



DIGITAL SATELLITE RECEIVER / VIDEO CASSETTE RECORDER

OWNER'S MANUAL

**MODEL : LSV-701W
LSV-700W**



**Before connecting, operating or adjusting this product,
please read this instruction booklet carefully and
completely.**



Safety Precautions / Notes on using this unit



CAUTION
RISK OF ELECTRIC SHOCK.
DO NOT OPEN.



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



This 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 of electric shock to persons.



The exclamation mark 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 PRODUCT TO RAIN OR MOISTURE.

CAUTION:

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location-see service procedure.

Disconnect this unit from the mains before connecting or disconnecting the cable from the satellite dish.

Please do not insert metal or alien substance into the slots for the Modules. In doing so can use damage to this unit and reduce its life span.

The apparatus shall not be exposed to water, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 73/23/EEC.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others.

Model No. _____

Serial No. _____

Features:

- Brilliant On Screen Graphic
- MPEG-2 & Fully DVB Compliant
- MPEG-2 Video (MP@ML), MPEG-1 Audio Layer1, Layer2
- PLL RF-Modulator UHF 30~40 with PAL I / G / B / D / K
- LNB Controlling Logic (0/22KHz Tone, 13/18V, 14/19V)
- SCPS/MCPC Receivable from C /Ku-Band Satellites
- Digital Tuner with Loop-through
- Wide Symbol Rate 1~45Msp/s & Frequency Input 950~2150MHz
- DiSEqC 1.2 Supported
- 1 SCART for TV
- User friendly OSD Menu with Full Function
- 256 Colors Graphic User Interface
- Multi-language Menu
- LED Display
- Variable Aspect Ratio (4:3, 16:9)
- EPG(Electronic Programme Guide) for On-screen Channel Information
- Small Screen Picture on EPG
- Teletext and Subtitle Supported (VBI & OSD)
- Capacity for Storing Multi Channel (4000 Channels, 1000 Transponders)
- Favorite Channel and Parental Lock Function
- RS232C Port for Additional Information Service and Upgrading System Software
- (CAS model only) 2 Slot Common Interface for Viaccess, Conax, CryptoWorks, Nagravision, Irdeto and MEDIAGUARD

To keep the surface clean

Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

To clean the cabinet

Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzene, or thinner, as these might damage the surface of the unit.

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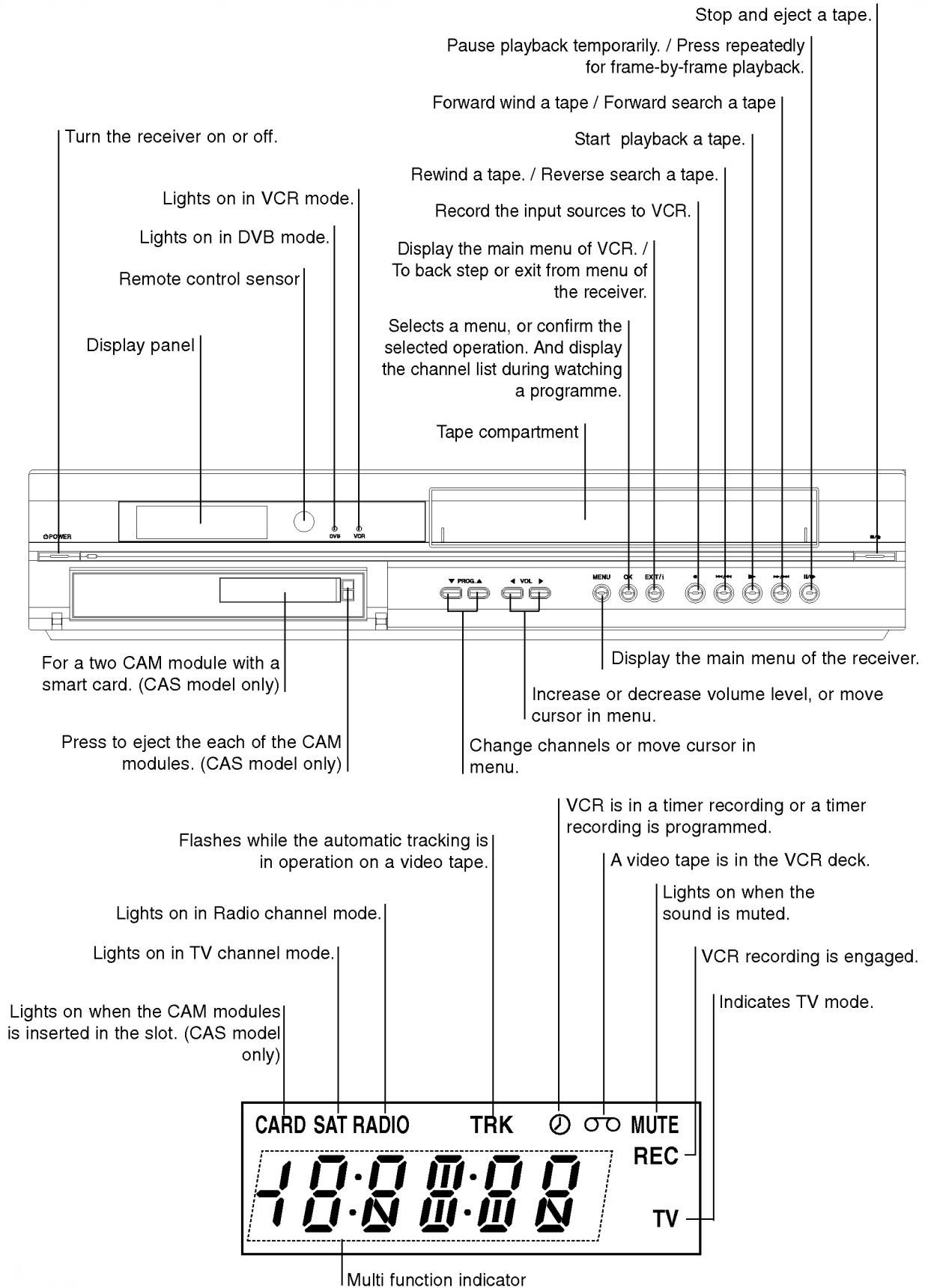
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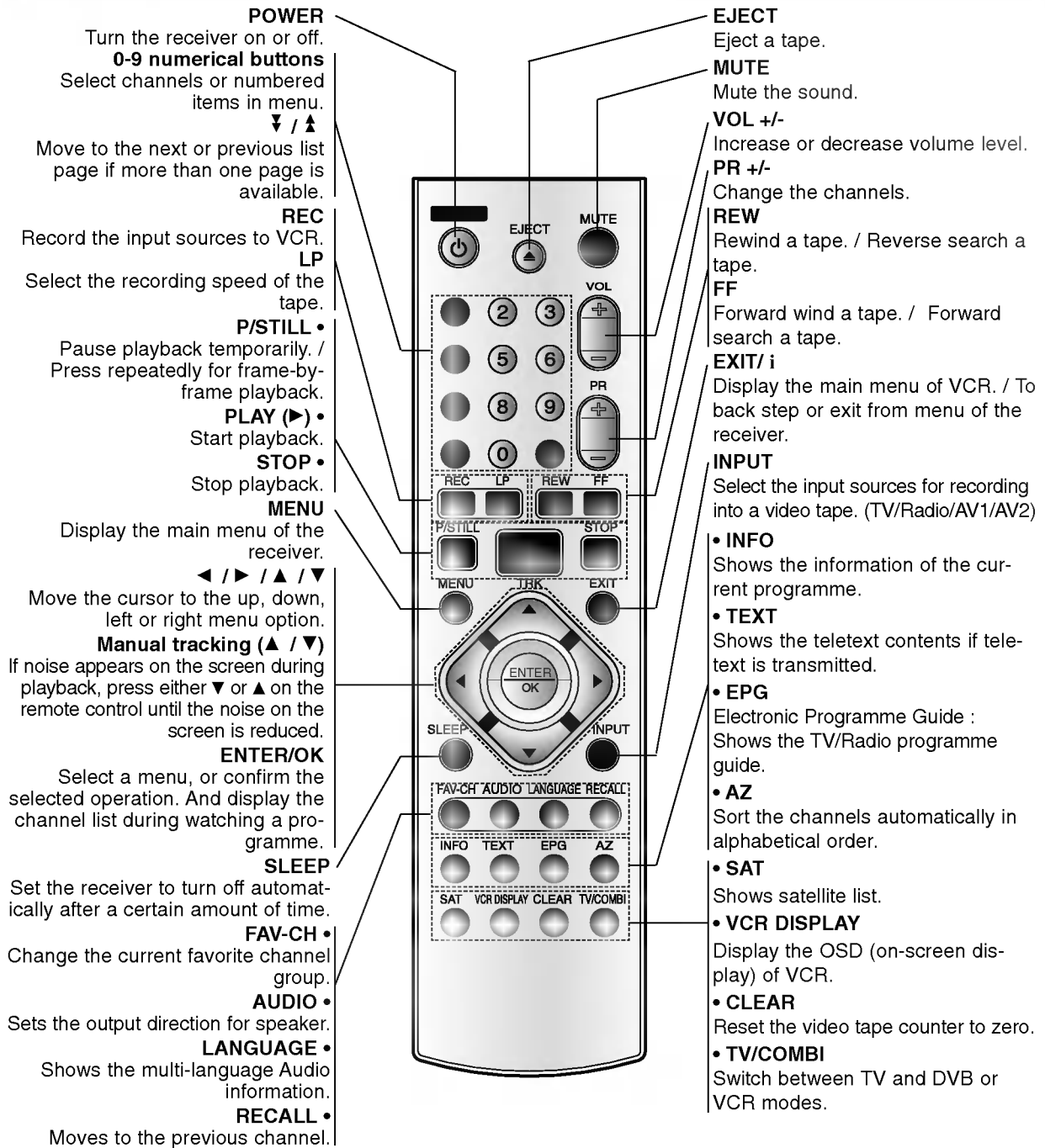
About the symbols for instructions

