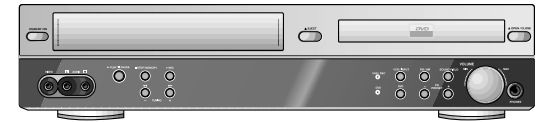




DVD+VCR

HOME THEATER SYSTEM

DVD + VCR HOME THEATER SYSTEM



- ◆ Region code of DVD/Video player for home is 2 or ALL. In inserting a disc with other region code, it does not operate. Please only use a disc with region code 2 or ALL.
- ◆  is a 'Prohibition' mark. If this mark is displayed in operating the product, please wait for a while, then use it. If " Prohibition" mark continues to be displayed in pressing a button after that, it means the button does not function in the currently played disc.
- ◆ Press a product button on the remote control then use the product.
 - DVD operation : [DVD] button
 - Video operation : [VCR] button
 - Radio operation : [FM/AM] button

DCR-9120

| **DAEWOO**

Contents

Product Information

Important Safeguards	2
Advantages of This Product Are	5
Read Carefully before Using	6
Identification of Controls	7
Remote Control	10

Installation

Setting up your player	12
Connecting your player through extra equipment (satellite system).....	13
FM/AM Antenna connection	14
Speaker system connection	15
Connecting with Other Equipment	16
Initial installation	18
Setting time and date, Auto clock.....	19
OSD ON & OFF	20
Output Select	21

VCR Operation

VCR Playback	22
Tuning in New Stations	23
More Functions	25
Connections	30

DVD Setup

DVD initial setting.....	31
• LANGUAGE Setup	31
• DISPLAY Setup	32
• AUDIO Setup	33
• RATINGS Setup	35

DVD Operation

DVD Playback	36
Playing a desired scene	37
Confirming the current PLAY mode on screen	42
AUDIO, SUBTITLE language and SOUND FIELDS	44
ZOOM, Multi Angle	45
About MP3 discs	46
Displaying menus in a disc	47

Recording

Recording	48
Timer Recordings	50
Copying and Assembling	53

Radio Operation

Presetting the radio stations	54
Listening to the radio	55
RDS (Radio Data System) function	56

Speaker Setup



Speaker Setup for enjoying the surround sound effect ..	57
Delay Time Setting	59
Setting the sound level	61


The others


About DVD	62
Basic information about VCR and Videotape	64
Before doubting about troubles (DVD)	65
Before doubting about troubles (VCR)	66
Specifications	68

Important Safeguards

Important Safeguards

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>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.</p>		

 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 of electric shock.

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

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

IMPORTANT FOR LASER PRODUCTS

LASER This Digital Video Disc Player employs a Laser System. 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.
 Use of control adjustments or the performance of procedures other than those specified may result in hazardous radiation exposure.
 To prevent direct exposure to the laser beam, do not try to open the enclosure. Visible laser radiation when open and interlocks defeated.
DO NOT STARE INTO THE BEAM.

DANGER Visible laser radiation when open and interlock failed or defeated.
 Avoid direct exposure to beam.

CAUTION Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

**CLASS 1
LASER PRODUCT**

CAUTION Any changes or modification 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.

- Make sure the unit is placed at least 8cm apart from other home appliances for the appliances to get sufficient ventilation.
- This unit shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on this unit.
- Switching it off does not disconnect it from the mains (stand-by). To disconnect it from the mains, you have to unplug it.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.

- 1 Read Instructions**
All the safety and operating instructions should be read before the unit is operated.
- 2 Retain Instructions**
The safety and operating instructions should be retained for future reference.
- 3 Heed Warnings**
All warnings on the unit and in the operating instructions should be adhered to.
- 4 Follow Instructions**
All operating and use instructions should be followed.
- 5 Cleaning**
Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6 Attachments**
Do not use attachments unless recommended by the unit's manufacturer as they may cause hazards.
- 7 Water and Moisture**
Do not use this unit near water- for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool and the like.
- 8 Accessories**
Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury to a child or adult as well as serious damage to the unit. Use this unit only with a cart, stand, tripod, bracket, or table recommended by the manufacturer.
- 9 Ventilation**
Slots and openings in the case are provided for ventilation to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. These

PORTABLE CART WARNING
(symbol provided by RETAC)



openings must not be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat radiator. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

- 10 Power Sources**
This unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company. For units intended to operate from battery power, or other sources, refer to the operating instructions.
- 11 grounding or Polarization**
This unit is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. To prevent electric shock, do not use this polarized plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted without blade exposure. If you need an extension cord, use a polarized cord.
- 12 Power-Cord Protection**
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- 13 Outdoor Antenna Grounding**
If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984 (Section 54 of Canadian Electrical Code, Part 1) provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See example as shown.
- 14 Lightning**
For added protection for this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent

damage to the unit due to lightning and power line surges.

15 Disc Tray

Keep your fingers well clear of the disc as it is closing. It may cause serious personal injury.

16 Overloading

Do not overload wall outlets of extension cords as this can result in a risk of fire or electric shock.

17 Object and Liquid Entry

Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.

18 BURDEN

Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.

19 DISC

Do not use a cracked, deformed or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

20 Servicing

Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

21 Damage Requiring Service

Unplug this unit from the wall outlet and refer servicing to qualified service personnel under the following conditions.

- A. When the power-supply cord or plug is damaged.
- B. If liquid has been spilled, or objects have fallen into the unit.
- C. If the unit has been exposed to rain or water.
- D. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
- E. If the unit has been dropped or the cabinet has been damaged.
- F. When the unit exhibits a distinct change in

performance-this indicates a need for service.

22 Replacement Parts

When replacement parts are required, have the service technician verify that the replacements he uses have the same safety characteristics as the original parts. Use of replacements specified by the unit manufacturer can prevent fire, electric shock, or other hazards.

23 Safety Check

Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks recommended by the manufacturer to determine that the unit is in safe operating condition.

24 Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

25 Heat

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

- DVD, VCD, CD, CD-R(MP3), CD-RW, VHS playback function
- Watching DVD for recording broadcast
- Integrated remote control (VCR, DVD)
- VISS function (VHS Index Search System)
- Multiplex sound playback/record
- High Sound Quality of 6 head Hi-Fi (Hi-Fi Model only)
- One Touch timer Recording (OTR)
- MP3 file playback function (CD-R disc having records of MP3 files)
- GUI (Graphical User Interface) OSD (On Screen Display)

By using the [DISPLAY] button on the remote control, information on the DVD/VCD/CD player and disc, can be displayed on the TV screen.
- Screensaver function (DVD)
 - Digital Amplification total output power 200 W
 - 30W X 5 satellite speaker system plus 50W Subwoofer
 - Dolby Digital, Dolby Prologic, Dolby Prologic II, DTS compatible
- Various Sound Field effect (Movie, Music, PL EMUL, Matrix, Classic, Hall, Theater)
- High bit / high sampling with 27MHz / 10bit video encoder

This unit has 27MHz / 10bit capability, that enables the faithful reproduction of fine images.
- High bit / high sampling with 96KHz / 24bit audio D/A converter

With this 96KHz / 24bit linear Pulse Code Modulated signals, which constitute the highest specifications in the DVD standards, you can enjoy faithfully reproduced sound in all of its various modes. To support 96KHz sampling / 24bit sound, the shaping noise of this multi-level digital sigma type of D/A converter is kept flat up to 44KHz, thus preventing the important audio signals from being affected.
- Built-in Dolby Digital decoder (DVD)
- Slow Forward / Reverse (DVD) playback

- Fast Forward / Reverse playback
- Search of title, chapter, and time in DVD disc, and search of track and time in VCD and CD
- Various TV aspect (DVD)

4:3 for Pan and Scan, 4:3 for Letter Box, and 16:9 for Wide
- Repeat playback (title and chapter for DVD, track and disc for VCD/CD)
- Repeat a defined period from A to B (DVD/VCD/CD)
- Selective Play (DVD/VCD/CD)

You can select and play the desired title / chapter of DVD and track of Video CD/CD in STOP mode.
- Various languages OSD (On Screen Display) function (DVD)

You can select and display OSD among various languages. (English, French, Spanish, etc.)
- Parental Lock function (DVD)

This function can prevent playback of software that may be unsuitable for children.
- Multi Audio function (DVD)

The audio soundtrack can be heard in up to 9 languages. In the case of SVCD or VCD, it depends on the disc. (The number of audio languages depends on the software.)
- Multi Subtitle function (DVD)

The subtitle can be seen in up to 9 languages. In the case of SVCD or VCD, it depends on the disc. (The number of subtitle languages depends on the software.)
- Multi Angle function (DVD)

This function allows you to choose the viewing angle of scenes which were shot from a number of different angles. (The number of angles depends on the software.)
- Screen zoom function (DVD/VCD)
- Digital FM/AM tuner with 50 station memories

This function allows you to listen the radio broadcasting of FM or AM.
- RDS (Radio Data System) function

Besides listening the radio, this set can receive the radio channel that sends the letter data and display them on the Display window. It calls RDS.

Read Carefully before Using

Cautions in use of DVD-Video player are described below.

Please read carefully before using a DVD-Video player.

Installation place and handling

- When you place this player near other devices, they may affect poorly together.
- When you place DVD-Video player and TV in the upper and lower sides, it may cause flickering of pictures or failure (tape is not ejected).
- When you place this player near strong magnetic materials, it may affect image or voice poorly or damage recording.
- Do not spill volatile liquids like insect spray over the player. Do not leave rubber or plastic products in contact with the player for a long time. They will cause deterioration or paint peel-off.

Not in use

- When the unit is not in use, be sure to remove the disc or tape and turn off the power.
- If you do not use the unit for a long period, remove batteries in remote control to prevent leakage.
- In case you don't use the unit for a long time, the unit may not function properly in the future. Turn on and use the player occasionally.

Moving

- Repack the unit as it was originally packed at the factory. Alternatively, pack this product with towel not to be damaged.
- Eject any videotape.

Cleaning

- Dust off dirt in cabinet or control panel part smoothly with a soft cloth.
- For heavy dirt, soak the cloth in a weak detergent solution, wring it well and wipe. Use a dry cloth to wipe it out.
- Follow instructions in using chemical cleaners.
- Do not use any type of solvent such as gasoline or benzene, as they may cause deterioration or paint peel-off.

Checking

- Video is a high precision device. To obtain a clear screen, we recommend regular inspection and maintenance every 1,000 hours of use by technical engineers.
- For checking, contact your dealer or your nearest service center.

Checking and Replacement of Antenna

- Antenna is subject to change in its direction or damage by wind and rain. For clean screen, contact and consult your nearest service center about checking and replacement.

In recording important screen

- Be sure to record the screen and check whether recording is performed properly. Please understand compensation of recording if recording is performed using low quality tapes or videos.

