the volume and press Mute key to turn to silence mode. Press Mute key again to return to the previous mode
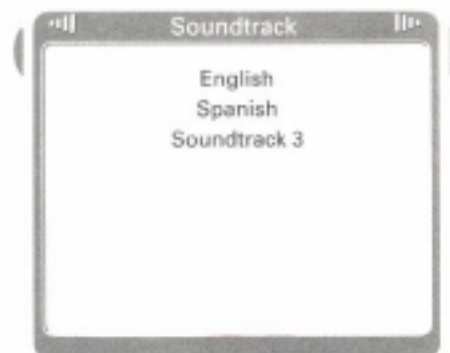
Left or Right Audio Control? Press SYS key to change the Audio to or Both

Select Soundtrack

Press ALT key to see the soundtrack list and press channel up/down and OK key to select one

```
 ·ıll        Soundtrack       IІ·

          English
          Spanish
          Soundtrack 3
```

Service List

Service list will be displayed when you press OK key in view Mode. TV Radio List can be transferred by TV Key and you can change Favorite list by FAV key. F or S in front of the list stands for Free channel or scramble channel and the icon behind the list symbolises lock channel. Select the channel by pressing channel up/down and VOL-/VOL+ key and press OK key to watch that channel.
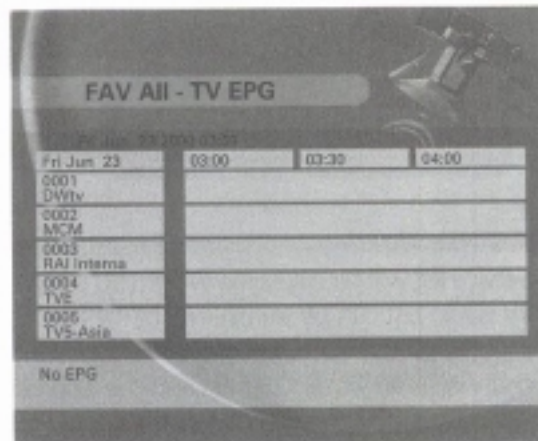
```
 ·ıll          TV List        IІ·

   F  001  VOX
   F  002  RTL            ▨
   F  003  SAT 1.
   F  004  PASSION        ▨
   S  005  CINE 1
   S  006  BLUE



              FAV All
```

Favorite change

Favorite can be changed by pressing FAV key in view mode

FAV All → FAV 1 → FAV 2 → FAV 3 → FAV 4

EPG? Press the EPG key in view mode to see EPG.
Displayed EPG and Favorite can be changed by TV key, FAV key.

FAV All - TV EPG

Fri Jun 23	03:00	03:30	04:00
0001 DWtv			
0002 MCM			
0003 RAI Interna			
0004 TV5			
0005 TV5-Asia			

No EPG

Last key

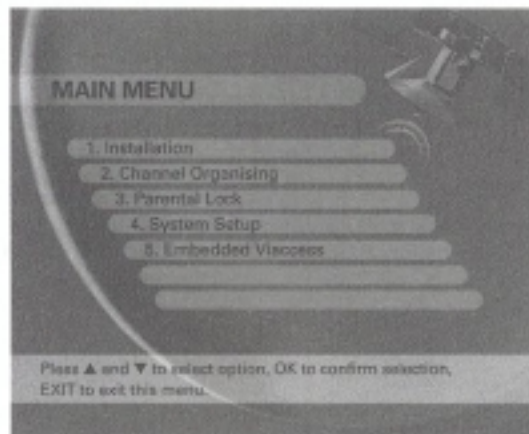Return to the previous channel.

OPERATING THE 'DSR9000'

The menu display is carefully created and used friendly to assure the easy operation of the receiver by the user. The main menu is classified into five sub menus which will carry out the various operations individually.