-  Indicates hazards likely to cause harm to the unit itself or other material damage.
-  Indicates special operating features of this unit.
-  Indicates tips and hints for making the task easier.

Front Panel and Display Window



Remote Control

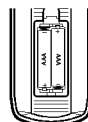


Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Remote control battery installation

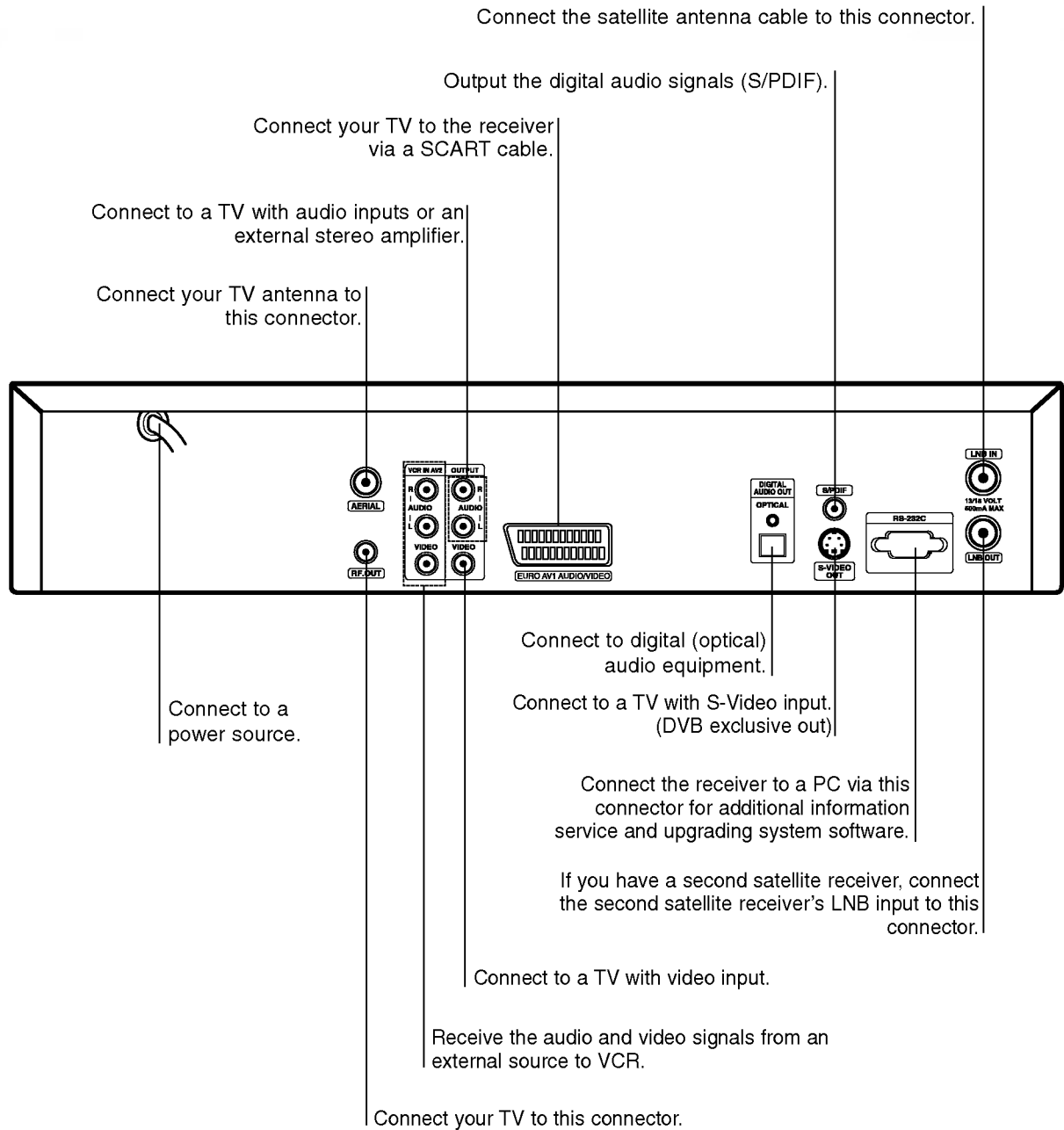


Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with + and - aligned correctly.

Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Rear Panel



Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Connections

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the unit.
- Please refer to the manuals of your TV, Stereo System or other devices as necessary to make the best connections.

Caution

- Make sure this unit is connected directly to the TV. Set the TV to the correct video input channel.

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.

Basic connection (AV)

- Connect the **EURO AV1 AUDIO/VIDEO** on the rear panel of this unit to the SCART input socket on the TV using a SCART lead.
- Connect the **AUDIO OUTPUT (L/R)** and **VIDEO OUTPUT** on the rear panel of this unit to the RCA input sockets on the TV using the RCA leads.

Basic connection (RF)

- 1 Connect the antenna cable from your indoor/ outdoor antenna to **AERIAL** jack on the rear panel of this unit.
- 2 Connect the supplied coaxial RF cable from the **RF.OUT** jack on the rear panel of this unit to your television's Antenna Input.

S-Video connection

- You cannot watch the playback of the video tape. Connect the **S-VIDEO OUT** jack on this unit to the S-Video in jack on the TV using the S-Video cable.