Copyright

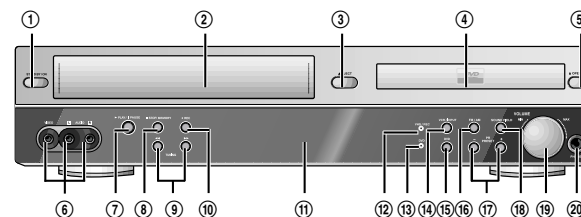
- Do not use your recordings without permission of a copyrighter except personal usage.

Tape and Disc Handling

- Do not use any tape and disc below. Damage of video head or cut/coiling of tape may cause failure.
 - Tape with mold
 - Tape or disc stained with juice or attachments
 - Tape having breakage connection
 - Disassembled tape
 - Disc with severe scratch
- Moisture condensation may occur in tape. Moisture condensation damages the tape. Please use the tape after the moisture condensation is disappeared.
- After use, store tape vertically in a case to prevent loose.
- Do not store the following places.
 - High temperature and humidity
 - Subject generation of mold
 - Subject to direct sunlight
 - Much dirt or dust
 - Near strong magnetic materials such as speaker

Identification of Controls

Front panel



① Power (STANDBY/ON) button

Use to power the device on/off if AC power supply is connected.

② Place to insert videotape

Eject the desired tape.

③ Eject button

Use to eject the tape.

④ Disc tray

⑤ Open/Close Tray button

Open or close tray by pressing [OPEN/CLOSE] button. Place a disc on the disc tray, label side up.

⑥ Video / Audio input jack

Connect a cable coming from the video/audio out jacks of a camcorder, another VCR, or an audio visual source here.

⑦ Playback/PAUSE button

Playback videotape or disc. Press this button to pause a screen.

⑧ Stop/MEMORY button

Use to stop playing a tape or disc. Use to memory radio stations.

⑨ Tuning & Search -/+

Search- (◀◀): Use to rewind currently being played videotape or disc; or to playback back rapidly.

Search+ (▶▶): Use to wind currently being played videotape or disc; or to playback rapidly.

Tuning -/+ : Scan all available radio stations.

⑩ Record button

Record a programme from TV or other sources (except DVD).

⑪ Operation Display Window

Display operation of device. For more information, see "Operation Display Window" in the next page.

⑫ VHS/REC indicator

Illuminate in VCR mode.

⑬ DVD indicator

Illuminate in DVD mode.

⑭ VCR/INPUT button

Use to change into VCR or other output mode.

⑮ DVD button

Use to change into DVD mode.

⑯ FM/AM button

Use to change into RADIO mode.

⑰ PR & Preset - / +

Used to select the memorised TV broadcasting program or radio stations.

⑱ SOUND FIELD button

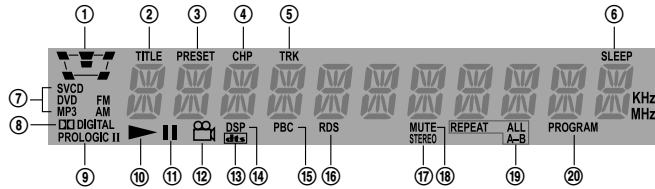
Use to adjust the Sound Fields.

⑲ Volume control

Change the loudness of the sound from the speakers connected to the unit.

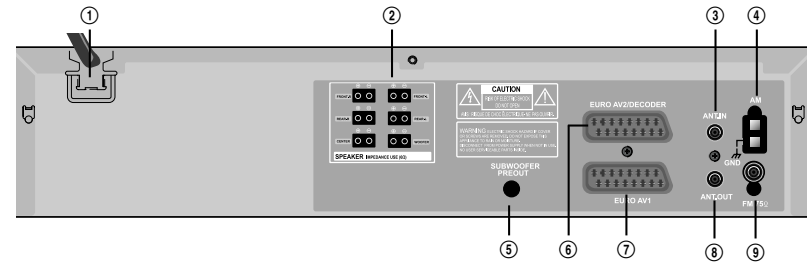
⑳ Headphone jack

Operation Display Window



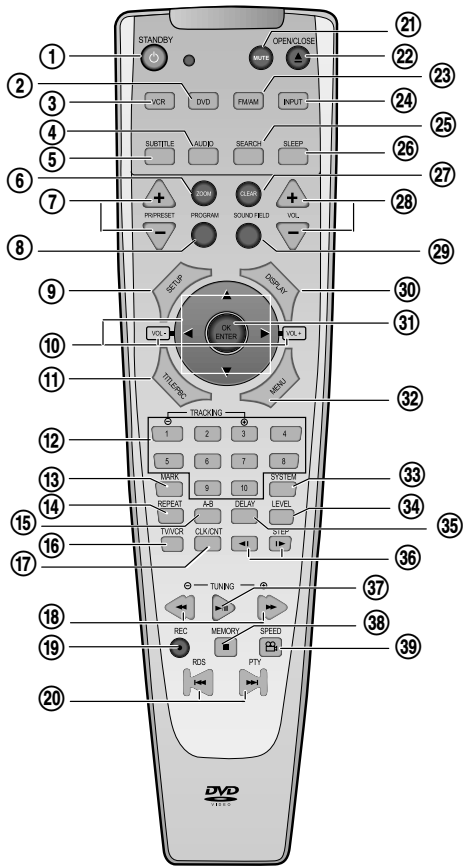
- ① Speaker setup indicator
- ② Title indicator
- ③ Memorized radio stations
- ④ Chapter indicator
- ⑤ Track indicator
- ⑥ Sleep time indicator
- ⑦ Playback disc indicator
- ⑧ Dolby Digital indicator
- ⑨ Prologic II indicator
- ⑩ Pause indicator
- ⑪
- ⑫ Multi angle indicator
- ⑬ DTS indicator
- ⑭ DSP indicator
- ⑮ PBC (Playback Control) indicator
- ⑯ RDS indicator
- ⑰ FM Stereo indicator
- ⑱ Mute indicator
- ⑲ Repeat playback indicator
- ⑳ Program indicator

Rear Panel



- ① Power Cord
It is a jack for supplying power to the unit.
Connect to outlet in a wall.
- ② Analog 5.1 Speaker Out Jack
Connect each of the speaker wires to the satellite speakers.
- ③ Connection to Antenna Cable
- ④ AM Antenna Jack
- ⑤ Woofer Out Jack
- ⑥ EURO AV2/ DECODER
- ⑦ EURO AV1
- ⑧ Connection to TV
- ⑨ FM Antenna Jack

Remote Control



- ① STANDBY/ON button
- ② DVD SELECT button
- ③ VCR SELECT button
- ④ [DVD] AUDIO LANGUAGE Select, [VCR] AUDIO Select button, [RADIO] Set FM Mode to Stereo or Mono sound
- ⑤ [DVD] SUBTITLE Select button
- ⑥ [DVD] ZOOM button
- ⑦ [VCR] Channel Up/Down button, [RADIO] Tune to the presetted stations
- ⑧ [VCR] TIMER RECORDING button, [DVD] PROGRAM button
- ⑨ SETUP button
- ⑩ [DVD, VCR] Use to highlight selections on a menu and adjust certain settings [RADIO, DVD, VCR] Adjust the volume
- ⑪ [DVD] TITLE /PBC button
- ⑫ [DVD, VCR] NUMBER button , [VCR] TRACKING -/+ button
- ⑬ [DVD] MARK button
- ⑭ [DVD] REPEAT Playback button
- ⑮ [DVD] REPEAT a defined period from A to B button
- ⑯ TV/VCR Select button
- ⑰ [DVD, VCR] CLOCK/COUNTER button
- ⑱ [DVD, VCR] FORWARD / REVERSE SEARCH button, [RADIO] Scan all available radio stations
- ⑲ [VCR] Record button
- ⑳ [DVD] PREVIOUS (move into a previous chapter or track) / NEXT (Move into a next chapter or track) button, [RADIO] RDS/PTY button
- ㉑ SOUND MUTE button
- ㉒ [DVD] OPEN/CLOSE button, [VCR] EJECT button
- ㉓ [RADIO] FM/AM Select button
- ㉔ VCR INPUT button
- ㉕ [DVD] Chapter/Title/Time SEARCH button
- ㉖ SLEEP button
- ㉗ CLEAR button
- ㉘ VOLUME CONTROL buttons
- ㉙ SOUND FIELD button
- ㉚ [DVD, VCR] OSD DISPLAY button
- ㉛ ENTER (Confirm selections on a menu screen) button
- ㉜ [DVD] MENU button
- ㉝ SYSTEM select button (This button is not available for this set)
- ㉞ Sound LEVEL button
- ㉟ DELAY button
- ㊱ [DVD] Slow Forward/ Reverse button, [VCR] Slow speed button, [DVD, VCR] Frame advance (step) in still mode
- ㊲ PLAY/PAUSE button
- ㊳ STOP/MEMORY button
- ㊴ [DVD] ANGLE, [VCR] Record SPEED button

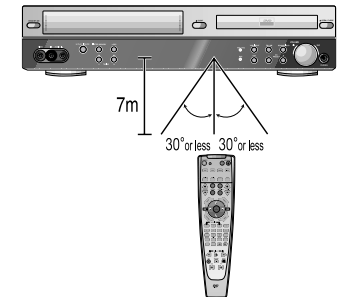
Child Lock!!!

Press the power [⏻] button of the remote control for about 8 seconds. No buttons of front panel can be operated now and Lock indicator ("L O C K") will be displayed on window display. To release child lock, press any button of the remote control.

Remote Control

Instructions in using remote control

- Operate remote control within 7m from the unit.
- Do not press two buttons at the same time.
- Do not light up sending part of remote control.
- Do not keep in the place with much dust and humidity.



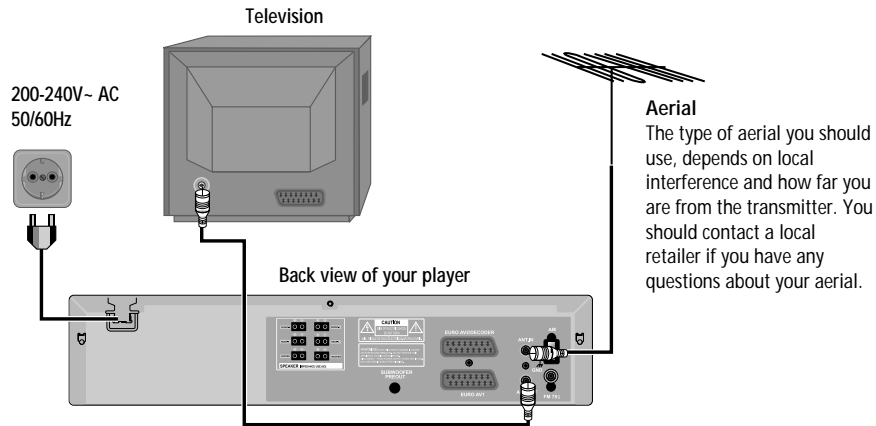
Accessories

Remote Control 	2 Batteries 	RF cable 	Owner's Manual/ Warranty 	AM antenna
FM antenna 		Unpacking The Speakers <ul style="list-style-type: none"> • one set of speakers including 1 set of left and right front speakers, 1 centre speaker, 1 subwoofer and 1 set of left and right rear speakers. 		
6 Speaker Cables: 		Front Speakers 	Center Speaker 	Rear Speakers (Surround Sound)
<ul style="list-style-type: none"> • 1 X green/black wire for center speaker • 1 X red/black wire for front right speaker • 1 X white/black wire for front left speaker • 1 X purple/black wire for subwoofer • 1 X blue/black wire for rear left speaker • 1 X gray/black wire for rear right speaker 		Subwoofer 		
<ul style="list-style-type: none"> • To purchase accessories or parts not supplied, contact your nearest dealer or service center. But, owner's manual and warranty are not sold additionally. 				