MAIN MENU: After installing your dish system and DSR9000 with appropriate connectors, plug in the AC main power and switch on the receiver.
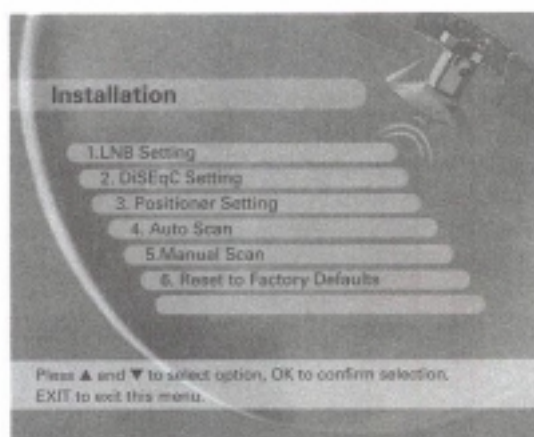
Press MENU key to bring up the main menu. The following on screen display will appear:

The sub menu topics will be displayed from 1 to 5.
Use ▲ or ▼ keys to browse, and to select any sub menu option place the cursor on the sub menu title and press "OK" Key.
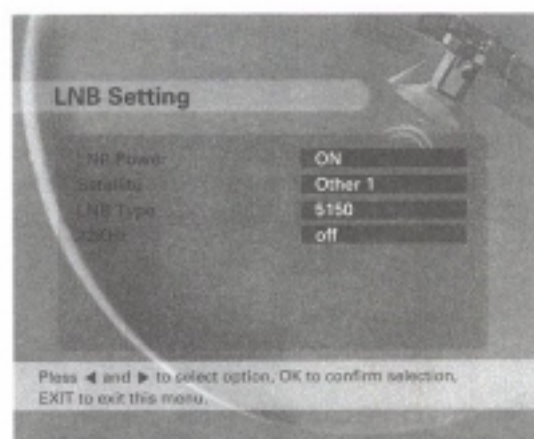
1. INSTALLATION

Select "INSTALLATION" in the main menu mode to select the sub menu. The menu provides settings for customizing, adding new services and displaying the status of the receiver.

1-1. LNB Setting

You can select the satellite and LNB setting conditions for service search and you can change the settings for 22KHz tone. The values that are set in this menu will be available for selection in other service-searching menus.
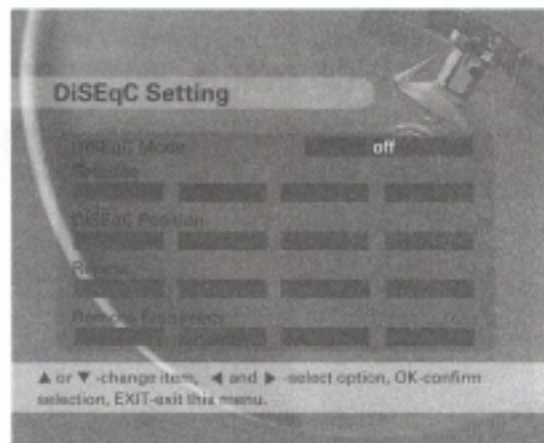

1) **LNB Power:** You can select the LNB power ON or OFF
2) **Satellite:** You can select the wanted satellite name.
3) **LNB Type:** You can select the LNB frequency.
4) **22KHz:** In case you are using a dual LNB or two antennas connected to a 22KHz tone switch box, make 22KHz tone switch ON or OFF to select LNB or antenna.

1-2. DiSEqC Setting

DiSEqC (DIGITAL SATELLITE EQUIPMENT CONTROL) is the registered trademark of EUTELSAT and is the more sophisticated way of controlling the various accessories of the satellite receiving system by the receiver.

It is a master-slave protocol using the data modulated 22KHz tone for communicating between the receiver and its accessories like LNB, switches, etc.

DiSEqC 1.2 version will enable switching between 4 LNB connections irrespective of LNB type either Universal, Single(voltage switching for ver/hor) and Single solution

1-2-1 Satellite

You can select the wanted satellite name

1-2-2 DiSEqC Mode

Off	: Do not use DiSEqC.
Tone Burst	: 2 LNB can be selected.
Full	: 4 LNB can be selected.
Positioner	: If you use Positioner, select this.
SMATV	: If you use SMATV, select this. Input frequency range 950-2150MHz.