Connecting to Optional Equipment

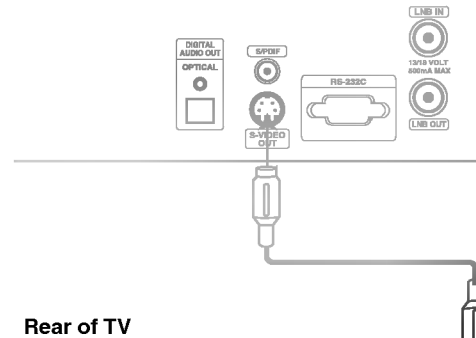
Connecting to an amplifier equipped with two channel analog stereo or Dolby Pro Logic II /Pro Logic

Connect the Left and Right **AUDIO OUTPUT** jacks on this unit to the audio left and right in jacks on your amplifier or stereo system using the audio cables.

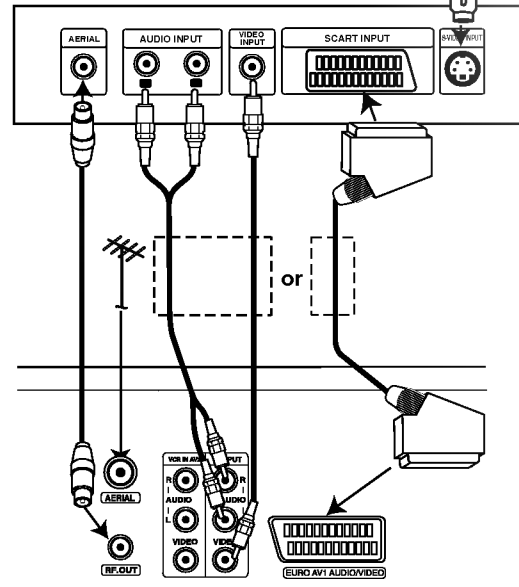
Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2 or DTS)

Connect this unit's **DIGITAL AUDIO OUT** jack (**S/PDIF** or **OPTICAL**) to the corresponding in jack on your amplifier. Use a digital (S/PDIF or optical) audio cable.

Rear of this unit (S-Video connection)

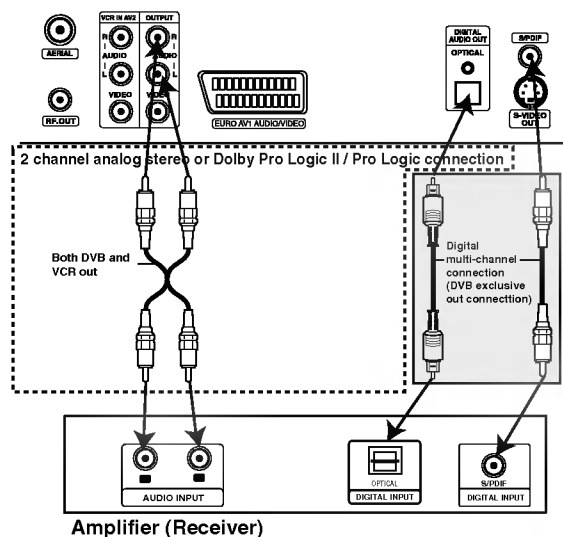


Rear of TV



Rear of this unit (Basic connection)

Rear of this unit



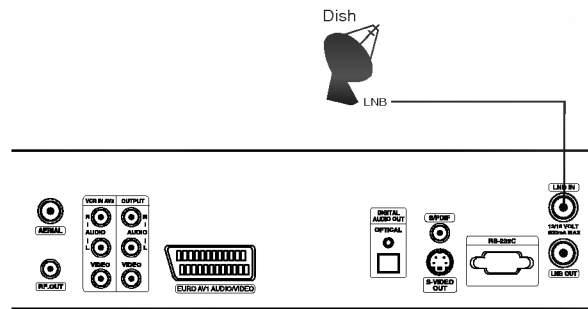
Amplifier (Receiver)

Connections (Continued)

Connecting to Dish

A Fixed Dish

To the digital receiver, you can connect either a single satellite antenna directly or through converter box several antennas or LNB of multi-feed equipment. You can connect a further Sat-receiver (for example analogue), with the receiver of common antenna equipment that has satellite signals.

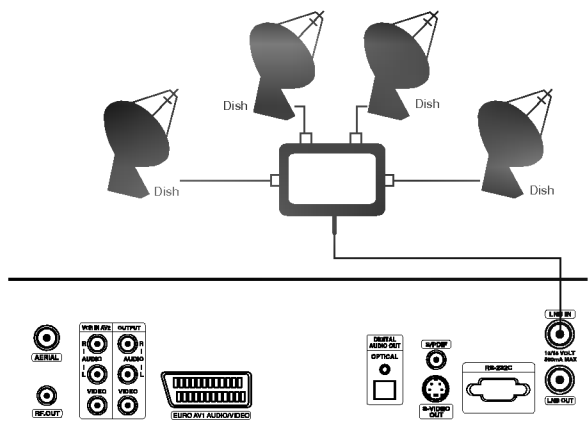


Several Fixed Dishes Using DiSEqC

Our receiver is designed to be DiSEqC 1.0 compatible. This allows multiple antennas to be connected to the DVB simultaneously.

If you have two or more fixed antennas or LNBs, you can use a DiSEqC 1.0 switch.

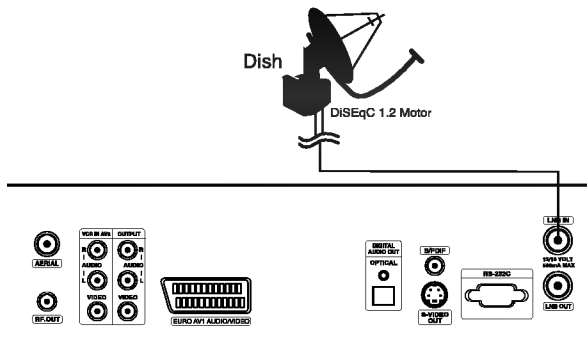
- 1 Connect the coaxial cable from the first LNB to the LNB 1 or LNB A input connector of the DiSEqC switch.
- 2 Connect the coaxial cable from the second LNB to the LNB 2 or LNB B input connector of the DiSEqC switch.
- 3 Do the same for other LNBs.
- 4 Connect one end of a coaxial cable to the RF output connector of the DiSEqC switch and the other end to the **LNB IN** socket on this unit.



Moved Dish Using DiSEqC 1.2

Please refer to step 7 on page 11.

If you have a DiSEqC 1.2 motorised system, then you can use the DiSEqC 1.2 options available.



Before Operation - VCR part

Tuning in a video channel on your TV

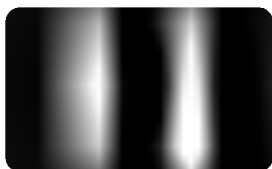
Your TV receives signals from the video recorder like another TV station.

You have to select a channel number on your TV and tune it in so that you may watch video tapes or satellite programme.

If you are using a coaxial RF cable you need to select a TV channel on your Television and tune it to the Video signal.

If you connect a monitor or a TV set equipped with audio and video or SCART sockets this adjustment will not be necessary, simply select the AV mode on your TV (Recommended).

- 1** Turn on this unit and TV.
- 2** Select the vacant position 36 on your TV.
- 3** Press **POWER** to put this unit on standby then press and hold **EXIT/i** on the front of your unit for more than 3 seconds. "RF:36" will appear in the display window. If the test picture appear clearly on the television screen, the position 36 is your video channel. If the test picture do not appear clearly, go to next.
- 4** Select a vacant position between 30 and 40 on your television. Press **PROG.** ▼ or ▲ on the front of your unit until the test picture appear clearly on the television screen.