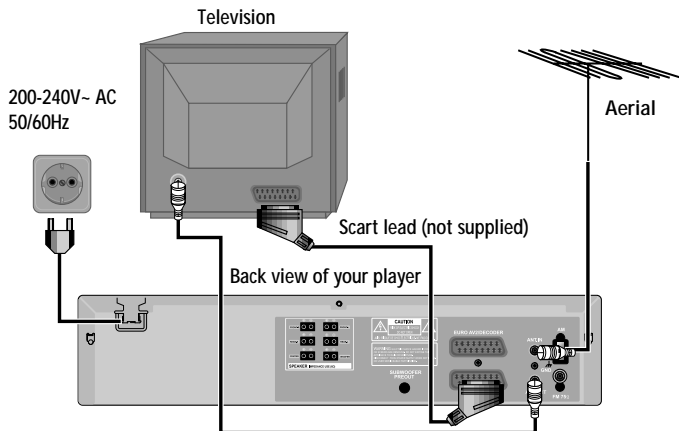
Setting up your player

- Before you start, unplug all the equipment from the mains supply.

(Option 1) - Connecting your player through RF lead



(Option 2) - Connecting your player through SCART lead



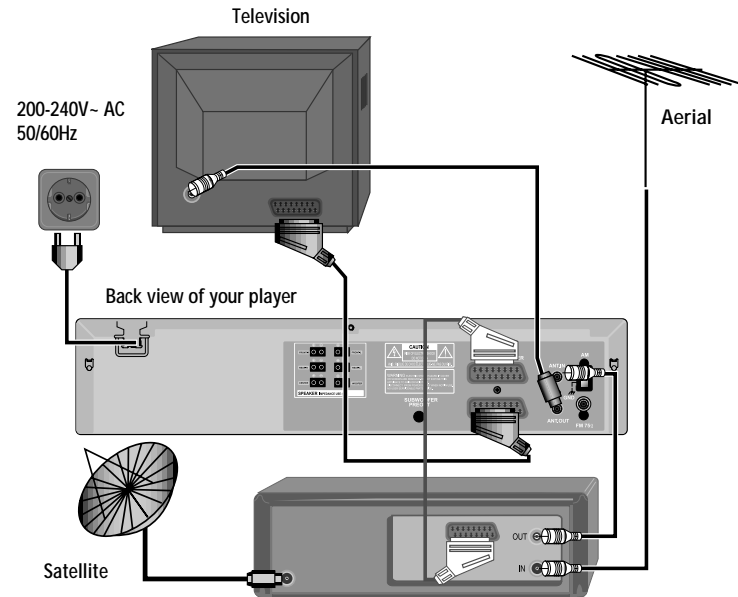
With this connection, if your player is receiving CH ARD and your TV is displaying CH3, when you press the [TV/VCR] button on the remote control, your TV will automatically display the CH ARD. "VCR" will be displayed.

In this mode, to change the viewing channels the [PR/PRESET] buttons on the player remote need to be used. To switch off this mode press [TV/VCR] on the remote control, TV remote can now be used as normal. You will get better pictures and sound quality if you connect your player with a scart lead.

Connecting your player through extra equipment (satellite system)

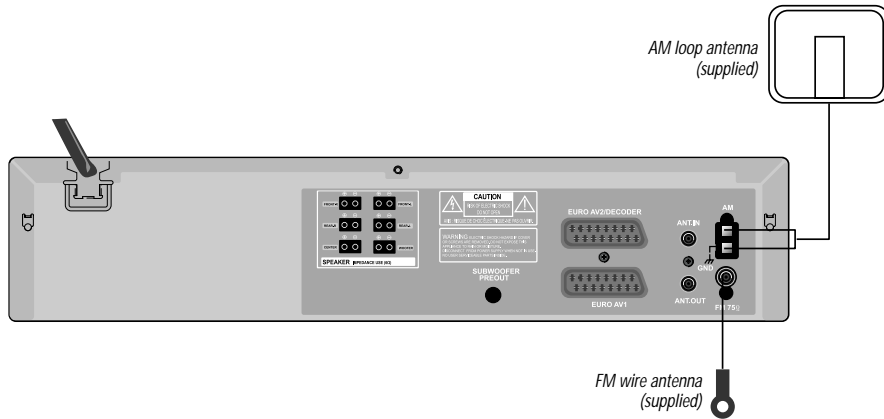
- Before you start, unplug all the equipment from the mains supply.

(Option 1) - Connecting your player through RF lead



You can use this connection if your player has two scart sockets. This will improve sound and picture quality when you are recording from satellite.

FM/AM Antenna connection



Connect the supplied FM/AM antennas for listening to the radio.

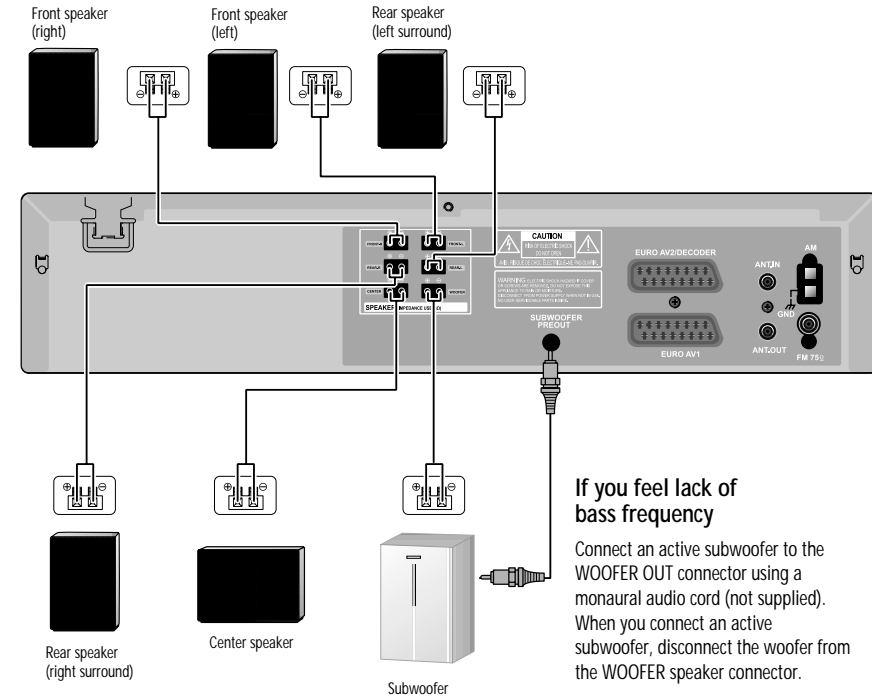
- Connect the AM loop antenna to the AM antenna connector.
- Connect the FM wire antenna to the FM antenna connector.



- To prevent noise pickup, keep the AM loop antenna away from the DVD Receiver and other component.
- Be sure to fully extend the FM wire antenna.
- After connecting the FM wire antenna, keep it as horizontal as possible.

Speaker system connection

Connect the speakers using the supplied speaker cords by matching the colors of the terminals and those of the cords. To obtain the best possible surround sound, adjust the speaker parameters (distance, level, etc.)



If you feel lack of bass frequency

Connect an active subwoofer to the WOOFER OUT connector using a monaural audio cord (not supplied). When you connect an active subwoofer, disconnect the woofer from the WOOFER speaker connector.

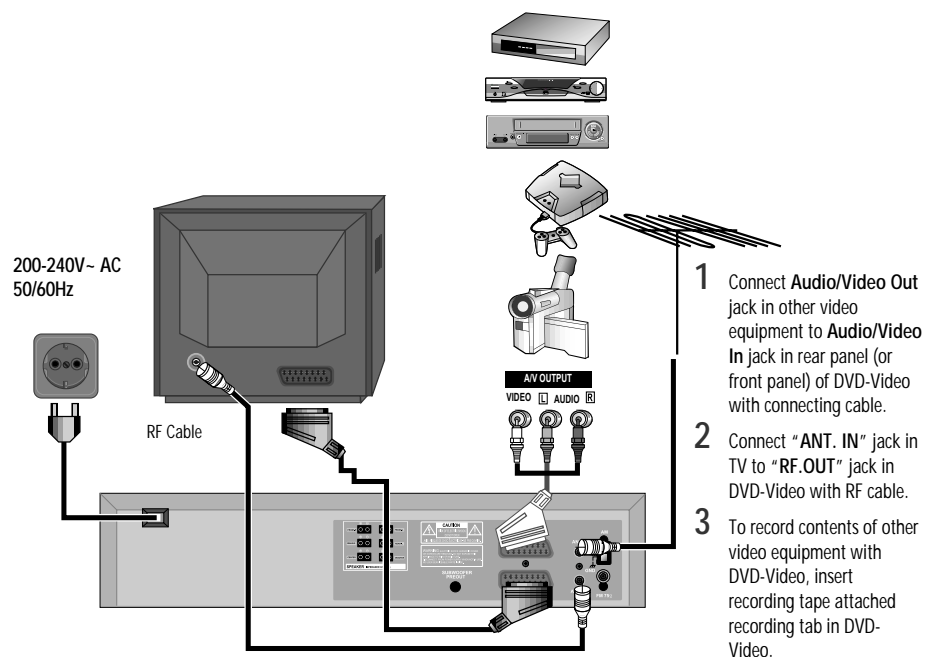


- Be sure to match the speaker cord to the appropriate terminal on the components: + to + and - to -. If the cords are reversed, the sound will be distorted and will lack base.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
- Do not disassemble the front cover of supplied speaker.

Connecting with Other Equipment

- You can connect a wide variety of audio/video equipment to your DVD-Video, including : an additional VCR, Laser Disc Player, DVD Player, Camcorder, Satellite Receiver, Video Game. Since all of these devices use essentially the same connections, they will be described together.