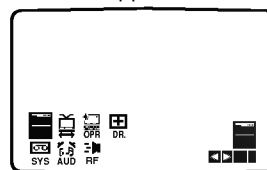
- 5** Store the selected TV channel on your TV. Please consult your Television User Guide for information on how to do this.
- 6** Press **POWER** when you have finished.

How to using the main menu

This VCR can easily be programmed by using the menus displayed on screen.

The menus are controlled from the Remote Control Handset.

- 1** Switch on your TV set and the receiver by pressing **POWER**.
- 2** Press **EXIT/i**. The main menu will appear on the TV screen.



- **F.OSD ON/OFF** - To switch the display operational mode of your VCR to on or off (see p. 20).
- **16:9/4:3** - To select the aspect ratio of your TV (see p.21).
- **OPR** - To improve the playback picture. You can set OPR only when a video tape is playing in the video recorder.
- **DR.** - To check a problem with your VCR (see p. 20).
- **SYSTEM** - To set the colour TV system. Your video recorder uses triple colour standards, PAL, SECAM and MESECAM. During play your video recorder should select the colour system automatically, however if you experience problems you may need to do it manually.

The system is changed as shown below.

Source	Mode	System Change
PAL/SECAM/MESECAM	Recording	AUTO→PAL→SECAM→MESECAM
	Playback	AUTO→PAL→SECAM→MESECAM
NTSC	Recording	NTSC3.58→NTSC4.43
	Playback	NTSC-PB→NTSC3.58 →NTSC4.43

If your tape programme is NTSC3.58 or NTSC4.43, set the system to **NTSC3.58** or **NTSC4.43** on a multi-system TV, or **NTSC-PB** on a PAL TV.

- **AUDIO** - To select the channel for audio output. AUDIO icon is not displayed when this unit is in DVB mode.
- **RF AUDIO** - To select the type of audio output according to your TV type.

Tip

You can change the menu language on the DVB setup menu. (See the **Setup** on page 15.)

- 3** Press ◀ or ▶ to select the desired menu. Press **ENTER/OK** and press ▲ or ▼ to select.
- 4** Press **EXIT/i** to remove the menus from the TV screen.



Before Operation - DVB part

Menu Information

Refer to "Menu Structure" on page 16.

Installation

During the installation, a short information is displayed at the bottom of the menu screen. After you finish the setup procedure, you can start watching TV or listening to Radio.

1 Turn on your TV and receiver.

2 The pop-up menu for language selection will appear. Select one language and press **ENTER/OK** to proceed.

Press **MENU** to display the main menu.



<Initial screen after performing **Reset Factory Defaults**>

3 A menu is a field of text shown on the TV screen. Selectable lines are generally highlighted. Non highlighted lines can not be selected. Most of menus show a short information at the bottom of the screen.



- Use the Up/Down (▲/▼) you can move upwards and downwards in the menu.
- When you have reached the required subject menu, press **ENTER/OK** to confirm your selection.
- When you want to return to the previous menu, press **EXIT**.

4 Press **ENTER/OK** on the **Installation**. The Password window will appear. Enter the default password "0000" with the numeric keypad.



Dish Setup

1 Press **ENTER/OK** on the **Dish Setup**.



2 The following window will appear. The right screen shows the pre-programmed 32 dishes list. If you want to change dish, select the dish on the right screen. Press **ENTER/OK** in the right screen. Dish number will change.



3 The column on the right screen will show the pre-programmed satellite list. If you want to change satellite, select the satellite on the right. Press **ENTER/OK** on the right.



4 The column on the right will show the transponder list of selected satellite. If you select one of the alternative satellite name, then transponder is changed automatically according to the satellite name.



- 5**
- You can select LNB Power value as 13/18V normally or if the distance between antenna and receiver is further than 60m, you can select LNB Power value as 14/19V.
 - You can select a LNB Type value from the column on the right screen based on the LNB type which is used for antenna. If you have selected User Single or User Dual, enter LNB frequency value directly, and press **ENTER/OK**.
 - If you select LNB Type value as 9750/10600, 9750/10750 or User Dual, 22KHz value is fixed to auto mode, in other case you can select a value depending on usage of 22KHz tone switch box.



Before Operation - DVB part

6 If your antenna has connected to the DiSEqC 1.0, select the switch type of "DiSEqC". Option specify DiSEqC input. Select one of the DiSEqC input.



7 If you connect a DiSEqC 1.2 antenna to the receiver, select the switch type to "Motor". The Motor means DiSEqC 1.2. You can change position of your Motor through the "Option".



- Done : Press **ENTER/OK** on the right screen, position of cursor will be change to left. In this mode Done is equal to **EXIT/i**.
- Move West-East : Press **◀/▶**, the motor position will be changed to West / East.
- Store Position : Press **ENTER/OK** to save the current position.
- Go to Position : Press **ENTER/OK** to move the motor to the stored position.
- Go to Reference : Press **ENTER/OK** to move the motor to the 0 position.
- Set West Limit : Press **ENTER/OK** to fix West limit.
- Set East Limit : Press **ENTER/OK** to fix East limit.
- Enable Limit / Disable Limit : Press **ENTER/OK** to change.
(Set West Limit & Set East Limit can be available with Disable Limit status.)

8 USALS (Universal Satellite Automatic Location System)

On **USALS Setup** of **System Setup**, First you get values of Longitude and Latitude for your dish location. Refer to **USALS Setup** on page 16.

Then, you select "USALS" on the "Switch Type" of **Dish Setup** menu.

Then, Automatically, the values of USALS are shown.

And the Receiver is basically entered for the value of Longitude : 11.9°E and Latitude : 44.9° N of "STAB" installation site (Italy).

Longitude : 11.9°E, Latitude : 44.9°N



Hotbird
Position : -1.2



Astra 1
Position : -8.1

Execute " Go to Position" of " Option" Menu. Then, It moves to the location automatically, the other functions are the same as DiSEqC 1.2.

- Done : Press **ENTER/OK** on the right screen, position of cursor will be changed to left. In this mode Done is equal to **EXIT/i**.
- Move West-East : Press **◀/▶**, the motor position will be changed to West / East.
- Go to Position : Press **ENTER/OK** to move the motor to the calculated position.
- Go to Reference : Press **ENTER/OK** to move the motor to the 0 position.
- Set West Limit : Press **ENTER/OK** to fix West limit.
- Set East Limit : Press **ENTER/OK** to fix East limit.
- Enable Limit / Disable Limit : Press **ENTER/OK** to change.
(Set West Limit & Set East Limit can be available with Disable Limit status.)

Scan Satellite

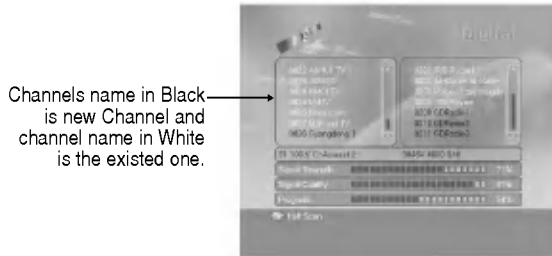
1 You can search the channels offered by the satellite for which your antenna has been configured. Press **ENTER/OK** on the **Scan Satellite** of the **Installation**. The Scan Satellite window will appear. Select the satellites for scanning in the left screen, and then move the cursor to the bottom right side by pressing **◀/▶** to select the scan mode. If you select one of two scan modes by **▲/▼** and press **ENTER/OK**, TV & Radio channel search will start.



Scan All Channel : searches all channels (FTA + Scrambled).
Scan Free Channel : searches Free to Air channels.

Before Operation - DVB part

- The progressing scan window will appear. The column on the left window shows TV channels and the column on the right screen will shows Radio channels.

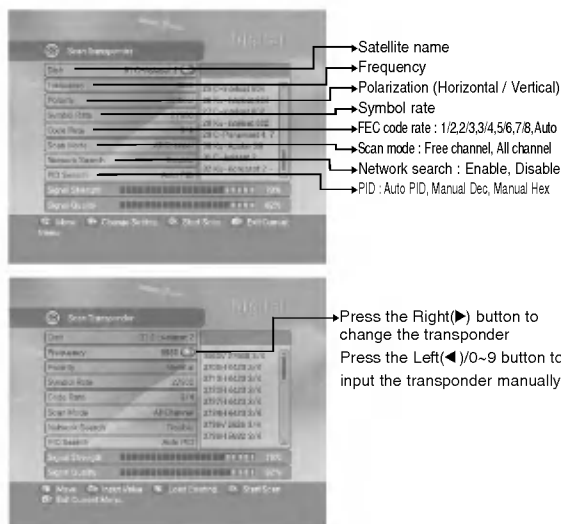


- If you press **EXIT/i** while searching channels or after searching channels, the confirmation window will appear. If you want to save the updated channels, select "Yes".



Scan Transponder

- Press **ENTER/OK** on the **Scan Transponder** of the **Installation**. You can search the transponder offered by the satellite for which your antenna has been configured. Select the satellite name, frequency, polarization, symbol rate, code rate, scan mode, and network search. You can also set the User PID. If you set the network search to "Enable", you can find more transponders through the home network. If you input the transponder frequency, the receiver searches other transponder besides the existing transponder.



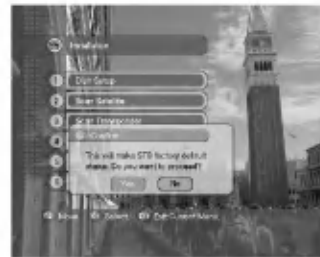
If you select the values and press **ENTER/OK**, the transponder search will start.

- The progressing scan window will appear. When the channel search has been finished, TV & Radio channels that you found will be shown in two columns on the screen.



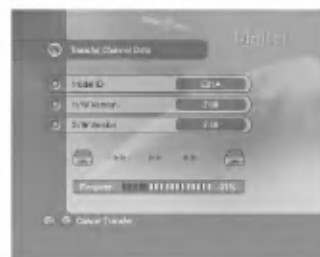
Reset Factory Defaults

Press **ENTER/OK** on the **Reset Factory Defaults** of the **Installation**. You can change the system setup into the default values. The confirmation window will appear. If you select the "Yes", the system setup will be reset to the default values.



Transfer Data

Press **ENTER/OK** on the **Transfer Data** in the **Installation**. You can upgrade the channel information and system software from other new programmed satellite receiver or PC.



- Select the data type you want to download on the source satellite receiver, and press **ENTER/OK**.
- You should plug out and in the target satellite receiver. Press **POWER** to see the transfer status.



Before Operation - DVB part

- 3** The following screen will appear on the TV screen connected to target satellite receiver.



SOFTWARE UPGRADE

You can upgrade the DVB software. DVB checks whether the new S/W is released when you view channels or select this **SOFTWARE UPGRADE** menu. If the new version is detected, the DVB will be rebooted automatically and the download screen will appear.



User Preference

Channel Properties

You can make the Favorite channel grouping and Adult channel function in this menu. When you want to watch the locked TV channels, you need to enter the password. To easy operation, press **AZ** to sort the channel list in alphabetical order.

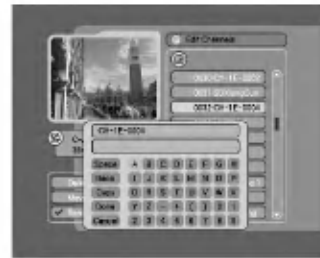


- Press Up/Down (▲/▼) to select the channel for lock and favorite group.
- Use Left/Right to place the cursor on the desired group.
- Press **ENTER/OK** to confirm your selection (selection and deselection).
- Press **EXIT/i** to exit current menu, the confirmation window will appear. If you want to save the changes, select the "Yes".

Edit Channels

This menu can support you to delete, move and rename the channel of normal channel. Select one of the function in the left screen, Delete, Move or Rename. Then move to the channel list in right screen to select and deselect the channel.

- Press **ENTER/OK** to delete the channel,
- Press **ENTER/OK** and Up/Down (▲/▼) to move the channel.
- Press **ENTER/OK** to rename the channel, total 15 letters can be available for new channel name.



Channel rename screen

Uninstall Satellite

- 1 Press **ENTER/OK** on the **Uninstall Satellite** of the **User Preference**. You can remove the satellite for which your antenna has been configured.
- 2 Press **ENTER/OK** in the left screen to delete the satellite and all channels in the selected satellite.
- 3 Press **EXIT/i** after selecting the satellite, the confirmation window will appear. If you select "Yes", the satellite and all channels of the selected satellite will be removed.

Edit Satellite

In this menu you can see all satellite information and can make Delete, Edit and Add the satellite and transponder.

To Delete, Edit and Add the satellite select the satellite name in the left screen,

And to Delete, Edit and Add the transponder select the transponder in the right screen.

Press **ENTER/OK** and select one of Delete, Edit and Add in the pop up menu to make it.

(The last one satellite and transponder cannot be deleted.)



Before Operation - DVB part

Change Password

You can change the password. Press **ENTER/OK** on the **Change Password** of the **User Preference**, then Password window will appear. Enter "0000" with the numeric buttons, and then enter new password. "0000" is the default value.

Event Timer

Event Timer is to use easily recording function. Using this function, you can reserve recording. Eight reservation is possible.

Note

Ensure the satellite channels have been tuned and stored correctly and that the clock is set to the correct time. (Refer to **Clock Set** on page 15.)

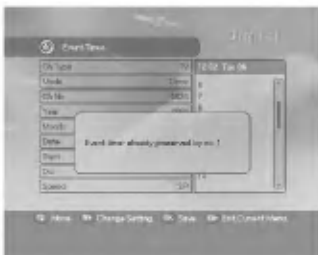
1 If you press **ENTER/OK**, and the Pop-up window appears, select the Add menu then add a new reservation item.



2 After you set up channel type, channel number, regular recording, reservation date, time and recording speed, using by Left/Right/Up/Down button and number key, you press **ENTER/OK** and store setting contents.



3 If it is duplicated with the time zone that was already registered at a reservation list, the alarm message appears which it is not able to register. In this case, you must register a reservation for other time zone.



4 If the channel that you are going to reserve is a locked channel, Reservation setting is completed after you input password. Press **EXIT/** to cancel and get out.



5 After find the reservation item that needs to be amended and press **ENTER/OK**. If a Pop-up window appears, you select a menu and you can add, amend, delete a reservation. If you complete reservation, press **POWER** and check if the record tape is inserted. If it is reservation time, recording will start.



Menu explanation

- Ch Type
 - TV : TV channel
 - Radio : Radio channel
 - AV1 : Other device
 - AV2 : Other device
- Mode
 - Once : just one time action
 - Daily : action execution in every day
 - Weekly : action execution weekly
- Ch No
 - Only if Ch type is TV or Radio, you can select the channel from right channel list.
- Year, Month, Date
 - Select the date when record is operated.
- Start
 - Select the start time when record is operated.
- Dur
 - Set up how long record will be operated from start time.
- Speed
 - SP
 - LP/EP : LP (using PAL colour signal) provides twice times as much recording time as SP.
 - EP (using NTSC colour signal) provides three times as much recording time as SP.
 - Please note there will be a slight loss in picture and sound quality when using LP or EP.
 - Auto : Auto determines how much tape is left and switches speed from SP to LP or EP, if necessary, to complete recording the programme.