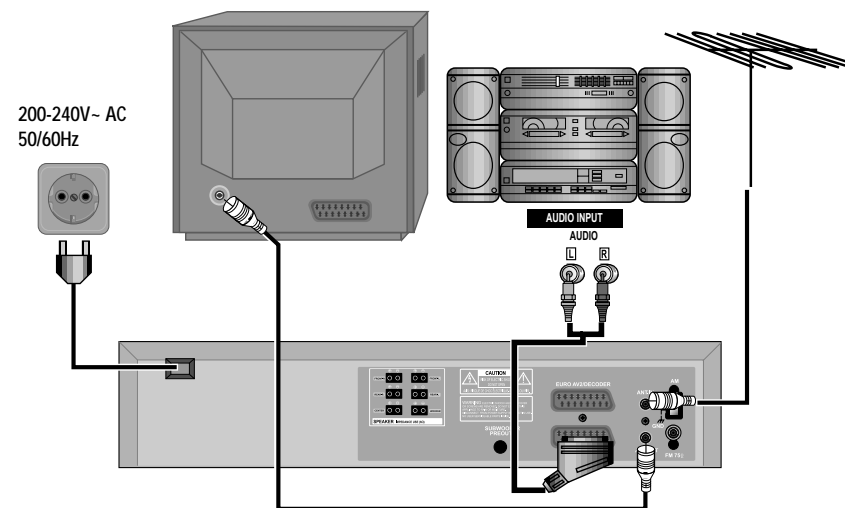
Connection with other video equipment



How to Copy (Edit) Tape with Other Video Equipment

- 1 Turn on the unit.
 - 2 Insert a recordable tape to the machine to record.
 - 3 Press [INPUT] button to select the video equipment's input is copied.
 - 4 Check the video signal in other video equipment. If video in the other video equipment is correctly displayed on TV screen, Press [REC] button in your player.
 - 5 Press [PLAY/PAUSE] button in DVD-Video when unnecessary or undesired scene is displayed in recording.
- (Caution) Recording is released automatically after 5 minutes since pressing [PLAY/PAUSE] button. Press [REC] button if you want to record again.

Connection with Hi-Fi system



- 1 Connect Audio jack. Connect **AUDIO OUT** in rear panel of DVD-Video to **In** jack of stereo sound unit.
- 2 For Input Select in stereo unit, Select "External Input" connected with DVD-Video.
- 3 Playback DVD disc or Hi-Fi videotape, you can hear sound in speaker of stereo unit.

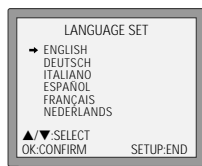
Initial Installation

- Switch the TV on.
- You can also start "AUTO SET" in the SETUP "PR PRESET" → "AUTO SET".
- To tune in new stations (manual tuning) and to enter station names see page 23-24.

Setting up the player

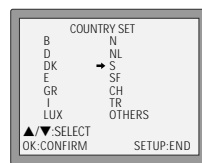
1 You should see this picture the first time you switch on the TV and player.

Choose your language.

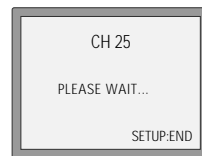


2 Then choose your country.
For selecting the country, refer to the followings.

B: Belgium	I: Italy	SF: Finland
D: Germany	LUX: Luxembourg	CH: Switzerland
DK: Denmark	N: Norway	TR: Turkey
E: Spain	NL: Netherlands	
GR: Greece	S: Sweden	

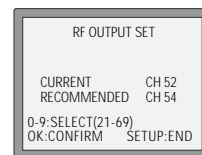


3 OK for "AUTO SET!".
"AUTO SET" tunes in all the stations you can receive in your country and sorts them in an order common for your country. Clock is automatically set.



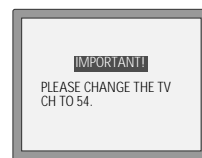
4 If other stations are positioned on near the current RF OUTPUT CH, the guide message appears automatically.

The player recommends the optimal RF OUTPUT CH number automatically.



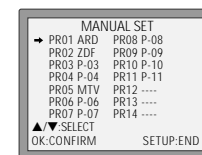
5 Press the [OK] button to confirm the recommended PR.
Should you wish the stations to have the same numbers as those used on the TV, follow the instructions in "Sorting programme locations" on page 24.

Else ...
exit the basic installation function and enjoy your player.



- If you don't see this picture, because you don't use a SCART cable, search this picture now (CH 52) with the station tuning functions of your TV set (see its user manual).

RF 52 In case of interference problems on CH 52, type in an other transmission channel between 21 and 69 using the number buttons.

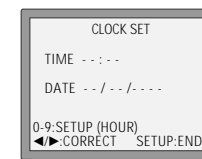


Setting time and date / Auto clock

Setting time and date

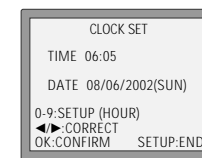
- Press [VCR] button on the remote control to change into VCR Mode and follow the procedure below.

1 Call the player's "SETUP", choose "VCR SETUP", then "CLOCK SET".



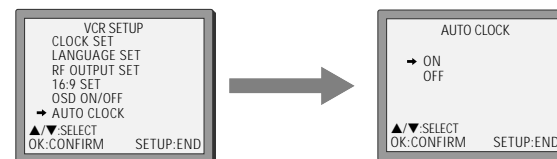
2 Move to the position you want to change and type in the new values.
Wait a few seconds after typing a one-digit number.

Store with [OK] button and exit with [SETUP] button.



Setting Auto clock

- Auto Clock is only available for models with the VPS/PDC function (see page 50). Some broadcasting stations may send the time and date along with the VPS/PDC data. The video will automatically use this time and date during the initial setting up procedure during normal use, and every time you switch the video off at the mains. If you find that this time and date is incorrect you can remove this feature by following the steps below changing it to OFF mode, you will then have to manually set the time and date, see above.



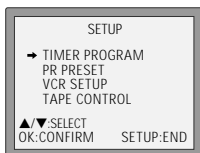
OSD ON & OFF

OSD (On Screen Display) ON & OFF

This player is set to "OSD (On Screen Display) ON" mode before shipping and you can change it to OFF mode.

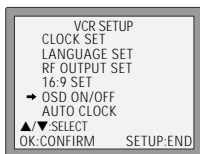
1

Call the player's "SETUP".



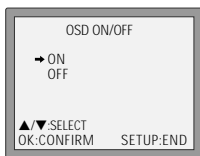
2

Choose "VCR SETUP".
And press the [OK] button.



3

Select "OSD ON/OFF".
If you want OSD OFF mode, select it and press [OK] button to confirm.
Then OSD characters are not displayed in the normal picture.



Output Select

To Select DVD

Press [DVD] button.

If DVD mode is correctly selected, DVD indicator on the front panel is lighted. Then, remote control button works as DVD function. Press the [DVD] button, then the mode of DVD-Video Player becomes to the DVD OPERATION mode.

To Select VCR

Press [VCR] button.

If VCR mode is correctly selected, VHS indicator on the front panel is lighted. Then, remote control button works as VCR function. Press the [VCR] button, then it becomes to the VCR OPERATION mode.

To Select Watch Modes or External Input

Press [INPUT] button.

Whenever you press [INPUT] button, BROADCASTING RECEPTION and EXTERNAL INPUT are selected in order.

To Select Radio

Press [FM/AM] button.

The character of Radio will be displayed on the blue back TV screen. Whenever you press [FM/AM] button, FM and AM broadcasting are selected in order.

VCR Playback



- 1 Press [⏻] button to power on.
Press [VCR] button of remote control to change into VCR mode.
- 2 Insert the desired tape.
- 3 If you want to playback it, press [PLAY/PAUSE] button.
When the operational status is flickering or poor, adjust it with [TRACKING +/-] button.
- 4 To stop it, press [■] button.
For pause, press [PLAY/PAUSE] button in playback mode.
If you press this button once more, it starts playback again.
- 5 Press [EJECT] button in the front part or [OPEN/CLOSE] button on remote control to remove the tape.

Various Playback Methods

- If you want fast forward (or reverse) playback, press [▶▶] or [◀◀] button in Playback mode. You can watch fast playing (rewinding) screen.
- If you want Still picture, press [PLAY/PAUSE] in Playback mode. You can watch the desired screen in pause status.
- If you want slow-motion playback, press [▮▶] button in Playback mode. You can watch the desired screen in the slow forward playback.
** NOTE: VCR doesn't have Slow Reverse Playback function.*
- If you want to watch a series of screens one by one (FRAME ADVANCE), press [▮▶] button in Pause mode. Each time you press this button, the picture advances one frame.

To Adjust Display

This product includes automatic Tracking function and enables users to enjoy clear picture without an additional operation. Provided that the following problems can be solved by the manual adjustment, which improves display quality. (During automatic display adjustment, "Adjusting Display" are displayed on TV screen.)

- If the screen is poor in Playback mode,
- If noises occur in the upper or lower part of screen in slow playback mode,
- If paused picture vibrates up and down.

Use [TRACKING +/-] buttons of remote control to adjust the display suitable for watching.

If the product, which has an auto-detector, detects a contaminated head(s), it shows the conditions to notice the contamination on screen.

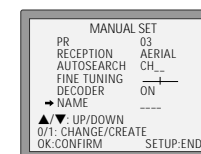
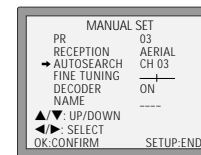
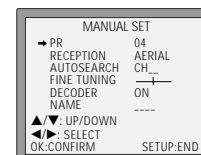
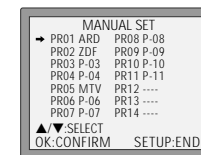
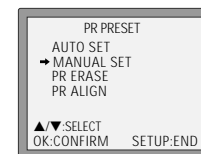
* In case of the notice on screen, please rub the heads with a head-cleaner followed by "How to use a head-cleaner".

Tuning in New Stations

- The TV and player are switched on.
- To see the picture from your player, press the station button on the TV reserved for player input or the AV (Audio / Video) button.
- "AV1/2" should not be selected with the AV button on the player.

Tuning

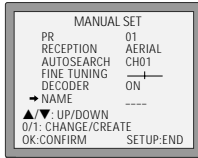
- 1 To complete the set-up of your video recorder when the auto set has not stored all of the channels or when you wish to store a new channel.
Call the video's "SETUP", choose "PR PRESET".
- 2 Select "MANUAL SET".
- 3 Choose any unused location number "----" or "P-xx" ...
It's simplest to use the same location number on both the TV and video.
... and confirm.
- 4 Set the station you want:
 - the programme location number;
 - the broadcast system you want (Aerial(CH) or Cable(CC)),
 - You can directly enter the real channel number with the [0 to 9] buttons, or search by pressing [◀▶],
 - The fine tuning you can adjust,
 - When the program is encoded (and you have a decoder connected to socket EURO AV2), press the [◀ ▶] to select ON or OFF.
 - Change or create the station name.
- 5 Once you see the station you want, store it.
Tune in further stations (from step 3 onwards) or exit tuning mode.



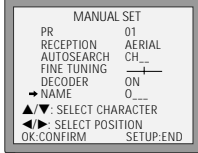
Station names

- If your player is showing no station name or is showing a station name incorrectly, you can correct this.

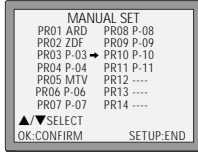
- Call this menu (just see the previous page), if it isn't displayed.
Select NAME position.
Press the [0] button to change the given name.
Or press the [1] button to create the station name.



- Either select the name from the stored list or you create the station name and enter a 4-digit name.
Change the letters with the [▲/▼] buttons, move to the next letter with the [◀/▶] buttons.



- Store and exit.



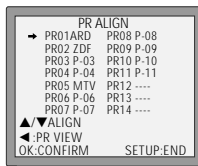
Sorting programme locations

If the location numbers used for programmes stored in your TV and player are different, you can change them on the player. To do this, move the stations to the right numbers, until they are arranged the way you want.

- Call the player's "SETUP", choose "PR PRESET" then "PR ALIGN".

- Select the programme to swap.

Confirm by pressing OK button.
Move the station to the desired location number.
Confirm by pressing OK button.



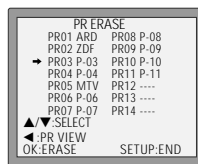
Clearing programme locations

- Call the player's "SETUP", choose "PR PRESET" then "PR ERASE".

- Select the station (location number) you want to clear.

Review the picture by pressing [◀] button.

Clear by pressing OK button.



More Functions

- The counter counts in real time from the point you load the cassette. This does not have to be its beginning! The counter does not count unrecorded parts of the tape.
- If you rewind beyond the zero position, the counter counts in negative values (e.g. - 0:01:15).

Clock / counter display

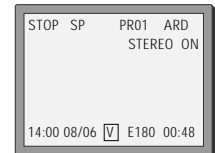
Each time you press [DISPLAY] button,

1x: Time and date+current status → Time and date

2x: Counter+current status → counter

3x: disappear.

But if you press [CLK/CNT] button, clock and counter on display window will change each other.



- If didn't wind tape (PLAY, FF, REW,...), it doesn't appear the tape remain time.
- In case that the timer recording information is inputted in the received broadcasting signal, press the button to display the VPS/PDC icon.

Remaining time and cassette length



Call the player's "SETUP", choose "TAPE CONTROL"
• Remaining time display is only possible when the cassette is loaded.

When you want the player to show the time remaining from the current player tape position (to find out if there is sufficient space for a recording, for example).

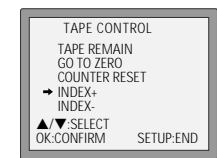
To ensure the remaining time shown is accurate, select the length of cassette currently loaded by selecting this function until you reach the correct length.

Searching a recorded program with index

When you record a program, the VCR places an index mark at the start of the recording.

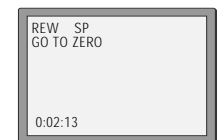
To search for an index mark

- Call the player's "SETUP", choose "TAPE CONTROL"
- Choose index + to search forward or index - to search backward.
The VCR will locate your index mark and begin playback.



Accessing counter zero position

The player will wind to the position 0:00:00 and stop.



Resetting the counter to zero

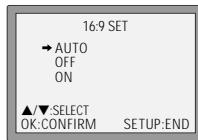
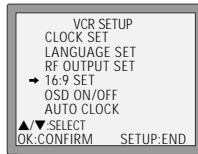


Reset the counter.

16 : 9 Wide Screen Format Playing back / Recording

You can play and record the program of 16:9 Wide-Screen format with this player .

- **16:9 Set**
- Auto : This video automatically detects the program format (16:9 or 4:3) and records or plays this program in the same format.
- ON : The video will play or record all broadcasts in 16:9 format. 4:3 broadcasts will be converted to 16:9 format.
- OFF : The video will play or record all broadcasts in 4:3 format only.
- If you watch a program which is recorded by 16:9 wide screen format with this player, your TV must have 16:9 wide screen function and you have to connect TV and player with the A/V scart.



AUTO REPEAT

If you press the [PLAY/PAUSE] button for 5secs during stop or still mode, it goes Auto repeat mode. This player plays repeatedly the tape from the beginning to end parts.

To release this mode, press the [] button or mode operation button. (PLAY, FF, REW or STOP)

SETUP languages

Call the player's "SETUP", choose "VCR SETUP", then "LANGUAGE SET".

Select your language.
Confirm.



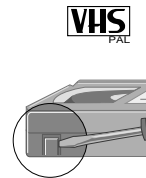
Child lock

Press the [] button for about 5 seconds.

No buttons of front panel can be operated now and LOCK INDICATOR ("LOCK") will be displayed on window display. Keep your remote control in a safe place.

To release child lock, press any button of the remote control.

Cassettes



Use only good quality tape cassettes with the VHS logo.

- Keep cassettes away from excessive moisture or dust, magnetic and electrical fields (loud speakers and computer monitors, for example).
- Always wind the tape to the beginning when you have finished. Store with the full spool at the bottom and with the cassette in its cover.

You can protect your precious recordings from being wiped by breaking out the safety tab on the side of the cassette (some cassettes have a slide). Should you wish to re-use the tape after removing the tab, cover the hole with adhesive tape.

and ...

Dimmer : Your player dims its display when switched to stand-by mode.

Auto power off : Your player switches to stand-by when no tape is played and no station is received for more than 5 minutes.

The Hi-Fi system

Your player machine is equipped with a high-quality Hi-Fi sound system.

This means you can enjoy

- films with excellent stereo sound
- films of full-length concerts in high quality stereo
- films with impressive Surround Sound using additional Surround equipment
- films with two dialogue modes (dual, bilingual), usually the original sound track and dubbed sound track
- VHS cassettes with Hi-Fi stereo sound and VHS cassette with normal sound

What you can listen to

During Stop, the player displays what the current station is broadcasting. When you switch to another station or the current station changes the sound mode, your player displays the programme and sound mode on screen (if not, press AUDIO).

- "STEREO" = stereo
- "BIL I / BIL II" =bilingual
- nothing= monaural sound



During Playback, the player displays what is recorded on the cassette (if not, press AUDIO).

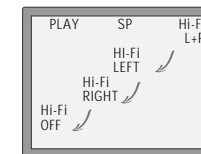
- "Hi-Fi" = stereo/bilingual
- nothing = monaural sound



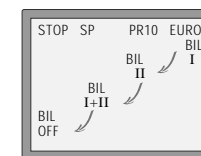
Choice of sound output

During a stereo performance (playback-"Hi-Fi"/ broadcast - "STEREO"):

Hi-Fi stereo → left audio channel only → right channel only
 → the normal mono sound track of a Hi-Fi cassette



- During broadcasting a bilingual performance : Main language (original sound track) → sub-language (dubbed) → both main language and sub-language → OFF.



Connections

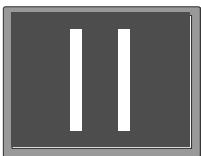
- If you are using a SCART cable, select the AV input on the TV to see the picture from the player.
- If you are not using a SCART cable, select the button number on the TV reserved for video input to see the picture from the player.

To the TV via antenna cable (if you are not using a SCART cable)

If you are not using a SCART cable, your player can transmit pictures and sound to the TV via the coax aerial cable. Just tune the TV to the player's transmitting channel (factory set to UHF CH 52). Tune the TV carefully to ensure the best pictures and sound.

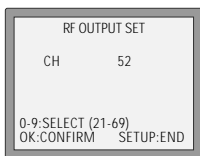
1

Once you have carried out the steps in "Connecting up the player", switch on your TV. Press the [OK] button of the player's remote control longer than 5 seconds to call the player's test picture. Tune the TV to the test picture using the channel pre-set functions of your TV as described in its manual. When you have found the test picture, store it under the button number on your TV for player input. Press the [OK] button of the player's remote control again longer than 5 seconds to release the test picture.



2

If the quality of the test picture transmitted to the TV is poor due to interference caused by a station transmitting on channel 52, you can tune the player to a different transmitting channel. Find a free channel between 21 and 69 on your TV. Call the player's "SETUP" choose "VCR SETUP" then "RF OUTPUT SET". Type in the free channel. Store and exit.



- If the quality of the test picture transmitted to the TV is poor, fine-tuning on the TV may help (refer to the TV manual).
- Without a scart cable, you will not get stereo sound from a TV capable of stereo sound.

DVD initial setting

LANGUAGE Setup

- A user can set OSD language, Audio, Subtitle and Disc Menu.

1

While STOP or RESUME STOP, press [SETUP] button.



2

Select "Audio" by pressing [▲/▼] button.

Set it as the preferred audio language. In case the audio language is set and recorded in the DISC, it is automatically played in the set language in every playing.



3

Select "Subtitle" by pressing [▲/▼] button.

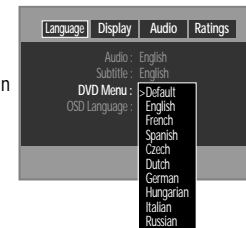
Please set it as the preferred language. In case the subtitle language is set and recorded in the DISC, it is automatically played in the set language in every playing.



4

Select "DVD Menu" by pressing [▲/▼] button.

Please set it as the preferred DISC MENU language. In case the DISC MENU language is set and recorded in the DISC, it is automatically played in the set language in every playing.



5

Select "OSD Language" by pressing [▲/▼] button.

Please select a language to be displayed on DVD screen.



"OSD" means "On Screen Display".

In case a disc does not include setting languages information, the selected language does not appear.

VCR Operation

DVD Setup

DISPLAY Setup

- A user can set up a connected TV condition and screen.

1 While STOP or RESUME STOP, press [SETUP] button.

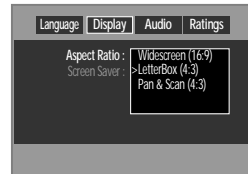
By pressing [◀/▶] button, select "Display".



2 Select "Aspect Ratio" by pressing [▲/▼] button.

Press [ENTER] button to select the desired setting.

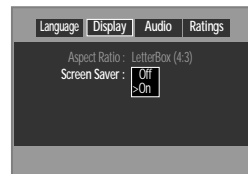
- If a user selects "Pan&Scan (4:3)", the user can watch only a center of the original scene of "16:9".
- If a user selects "Letterbox (4:3)", the user can watch the original scene of "16:9", but the top and bottom of the screen look black color.
- If a disc size is originally recorded in 4:3, a user cannot watch it in a wide screen though a user sets a size as "Widescreen 16:9".



3 Select "Screen Saver" by pressing [▲/▼] button.

Press [ENTER] button to select the desired setting.

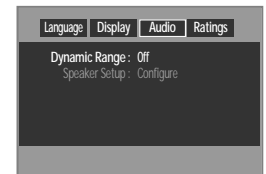
If bright scenes continue to be displayed in screen, TV can be damaged. Set the screensaver to "On", the screensaver functions automatically and DVD logo moves continuously if the resume stop, stop, pause, open status is maintained for about 5 minutes.