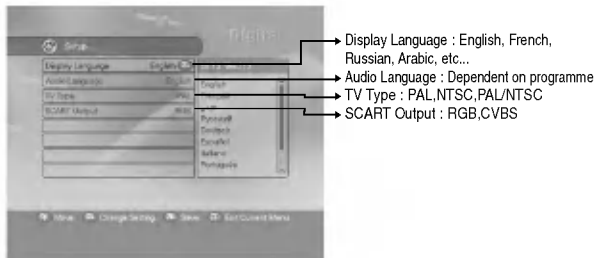
Before Operation - DVB part

System Setup

Setup

You can select the display language, audio language, TV type, and SCART Output.

If you select the TV type according to your TV, the receiver converts the input signal into a fit signal to your TV. But you can receive bad signal on some channels.



- Press Left/Right (◀/▶) to change the value.
- If you want to listen to AC3 broadcasting, press **AUDIO** on the Audio Language.
- Press **EXIT/i** to quit the current menu.

Clock Set

Clock Set is for setting current time. There are two modes (TDT and USER mode). In case of reservation recording, it is recommended to set the mode to TDT and TV Channels to one fixed channel.

- Mode

- TDT : Receive the time from Satellite.
- USER : Set the time directly by user.

- Time Offset

Set the time difference between GMT and the local time. (eg. Dubai: GMT + 04:00)
Verify if the Time Offset is correct. If it is not correct, press Left/Right (◀/▶) to adjust the value. (Increase and decrease by 30 minutes)

- TV Channels

Select one channel or All to get current time.

1 This is the Clock Set initial screen when any TV channel does not exist. The default mode of Clock Set is TDT.

If no channel exists to bring current time, TV Channels displays None and 00:00 becomes the current time, displayed in upper right side.



2 This is the screen when TV channels exist. TV Channels - All :

Means that you get current time from each channel whenever you change channel. The time can differ according to its own transponder of the channel. The time of the channel that you were watching will be displayed in upper right.

TV Channels - Channel selection:

Means that you get current time from only one fixed channel you specify. The time of the channel that you select will be displayed in upper right.



3 If you select one channel (eg. DWTN) in TV Channels by **ENTER/OK**, ---:-- will be displayed in upper right until time is gotten from the channel of satellite. At this time, please wait for getting time.



4 When time is gotten from the channel you select (eg. DWTN), it will be displayed in upper right. If the displayed time does not match with your local time, try another channel for getting correct time. After you get correct time, press **ENTER/OK** to store all setting and exit this menu. If you press **EXIT/i**, it will not be stored and you can just exit this menu.



Before Operation - DVB part

5 Even if you can't get correct time by setting TV Channels in TDT mode, you can set up manually current time(year,month,date,hour,min) in USER mode.

When you plug out and in, the time you set up will be initialized to 00:00. So, you need to set up TV Channels to get the initial time.

TV Channels - All :

Get the initial time from the channel you were watching before plugging out.

TV Channels - Channel selection :

Get the initial time from the specified channel you select.



USALS Setup

You can set values of Longitude and Latitude for your dish location.

Enter the values with the numeric keypad.

Use the Right (▶), you can select North/South and East/West.



System Information

You can see the system information such as Model ID, Hardware Version, S/W Version and Loader Version. Press **ENTER/OK** on the **System Information**.



CAS (CAS model only)

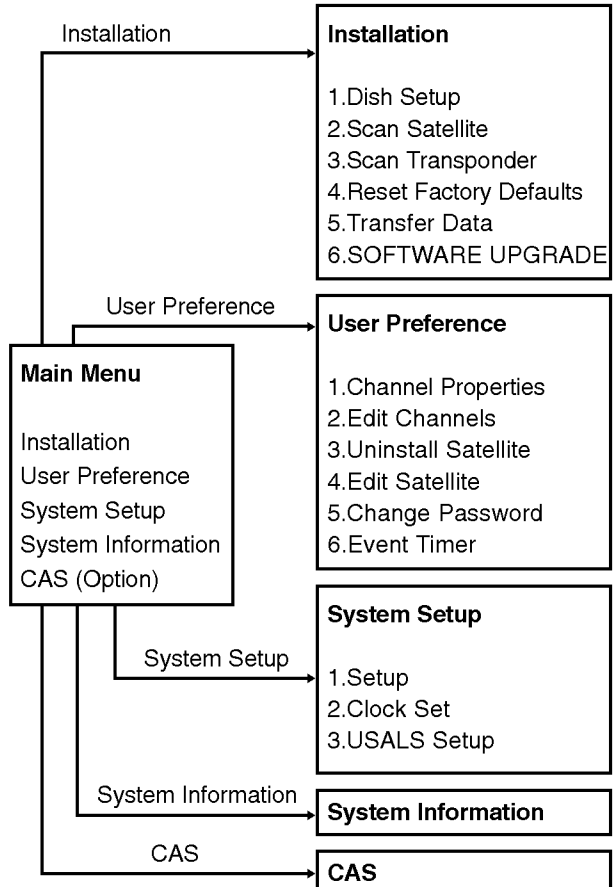
You can see not only Free To-Air services, but also scrambled services using the Conditional Access Modules(CAM). This DVB currently supports six kind of CAM(Irdeto, VIAC-CESS, Nagravision, CONAX, CryptoWorks, MEDIAGUARD). Also it supports Common Interface of two slots. If you want to see scrambled services, contact your service provider or distributor of Common Interface module and smart card depended on the service provider.



Note

Attention to the static electricity when you put CAM in or pull CAM out.

Menu Structure



Operation with your video cassette recorder

Playing a video tape

Before starting, you should ensure that your television and your unit have been plugged in and switched on and that the video channel on your television is selected.

Playing a video tape

Press **PLAY** ►.

The television screen will display **PLAY**.

Auto tracking

Your video recorder will automatically adjust the tracking to give you the best picture quality.

Manual tracking

If noise appears on the screen during playback, press either ▼ or ▲ on the remote control until the noise on the screen is reduced.

Stopping play

Simply press **STOP** ■ to halt video play.

Picture Search

While a video cassette is playing you can search the tape forward and backward to look for a specific position on the tape.

Press **REW** ◀◀ or **FF** ▶▶ to make the tape play rapidly forwards or backwards.

Fast Forward / Rewind

To fast forward or rewind at maximum speed, the tape must not be in play mode.

Press **STOP** ■ then press either **REW** ◀◀ for rewind or **FF** ▶▶ for fast forward. While you are rewinding or fast forwarding you can view the section you are passing. Press and hold either **REW** ◀◀ or **FF** ▶▶.

Releasing **REW** ◀◀ or **FF** ▶▶ will return the Video recorder to normal rewind or fast forward operation.

Automatic power off

By pressing **POWER** while rewinding a tape the video recorder will turn off automatically when the tape rewind has completed.

Pausing a tape

Pressing **P/STILL** ■ will pause play, giving you a still picture on the screen. This picture may display some interference in the form of black and white horizontal lines. This is perfectly normal and does not mean that the video tape or Video recorder are damaged.

By repeatedly pressing **P/STILL** ■ the picture advances one frame at a time.

If you press **FF** ▶▶, the picture will be slowed down at about 1/19 times the normal playback.

The tape can be paused for up to 5 minutes. The Video will then automatically stop playing in order to avoid damaging the tape or your Video recorder.

Removing the Video tape

Press **EJECT** ▲ to remove the video tape from your Video recorder.

If the end of the tape is reached, your Video will automatically stop, rewind, eject the tape and place itself into stand-by mode.

Instant Timer Recording (ITR)

Your VCR allows you to make recordings using a variety of simple methods:

Instant Timer Recording (ITR) start recording immediately for a set period of time or until the video cassette runs out.

Your VCR incorporates Long Play (LP) which enables you to record up to twice the amount of time on a video tape. For example an E-180 will record up to 180 minutes using Standard Play (SP); using LP you will be able to record up to 360 minutes. EP (using NTSC colour signal) provides three times as much recording time as SP. Please note there will be a slight loss in picture and sound quality when using LP or EP.

1 Make sure that you have correctly connected your VCR as described earlier in this book. Press **POWER** to turn on your VCR.

2 Insert a video cassette with protection tab into your VCR. The video cassette should have the window side facing up and the arrow facing away from you.

3 Press **PR +** or **-** to select the channel you wish to record.

You may also directly select programme number using the **numbered buttons** on the remote control.

4 If you wish to record directly from the SCART or RCA sockets repeatedly press **INPUT** until the socket you wish to record from is displayed.

AV 1 for recording from **EURO AV1 AUDIO/VIDEO** SCART socket on the rear of your unit.

AV 2 for recording from **VIDEO** and **AUDIO** (Left & Right) sockets of **VCR IN AV2** on the rear of your unit.

5 Press **LP** if you wish to record in Long Play or Standard Play.

Tips

- NTSC colour signal : SP or EP
- PAL colour signal : SP or LP

6 Press **REC** ● to start recording. Press **REC** ● several times. Each successive press will increase the record time by 30 minutes until you reach a maximum of 9 hours.

7 Press **P/STILL** ■ to avoid recording unwanted scenes.

Press **P/STILL** ■ to continue recording. If you press **P/STILL** ■ during ITR, this unit will enter the record pause mode and ITR is cancelled. Tapes can be paused for up to 5 minutes. After 5 minutes your VCR will stop recording to prevent damaging the video tape or your VCR.

8 Press **STOP** ■ to end recording.

Notes

- If you do not wish to record on a tape (this can happen quite easily by accident!) remove the protection tab on the back edge of the video cassette.
- It is possible to record on a video cassette with the record protection tab removed by covering the hole with self adhesive tape.



Operation with Satellite Receiver

Viewing General Information

This section explains the general information while watching TV or listening to Radio.

Programme Information

Whenever you press **INFO**, the programme information window will appear for a few seconds.



If you press **INFO** again on the information mode, the detail EPG window will appear.



TV or Radio Channel Lists

While watching TV or listening to Radio you can get the channel list by pressing **ENTER/OK** on the remote controller. Press Up/Down ($\blacktriangle/\blacktriangledown$) to move the cursor. If you press **ENTER/OK** on the desired channel, you can watch the channel screen. And if you want to hide the channel list, press **EXIT/i**.



- Whenever you press **FAV-CH**, the channel mode will be changed as follows: Normal \rightarrow Favorite 1 (\odot) \rightarrow Favorite 2 (\ominus) \rightarrow Favorite 3 ($\omin�$)
- When you want to see the next or previous channel page, press double arrow Up/Down (\bullet/\bullet).
- When you want to get the information about the TV/Radio channel, press **INFO**.
- When you want to sort the channels, press **AZ**.
- If you press **SAT** on the channel list, satellite list appears. At this time, you can see the channel list by each satellite, with selecting a satellite that you want.

Favorite Channel Lists

In the channel list, you can get the favorite channel group list by pressing **FAV-CH** on the remote controller. If any favorite group wasn't registered, the following window will not appear. Refer to "Channel Properties" on page 13 for more details.



Favorite channel group name:
Fav 1 -> Fav 2 -> Fav 3

The button usage of the favorite mode is the same as ones of the normal mode.

Channel list by satellite



You can see satellite list immediately if you press **SAT** while you are watching TV.

At this time, you move to a satellite that you want using by Up/Down button. If you press **ENTER/OK**, channel list of that satellite appears.

Operation with Satellite Receiver

Audio Language Selection

Press **LANGUAGE** on the remote controller to select the desired audio language.

Press Up/Down (▲/▼) to move to a desired audio language and **ENTER/OK** to select it.

The ✓ mark indicates the audio language currently being used. You can select a desired audio language from Audio language menu if only the language is input on the programme.



Audio Output Mode Selection

Press **AUDIO** on the remote controller to set the output direction for speaker.

Whenever you press **AUDIO**, the speaker output mode changes as follows:

Left → Right → Left+Right → Stereo

Setting of speaker output is possible every each channel.

Programme Guide

Press **EPG** on the remote controller, you can get the electronic programme guide if applicable. Press Left/Right (◀/▶) to see the guide about the programme, and then press **INFO**, the detail EPG window will appear.



- Press Up/Down (▲/▼) to move to other channel.
- Press Left/Right (◀/▶) to see the guide about the programme.
- Press **INPUT** to change the TV/Radio mode.
- Whenever you press **FAV-CH**, the channel mode will be changed as follows:
Normal → Favorite 1 (F1) → Favorite 2 (F2) → Favorite 3 (F3)
- Press **EXIT/i** to quit the current menu.

Teletext & Subtitle

Press **TEXT** on the remote controller, the teletext page will be moved to no. 100, and then you can see the teletext contents if teletext is transmitted. Even if your TV does not support the teletext, you can see the teletext contents by OSD.



Sleep

If you press **SLEEP** on the remote controller, the following window will appear. The sleep timer automatically switches the receiver to standby after the preset time elapses.



Press **SLEEP** several times or continuously to select the desired number of minutes. Sleep timer will appear as follows: 120, 90, 60, 30, 20 and 10.

- Press **SLEEP** once. The remaining sleep time will appear on the screen.
- Press **SLEEP** repeatedly until the display Sleep --- appears, and then the sleep timer will be released.
- When you turn the receiver off, the receiver releases the preset sleep time.

Additional Operation - VCR part

On Screen Display

You may easily display the tape counter, amount of tape left, audio mode, channel, tape speed and operational mode of your VCR will appear on the TV screen. If a recording is taking place these On Screen Displays will not be recorded onto the video tape.

- 1 Press **VCR DISPLAY** to display.
The tape counter and amount of tape left will appear if there is a tape loaded.
After 5 seconds the displays are cleared.

- 2 If you press **VCR DISPLAY** again within 5 seconds, only the tape counter and amount of tape left are displayed.
Press **VCR DISPLAY** again to remove the counter and amount of tape left.

Tape Counter Memory Stop

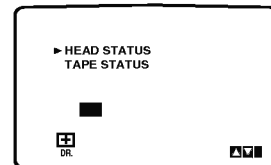
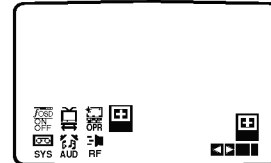
The Digital Tape Counter can be displayed on the display window instead of the time by repeatedly pressing **VCR DISPLAY** on the remote control. The Digital Tape Counter indicates the relative positions of recordings on the tape.

- 1 Press **VCR DISPLAY**.
Press **CLEAR** to set the counter to 0:00:00.
Press **PLAY** ► or start recording.
The tape counter will display the actual play time in hours, minutes and seconds.
- 2 Press **STOP** ■ when playback or recording is complete.
Press **REW** ◀◀.
The tape will rewind and automatically stop when the counter returns to 0:00:00.

Video Doctor (Self-Diagnosis)

This feature informs you that there is a problem with your VCR. These error messages will appear on the TV screen.

- 1 Press **EXIT/i**.
Press ◀ or ▶ to select **DR**.
Press **ENTER/OK**.