AUDIO Setup

- A user may select audio menu according to a user's speaker set.

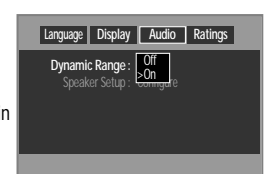
1 While STOP or Resume STOP, press [SETUP] button.



2 Select "Dynamic Range" by pressing [▲/▼] button.

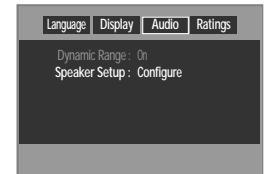
You can set following 2 values of Dynamic Range.

- Off : You can hear the same sound as recorded in disc.
- On : You can hear loud sound softer and soft sound louder.



3 Select "Speaker Setup" by pressing [▲/▼] button.

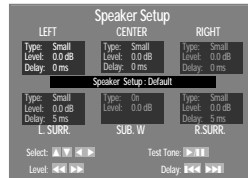
Press [ENTER] button to enter into Speaker Setup screen.



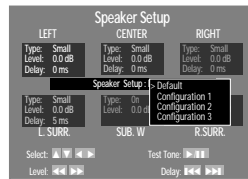
4 After selecting "Speaker" by pressing [▲/▼/◀/▶] button, adjust the Level by pressing [▶▶/◀◀] button and adjust the Delay by pressing [◀◀ ▶▶] button.



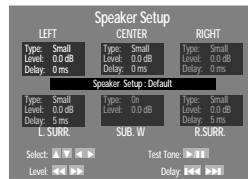
5 To hear the test tone of speaker is set, press [▶/||] button.



6 Select "SPEAKER SETUP: DEFAULT" between CENTER and SUB. W in the Speaker Setup menu and press [ENTER] button.



7 From Configuration 1 to 3 is correspondent with the position of speaker. Select the proper configuration for your speaker type.



- In case of using the supplied speaker without another purchasing, you will get better result if you select default mode.
- In case of configuration 2 or 3, it is impossible to adjust the Level setting for the Woofer (WF).

* Speaker type

- Small type : Speaker applied with high-pass filter. (supplied speaker)
- Large type : Speaker applied without high-pass filter.

The provided speakers are "small" type. Under the condition of the "Large" type speaker setup, the "small" speakers will be exposed to damage.

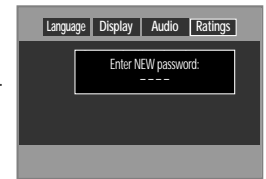
RATINGS Setup

1 While STOP or RESUME STOP, press [SETUP] button.



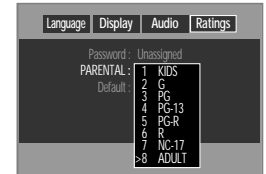
The initial password is 3308. In case you forget newly-input password, you can use 3308 as a password.

2 Entering a NEW password. Input password display appears. Enter a user's password by pressing 4 [Digit] buttons.



"Parental Lock" activates only if you set a password and the unit goes into Lock status. When the disc has no parental function even if the disc for adult only, Parental Lock doesn't activate.

3 Select "PARENTAL" by pressing [▲▼] button. Press [ENTER] button to select the desired setting. Then input password to enter into ratings screen. It consists of 8 levels of parental control, violence, sexual scene, strong sexual scene and others to protect children from watching those scenes.



4 Select "Default" by pressing [▲▼] button.

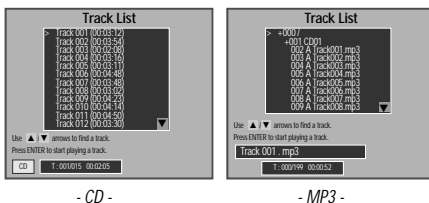
Press [ENTER] button to select the desired setting.
* "Default : Reset" function is available to make DVD setting go "Default".



DVD Playback



- 1 Press [] button to power on.
Press [DVD] button of remote control to change into DVD mode.
- 2 Press [OPEN/CLOSE] button to open the disc tray.
Place a disc firmly on the disc tray, making its label look upward.
Insert the disc and press [OPEN/CLOSE] button to close the tray.
The disc tray is closed and after checking the disc's condition, Playback or Stop function starts to operate.
- 3 To playback it, press [PLAY/PAUSE] button.
 - In the case of DVD, DVD menus and titles are displayed on TV screen.
 - In the case of S-VCD and VCD2.0, the menus are displayed on TV screen and it is converted into PBC (Playback Control) mode.
 - In the case of CD, VCD1.1 and MP3, the disc plays in order of its track numbers.



- 4 To stop it, press [] button once, the machine enters resume stop mode.
If you press [PLAY/PAUSE] button in resume stop mode, the machine begins playback at the stop position.
- 5 Press [OPEN/CLOSE] button to remove the disc.

Various Playback Methods

- If you want fast forward (or reverse) playback, press [] or [] button in Playback mode. You can watch fast forward (or reverse) playing screen.
** This reverse playback can be unavailable for certain DVD. Unavailable for MP3.*
- If you want slow forward (or reverse) playback, press [] or [] button in Playback mode. You can watch the desired screen in the slow forward (or reverse) playback.
** For the case of Video CD, this reverse slow playback function is unavailable. The mark will appear.*
- If you want still picture, press [PLAY/PAUSE] button in Playback mode. You can watch the desired screen in Pause status.

Playing a desired scene

To skip scenes in a disc

DVD, VCD, CD, MP3

To move to next chapter (or track), press [NEXT] button.
The current chapter (or track) moves to the next chapter (or track).

Press [] button.

The current scene moves to the previous chapter (or track) or first scene of current chapter (or track).

Directly moving to a desired title (DVD)

DVD, VCD

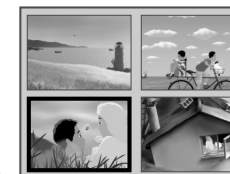
- Some movie discs may contain multiple titles. If the disc has a movie title menu recorded on it, the [TITLE] button can be used to select the movie title. Details of operation may differ depending on the disc used.

** Selecting a title may not be available on certain DVD discs.*

- 1 Press the [TITLE/PBC] or [MENU] button.
A list of the titles on the disc is displayed.
For the case of VCD disc, menu screen will appear only when the disc has PBC function and PBC ON is activated.



- 2 Press the [ENTER] button or [PLAY/PAUSE] button after pressing the [] button to select the desired title.



The selected title now starts playing.

Book Mark

DVD

- Once memorising a scene, the user may watch it anytime.

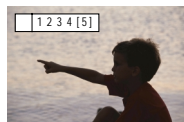
1 To memorise a scene,
press [MARK] button while DVD playing. Then press [ENTER] button to save a scene.

* Moving cursor with [◀▶] button to select the saving position, up to 5 scenes can be memorised.



2 To play a memorised scene,
press [MARK] button.

Moving cursor with [◀▶] button to get the desired scene and press [ENTER] button. Playback will start from the memorised position.



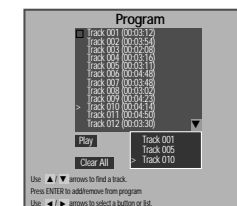
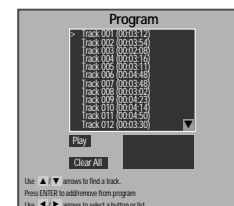
3 To erase a memorised scene,
press [MARK] button.

Press [CLEAR] button on the bookmark number you want to erase.

Playing a programmed order

VCD, CD

1 While STOP, press [PROGRAM] button.
While the figure is appearing, please select desired track by pressing [▲/▼] and [ENTER] button.

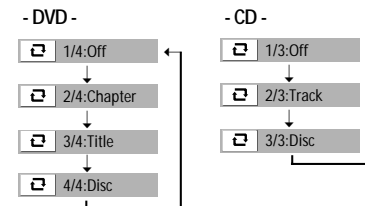


2 After completing setting, press [PLAY/PAUSE] button.
Then, titles and chapters (track) are played in the above-programmed order.
To exit from Program Play mode, press the [PROGRAM] button once more in Program menu screen.

Repeating a defined period

DVD, VCD, CD

Press the [REPEAT] button in playback mode and select the repeat period by using the [▲/▼] buttons.



- Chapter : Current chapter will be repeatedly playback.
- Title : Current title will be repeatedly playback.
- Track : Current track will be repeatedly playback.
- Disc : Current disc will be repeatedly playback.
- Off : Repeat playback will be cancelled.

Repeating a defined period from A to B

DVD, VCD, CD

- You may repeat a defined period from A to B.

- At the point where you want to start the repeat playback, press [A-B] button.
The right figure appears and repeat playback start position (A) is set.



- At the point where you want to end the repeat playback, press [A-B] button again.
The repeat playback end position (B) is set and a defined period from A to B is playback repeatedly.



- To exit from repeat playback mode, press [A-B] button.
It enters into Normal Playback mode.

A MP3 disc may not be repeated from A to B.

Searching DVD with a title number, a chapter number or a time

DVD

- Press [SEARCH] button.
It shows the title numbers, chapter numbers and times.
If you want to search with a title number,
please enter the new title number to be searched using the [NUMBER] or [▲/▼] buttons.



- If you want to search with a chapter number,
please select the "Chapter window" with [◀▶] buttons and enter the new chapter number to be searched using the [NUMBER] or [▲/▼] buttons.



- If you want to search with a time,
please select the "Time window" with [◀▶] buttons and enter the new time number to be searched using the [NUMBER] buttons.

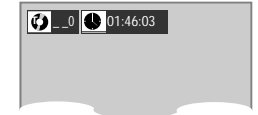


- In completing entering, please press [ENTER] button.
PLAY starts from the selected position.

Searching VCD and CD with a track number or time

VCD, CD

- Press [SEARCH] button.
It shows the track numbers and times.
If you want to search with a track number,
please enter the new track number to be searched using the [NUMBER] or [▲/▼] button.



- If you want to search with a time,
please select the "Time window" with [◀▶] buttons and enter the new time number to be searched using the [NUMBER] buttons.



- In completing entering, please press [ENTER].
PLAY starts from the selected position.

Quick Searching

VCD, CD, MP3

With NUMBER buttons, you can play the desired track.

Press the desired track number using number buttons, the selected track will be played back with display of figure on the right upper screen.

Confirming the current PLAY mode on screen

Confirming the current PLAY mode on screen

Confirming the current DVD disc mode

DVD

- 1 While in playing, press [DISPLAY] button.
It shows the current title, current chapter and time elapsed.



- 2 Press [DISPLAY] button again.
It shows the audio selected.



- 3 Press [DISPLAY] button again.
It shows the subtitle selected and repeat playback mode.
To exit from Display mode, press [DISPLAY] button again.



Confirming the current VCD, CD disc mode

VCD, CD

- While in playing, press [DISPLAY] button.
It shows the current track, audio selected, repeat playback mode and time elapsed.
To exit from Display mode, press [DISPLAY] button again.



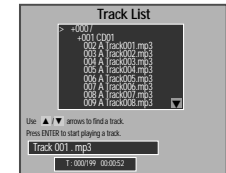
Confirming the current MP3 disc mode

MP3

Display screen appears automatically in Playback mode.

It shows the MP3 File information in disc, the directory, MP3 File name and directory list.

With [▲▼] buttons, you can move the cursor to MP3 Music File. To playback MP3 File, press [ENTER] button.




AUDIO, SUBTITLE language and SOUND FIELDS

- The user may select an audio language and subtitle language if a disc includes Multi-language.

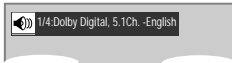
Selecting an audio language

DVD

 A certain disc may not support audio select or subtitle select.

Press [AUDIO] button. It shows the audio information DVD disc includes.

The user can select each audio information by using [▲▼] buttons. In completing selecting, please press [AUDIO] button one more.

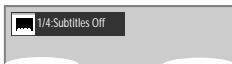


Selecting a subtitle language

DVD

Press [SUBTITLE] button. It shows the subtitle information DVD disc includes.

The user can select each subtitle information by using [▲▼] buttons. In completing selecting, please press [SUBTITLE] button one more.



Selecting Sound Fields

DVD, VCD, CD

Each time you press [SOUND FIELD] button in playback mode, sound fields can be set as below.

DVD mode

DVD (only for 2CH) : OFF → MOVIE → MUSIC → PL EMUL → MATRIX → OFF.

VCD, CD, MP3 : OFF → MOVIE → MUSIC → PL EMUL → MATRIX → CLASSIC → HALL → THEATER → OFF.

This function is not available to a DVD disc supporting 5.1 Audio channel & DTS.

This function may be unavailable to some VCD or CD.

VCR mode

OFF → MOVIE → MUSIC → PL EMUL → MATRIX → CLASSIC → HALL → THEATER → OFF..

RADIO mode

OFF → MOVIE → MUSIC → PL EMUL → MATRIX → CLASSIC → HALL → THEATER → OFF..

ZOOM, Multi Angle

Using a zoom function

DVD, VCD, VCD2.0

- The user can enlarge the current screen about 2, 4 or 8 times.

While playback or still mode, press [ZOOM] button till the right figure appears.

Every time the user presses [ZOOM] button, a zoom magnification changes 2 times (X2) → 4 times (X4) → 8 times (X8) → OFF → 2 times (X2) ... one by one.

A base point to be enlarged is center and the point can be changed with the operation of [▲▼◀▶] button.



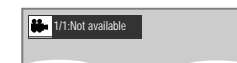
Different Angle

DVD

- If a disc includes multi angle information, the user can watch a screen in multi angles. The function is limited to a DVD disc supporting multi angle information.

Press [ANGLE] button. It shows multi angle information DVD disc includes.

The user can select each angle information by using [▲▼] buttons. In completing selecting, please press [ANGLE] button one more.



About MP3 discs

Playing a disc containing MP3 files

MP3

This unit will play MP3 files recorded on CD-R and CD-RW discs.

- 1 Turn on your television and select the program assigned to this DVD player.
- 2 Press the DVD open [OPEN/CLOSE] button, the disc tray opens.
- 3 Put a disc containing MP3 files on the disc tray with the label side up.
- 4 Press the DVD open [OPEN/CLOSE] button, the disc tray closes.
- 5 The unit will take a short while to load the disc and display the directory structure.
- 6 Press the [▲▼] navigation buttons of the remote control to select the file you want to listen to, then press the [ENTER] button and this selected file is located and played back.

■ Play and Pause

Press the [PLAY/PAUSE] button to switch between play and pause.

* If you want to 2 times playback, press the [▶▶] button in playback mode.

■ To stop playback

Press the [STOP ■] button.

■ To skip to the next or previous file

- Press the [NEXT ▶▶] button of the remote control briefly while playing, to skip ahead to the beginning of the next file. Each time you press the button consecutively, the beginning of the next file is located and played back.
- Press the [PREV ◀◀] button of the remote control briefly while playing, to skip back to the beginning of the previous file. Each time you press the button consecutively, the beginning of the previous file is located and played back.



The ability of this unit to read MP3 discs is dependent on the followings:

- The Bit Rate must be within 64-256 kbps.
- The maximum number of directories should not exceed 32.
- The maximum depth level of directories should not exceed 4.
- In case that the file is recorded with the variable bit rate (VBR) in one file (Example: 54-256kbps) the sound breaking may occur during the playback.
- File names should be named using 8 or fewer letters and/or numbers, and must incorporate the "MP3" file extension. EXAMPLE: *****.MP3 where each * is a letter or number.
- Use only letters and/or numbers in file names. If you use special characters, the file and/ or folder names may not be displayed correctly on the on-screen display.

Caution

- Try to avoid the use the CD-RW(Rewritable) disc if possible because it can not be played back according to the recording format.
- The CD-R must be recorded with the standard format because it can not be played back according to the recording format.
- The CD-R should be written using the 'disc at once' method.
- The disc which is made with ISO 9660 format can be played back.

Displaying menus in a disc

To display menus in a disc

DVD, VCD2.0

- If a disc includes menus, the user may use them.

1

Press [TITLE/PBC] or [MENU] button.

- It shows menus in the disc. Also they are different according to discs.
- If it is a VCD2.0, select PBC ON mode by pressing [TITLE/PBC] button.
* CD and VCD1.1 do not support the function.

2

Move a cursor to a relative item with arrow buttons of [▲▼◀▶] button and select one with [ENTER] button or [PLAY] button.

To watch JPEG file

- This unit will play JPEG files recorded on CD-R and CD-RW discs.

To watch the desired file, move a cursor to a relative item with arrow buttons of [▲▼◀▶] button and select one with [ENTER] button.

* Progressive JPEG files do not support the function. It is displayed "Unsupported Format".

- It shows the next file for a few seconds in order. If you want to stop the playing file, press [PLAY/PAUSE] button.
- If you press [STOP ■] during playback, all JPEG files of disc will be listed of thumbnail format. To watch the desired file, move a cursor with arrow buttons of [▲▼◀▶] button and select one with [ENTER] button.

To Record With VCR



- 1 Press [⏻] button to power on.
• Press [VCR] button of remote control to change into VCR mode.

- 2 Insert a recordable tape.
Insert a tape with recording tab.

- 3 With [PR/PRESET], [NUMBER] and [INPUT] buttons, select the desired broadcasting channel or external input unit to record.

- 4 Select the desired speed (SP or LP) with [SPEED] button.

- 5 Press [REC] button.
Then, it starts recording.

- 6 If you want to pause recording, press [PLAY/PAUSE] button.
After pressing [PLAY/PAUSE] button, if the pause status continues for five minutes, the recording is released automatically.

- 7 To exit recording, press [■] (STOP) button.

To Enjoy Another TV Channel or DVD during recording

- 1 If you want to watch another TV channel during recording with video, press [TV/VCR] button.
It is available of changing into and watching another TV channel by pressing TV [PR/PRESET] buttons.
- 2 If you want to playback DVD during recording with video, insert a DVD disc.
Place the desired DVD disc on DVD tray, press [DVD] button to convert OUTPUT into DVD mode and press [PLAY/PAUSE] button. Then, you can watch DVD.

To Record From DVD To Videotape during DVD playback

- 1 Press [DVD] button of remote control to change into DVD mode.
Insert the desired DVD disc.
When it is a DVD disc with copy protect function, you can't copy it.
Insert a recordable tape.
- 2 Play the DVD disc and press [REC] button.
DVD plays and VCR starts recording.
- 3 To exit copy, press [■] button.
Also it stops automatically when DVD playback is finished or recorded tape is reached to the end.

* When the disc sets DTS 5.1Ch in audio mode, you can't copy it.
If you want to copy it, set audio mode to Dolby Digital 5.1Ch or Dolby Digital 2Ch.

This product incorporates copyright protection technology that is protected by method claims of certain U.S patents and other intellectual property rights owned by Macrovision Corporation and other rights owners.
Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

One Touch timer Recording (OTR)

- When your urgent business happens suddenly in watching TV or you want to record the current TV program for the desired time, follow the procedures below.

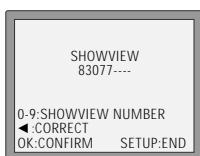
- 1 First, follow the steps 1 to 4 in "Recording With VCR".
- 2 Press [REC] button as much as you want. See the "Recording Times Table" below.
Once continuous recording until you press STOP button
Twice recording for 30 mins from current time
3 (times) recording for 1 hour
⋮
9 recording for 4 hours
22 returning to the status of Once Press
- 3 To stop Recording mode, press [■] (STOP) button more than 5 seconds.

Timer Recordings

TIMER RECORDINGS USING ShowView

- For timer recordings, clock, date, and stations must be set correctly.
- Load a cassette with its safety tab in place and with sufficient free space for the recording.

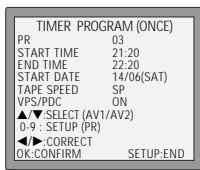
1 Call the ShowView menu by pressing PROGRAM on the remote control.
From your TV magazine, type in the number next to the programme you want to record ...
... and confirm.



2 Decide if you want to record "ONCE", "WEEKLY" or "DAILY"...
... and confirm.



3 If you wish to make changes:
Move to the position you want to change using the [◀/▶] buttons.
Change the setting using the [▲/▼] or [number] buttons. If all settings are ok, press [ok], till you see "OK: CONFIRM" in the bottom line.
Confirm.



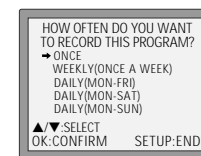
Switch your player off.

- VPS/PDC is a service provided by some stations to enable you to perform timer recordings precisely even if the broadcaster delays the start time of the programme slightly. The time you enter is the VPS/PDC time so must be correct. Not all stations offer VPS/PDC, in which case the player will start at the time you enter and not the actual start time of the programme.
If you wish to start recording at a specific time without it being adjusted by the VPS/PDC system in the event of a delay, switch VPS/PDC off otherwise the player will not record.
- If you don't have the ShowView numbers see next page for the normal timer.
- If you have made a mistake, move back to the relevant position with the [◀] button and change the setting.
- If there is no programme location displayed under "PR" in the change menu, the player doesn't yet know the location number for the programme you want. Type it in and this will be stored for last recordings.
- If you wish to record from a satellite receiver, select under "PR" the satellite programme location or AV (1/2) (depending on the connection with the antenna cable or the SCART-cable). Leave the satellite tuner switched on and to the programme you want.
- Should programming overlap, you get a warning.
- To cancel the recording press the [stop] button more than 5 seconds.
- ShowView is a trademark applied for by Gemstar Development Corp.. The ShowView system is manufactured under license from Gemstar Development Corporation.