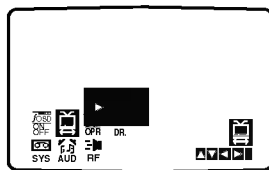
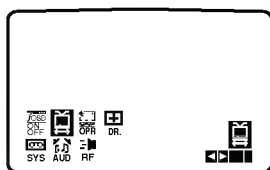
- 2 Press ▲ or ▼ to check a problem.
HEAD STATUS
 - OK
 - **PLEASE CLEAN:**
Clean your video heads.**TAPE STATUS**
 - **RECORDABLE**
 - **NOT RECORDABLE:**
Insert a tape with its protection tab in place
 - **NO TAPE IS LOADED**
- 3 Press **EXIT/i** to remove menus from the TV screen.

Additional Operation - VCR part

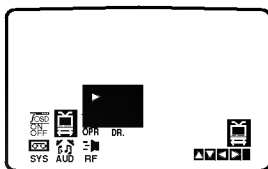
Wide Screen Compatibility 16:9

Your unit can record and play back wide screen aspect ratio programmes (16:9). To record a wide screen format programme successfully the correct type of wide screen signal must be broadcasted by the TV station.

- 1 Switch on your unit.
Press **EXIT/i**.
Press **◀** or **▶** to select .
Press **ENTER/OK**.



- 2 Press **▲** or **▼** repeatedly to select: **AUTO**, **4:3** or **16:9**.
AUTO:
Automatically plays back Wide-Screen programmes as Wide-Screen and Normal programmes as normal.
4:3
Only for playing back and recording normal format recordings (4:3).
16:9:
Only for playing back and recording Wide-Screen format recordings (16:9).



- 3 Press **EXIT/i** to remove the menus from the TV screen.
To enjoy Wide-Screen playback you must connect your unit to the TV using a SCART cable.

Recording from another video recorder

With this video recorder you can make recordings from an external source, such as copying from another video recorder or a camcorder.

Note

In the following description, this video recorder will be one used for recording and will be referred to as VCR B. The other appliance will be used for playback and will be referred to as VCR A.

- 1 VCR A should be connected to the SCART socket on the rear panel of your unit or the AV sockets on the front panel of your unit.
- 2 Insert the recorded tape into VCR A and a blank tape into VCR B.
- 3 Press **INPUT** until the socket you wish to record from is displayed on the VCR B.
AV 1 for recording from **EURO AV1 AUDIO/VIDEO** SCART socket on the rear of your unit.
AV 2 for recording from **VIDEO** and **AUDIO** (Left & Right) sockets of **VCR IN AV2** on the rear of your unit.
- 4 To start recording, press **REC ●** on VCR B and **PLAY** on VCR A.
- 5 When you want to finish copying, press **STOP ■** on both video recorders.

Troubleshooting

There may be various reasons for the abnormal operation of the receiver. Check the receiver according to the procedures shown below.

If you can't solve the problem even after referring this trouble shooting, please contact the dealer. Don't open the receiver cover. It may cause a dangerous situation

Symptom	Cause	Remedy
The front panel doesn't display any message.	The power cord is not plugged in.	Check that the power cable is plugged into the wall outlet.
No picture or sound.	<ul style="list-style-type: none"> Wrong connection of the Audio/Video output or SCART of the receiver to TV. 	<ul style="list-style-type: none"> Connect the Audio/Video output or SCART of the receiver to TV correctly.
	<ul style="list-style-type: none"> Wrong connection of the satellite antenna. 	<ul style="list-style-type: none"> Connect the antenna cable correctly.
	<ul style="list-style-type: none"> No or Bad signal message appears. 	<ul style="list-style-type: none"> Check other device connected between LNB and the receiver, or adjust the antenna position.
	<ul style="list-style-type: none"> Audio muting. 	<ul style="list-style-type: none"> Press MUTE.
	<ul style="list-style-type: none"> Check that you have tuned into a video channel on your TV. 	<ul style="list-style-type: none"> Refer to the "Tuning in a video channel on your TV" on page 9.
No picture or a poor picture.	<ul style="list-style-type: none"> The receiver can't receive the signal. 	<ul style="list-style-type: none"> Check the satellite antenna cable, replace the cable, or connect the cable to the receiver tightly.
	<ul style="list-style-type: none"> Incorrect values of some tuner parameters. 	<ul style="list-style-type: none"> Set the values of tuner parameters correctly in the Installation menu.
		<ul style="list-style-type: none"> Try a different video tape. If the problem is resolved, the problem may have been the video tape itself.
No or bad signal.	<ul style="list-style-type: none"> The satellite dish is not pointing at the satellite. 	<ul style="list-style-type: none"> Adjust the dish.
	<ul style="list-style-type: none"> Signal too strong. 	<ul style="list-style-type: none"> Connect the signal attenuator to the LNB input.
	<ul style="list-style-type: none"> Satellite dish is too small. 	<ul style="list-style-type: none"> Change to a larger dish.
	<ul style="list-style-type: none"> The LNB is faulty. 	<ul style="list-style-type: none"> Change the LNB.
You have forgotten your PIN number.		Contact your dealer, and then reset your receiver.
The remote controller does not operate.	The batteries of the remote controller are not inserted or exhausted.	Check whether the batteries are inserted correctly in your remote controller. Check and replace the batteries of the remote controller.
Poor picture quality.	Low LNB power or signal loss in cable.	Change the LNB power in dish set up menu to 14v/19v.
Less channels in scanning.		

Video Head Cleaning

Whenever a video cassette is inserted into or ejected from your VCR the video head is automatically cleaned. This should mean that additional head cleaning should not be necessary.

However dirt accumulating on the head after a long period of time can cause the playback picture to become blurred or broken up. High quality video cassette tapes will not normally deposit dirt onto the video head, but old or damaged tapes might.

Specification

Tuner & Demodulator

Input Frequency Range	950MHz to 2150 Mhz
RF Input Signal Level	-25 to -65dBm
RF Impedance	75Ω
IF Bandwidth	55MHz/8MHz(Under 5Msps)
LNB Power	13/18DC, 14/19V +/-5%, 0.5Amax, 0.8Apeak overload protected
LNB Tone Switch	22kHz +/-2kHz, 0.6Vpp +/-0.2V
DiSEqC Control	Version 1.2, Tone burst A/B
Demodulation	QPSK
Symbol Rate	1~45Msps/SCPC, MCPC

MPEG

Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Input Rate	Max.15Mbit/s
Video	MPEG-2 MP@ML
Audio	MPEG-1/2 Audio Layer 1,2
Aspect Ratio	4:3, 16:9 Selectable by VCR Menu Setting
Video Resolution	720x576(PAL), 720x480(NTSC)
Audio Mode	Stereo, Dual channel, Joint stereo, Mono
Audio Sampling Frequency	32/44.1/48kHz

Connector

LNB IF input	F type, IEC 169-24 Female
LNB IF Loop-through Output	F type, IEC 169-24 Female
SCART	RGB, CVBS, L, R OUT
Serial Port	RS232C D-sub male type
S/PDIF	Fiber-Optical and Coaxial Digital Audio Output
S-Video	Mini Din connector
3 RCA input	CVBS, L/R IN
3 RCA output	CVBS, L/R OUT

RF-modulator

RF-Connector	75Ω EC169-2, Male/Female
Frequency	470MHz to 860MHz
Output Channel	CH 30-40 for the Demodulator
TV Standard	PAL B/G/I/D/K Selectable by VCR Menu Setting

Power Supply

Input Voltage	110~240V AC(SMPS), 50/60Hz
Power Consumption	Max. 24W
Dimensions	Appr. 430 X 83.5 X 360 mm (W X H X D)
Weight	Appr. 4.9KG
Operating Temperature	0°C~45°C
Storage Temperature	-10°C~50°C

PCMCIA (CAS model only)

Number of Slot	2
Type	I, II DVB Common Interface Standard

- Design and specifications are subject to change without notice.



P/NO : 3834RV0014N