NORMAL TIMER RECORDING

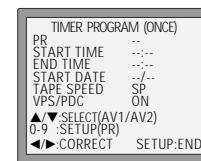
- For timer recordings, clock, date, and stations must be set correctly.
- Load a cassette with its safety tab in place and with sufficient free space for the recording.

1 Call the player's "SETUP", choose "TIMER PROGRAM".
Decide if you want to record "ONCE", "WEEKLY" or "DAILY"...
... and confirm.



2 Type in one after the other:

- The programme location number;
- the time the broadcast starts,
- the time the broadcast ends,
- the day of the broadcast, if it is not today.
- Select LP if you wish to make a very long recording .
- Switch off VPS/PDC here if you need to .



3 If you wish to make changes:
Move to the position you want to change using the [◀/▶] buttons.
Change the setting using the [▲/▼] or [number] buttons.
If all settings are ok, press [◀ or ▶], till you see "OK : CONFIRM" in the bottom line.
Confirm.



Switch your player off.

- Wait a few seconds after typing a one-digit-number.
- If you have made a mistake, move to the position you want to change using the [◀/▶] buttons and change the setting.
- If programme timings overlap, the machine will give a warning message. If you don't adjust the times, the machine will record the first programme completely then continue with the second one.
- If there is no sufficient free space for the recording on the cassette the video switches automatically to "LP" for double recording capacity.
- The recorder will eject cassettes which have the safety tab removed.

TIMER REVIEW - CHANGING AND ERASING

1

Call the player's "SETUP",
choose "TIMER PROGRAM".

TIMER PROGRAM				
PR	START	END	DATE	
→ 03	21:20	22:20	14/06	
01	18:10	20:30	20/06	
..
..
..
..
..
..
..
..
▲▼SELECT OK:CONFIRM SETUP:END				

2

Select the programming to change or erase.
If you want to erase this programming press button [0].

TIMER PROGRAM (ONCE)				
PR	START	END	DATE	
03	21:20	22:20	14/06(SAT)	
01	18:10	20:30	20/06	
..
..
..
..
..
..
..
..
..
0:ERASE ◀▶CORRECT SETUP:END				

If you wish to make changes:
Move to the position you want to change using the
[◀▶] buttons.

Change the settings using the [▲▼] or [number]
buttons.

If all settings are ok, press [◀ or ▶], until you see "OK:
CONFIRM" in the bottom line.

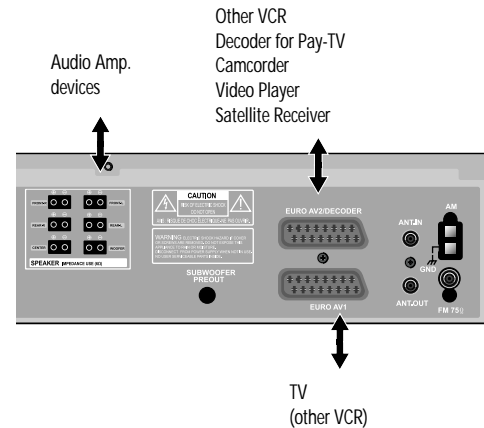
Confirm changes with [OK]. Exit the menus.

* In case the unit operates in VCR or Radio mode, the timer recording function
can not be performed.

Copying and Assembling

COPYING

- Switch off all components when connecting or disconnecting cables.



To copy to your player from another video machine,
connect the two machines with a cable between their
EURO AV (SCART) sockets and select as programme
"AV 1/AV 2" or "F. AV" (front sockets) using the
[PR/PRESET] or [INPUT] button.

Set the other video machine to playback and your
machine to record.

- To connect a mono audio source, use the front Audio In
socket marked L.

To copy to another video machine from your player,
connect the two machines by means of their EURO AV
(SCART) sockets.

On the other video, select its AV input and set the
machine to record.

Switch your player to play back at the position you want
copying to start.

ASSEMBLING

Should you wish to assemble your own film, from camcorder footage for example, use the assembly technique for smooth edit
points:

- Move the tape to the position at which the new scene is to be added using the play functions.
- Wind back slightly before the edit point and put the machine into pause using the [PLAY/PAUSE]
button (do not press STOP!).
- Now go directly into record.

For the best results, the source cassette from which you are recording should already be playing back
when you start recording.

Presetting the radio stations

- You can preset 50 stations for FM and AM. Before tuning, make sure that you have turned down the volume to the minimum.

1 Press [FM/AM] button until the FM or AM appears in the display window.
And then every time you press [FM/AM] button, FM and AM changes alternately.

2 Press and hold [TUNING -/+] button for about two seconds until the frequency indication starts to change, then release.
Scanning stops when the DVD Receiver tunes in a station.

3 Press [MEMORY] button.
A preset number will display in the display window.

4 Press [PRESET -/+] button to select the preset number you want.

5 Press [MEMORY] button again.
The station is stored.

.....

To tune in a station with a weak signal

Press [TUNING -/+] button repeatedly in step 2 to tune in the station manually.

To clear all the memorized stations

Press and hold [MEMORY] button for about three seconds and "CLEAR ALL" appears in the display window and then press [MEMORY] button again, the stations are cleared.

Listening to the radio

- Preset radio stations in the DVD receiver's memory first (see "Presetting radio stations" on the previous page).

1 Press [FM/AM] button until AM or FM appears in the display window.
The last received station is tuned in.

2 Press [PR/PRESET] button repeatedly to select the preset station you want.
Each time you press the button, the DVD receiver tunes in one preset station at a time.

3 Adjust the volume by rotating VOLUME on the front panel or pressing [VOL-] or [VOL +] button repeatedly.

4 When listening the FM radio broadcasting, each time you press [AUDIO] button, STEREO and MONO changes alternately.

.....

To turn off the radio

Press POWER to turn the unit off or select another function mode (DVD, VCR, VIDEO 1 or VIDEO 2).

To listen to non-preset radio stations

- Use manual or automatic tuning in step 2.
- For manual tuning, press [TUNING] button repeatedly.
- For automatic tuning, press and hold [TUNING] button for about two seconds.

RDS (Radio Data System) function

■ RDS (Radio Data System)

RDS means Radio Data System, a feature that allows you to receive the radio channel that sends the letter data, for example Weather, News, Affairs, Sports... etc... This unit can receive the RDS signal with the help of a FM/AM tuner and display the letter data on the display window.

To receive the RDS signal

1. Press [FM/AM] button until the FM or AM appears on the display window.
2. Press and hold [TUNING +/-] button for about two seconds until RDS signal is received.
(When the RDS signal is received, RDS turns red on the display window.)
3. Each time you press RDS [RDS] button, the exist frequency of RDS broadcasting and PS name PTY (only there is a PS name) are displayed alternatively.
 - * PS name (Program Service Name): It is a name of broadcasting station's own.
 - * PTY (Program Type Code): The classified code of the received broadcasting (None, News, Affairs, Info, Sport, Educate, Drama, Culture, Science, Varied, POP M, ROCK M, Easy M, Light M, Classics, Other M, Weather, Finance, Children, Social, Religion, Phone In, Travel, Leisure, Jazz, Country, Nation M, Oldies, Fork M, Document, TEST, Alarm!)

To search the RDS broadcasting using PTY button

1. Press PTY [PTY] button and press [PR/PRESET] button to select the desired program type code.
2. When press PTY [PTY] button, the unit searches the corresponding RDS broadcasting with the selected program.

Speaker Setup for enjoying the surround sound effect

Surround Sound Audio Components

DTS Digital Surround, Dolby Digital and Dolby Pro Logic technologies can be used to enjoy 3-dimensional sound effects with video image. We recommend you use the following devices.

- Hi-Fi Stereo VCR to play the program sources.
- Large screen TV monitor for a high-quality video image.
- Use the program sources (e.g. LD, DVD, VIDEO TAPE etc.) labeled with DTS Digital Surround (or) Dolby Digital Surround (or) Dolby Pro Logic Surround.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished works. Copyright 1992- 1997 Dolby Laboratories. All rights reserved.

Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other worldwide patents issued and pending. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc. Copyright 1996 Digital Theater Systems, Inc. All rights reserved.

Room features affecting sound

If the room is made of concrete and hard materials like wood walls, you will not hear the ultimate surround effects. The walls of the room must have the appropriate absorption factor and be able to "reflect" the sound for the proper effect. If the room has too much sound reflection, try repositioning the furniture. You may also need to hang curtains etc. to absorb more of the sound - experiment with the room's acoustics.



Delay Time Setting

Speaker Positioning

A typical speaker setup uses 6 speakers: 2 front speakers, a center speaker, 2 rear speakers, and a subwoofer. Add a subwoofer to hear excellent bass sound, DTS digital surround or Dolby Digital surround. Set up a listening position; a couch or chairs, etc. as shown in the speaker positioning example.

- **Front speakers**

We recommend that the height of the tweeters of the front speakers be at the same height as the listener's ears, to the left and right of the TV. See speaker positioning example for speaker placement.

- **Center speaker**

Ideally, the center speaker and front speakers would be positioned at the same height. Place the center speaker above or below the television.

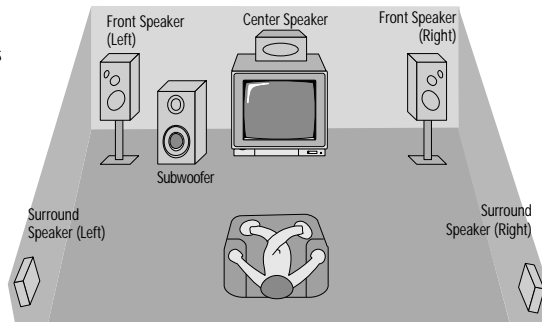
- **Rear speakers (Surround)**

Place left and right surround speakers behind the listening area. These speakers help recreate sound motion and atmosphere; required for surround playback. For optimum sound effects, do not place the rear speakers too far behind the listening position. Install them at or above the height of the listener's ears. It is also effective to point the rear speakers toward a wall or ceiling, to further disperse the sound.

If the room is small and the listeners area is near the rear wall, set the rear speakers opposite each other about 2 - 3 feet higher than the listeners' ears.

- **Subwoofer**

Place it an appropriate position. (See speaker positioning example.)



Speaker Positioning Example

Notes

- We recommend that you use magnetic shielded speakers for the front left/right speakers and center speaker to prevent video noise from appearing on the TV picture.
- Use speakers in your setup that have similar tonal characteristics.

- In Dolby Digital or Dolby Pro Logic mode it is assumed that the time it takes the sound from each speaker to reach the listener, is the same. But if the time interval from the center or rear left and right speakers to the listener is closer than the time interval from the listener to the front left and right speaker, the sound of center or rear left and right speaker will reach the listener first; instead of the sound of the front speakers. (It is desirable that the sound from the front speakers reach the listener first.)

Dolby Digital and Dolby Pro Logic modes provide speaker time delay adjustments to resolve this problem:; you can manually set the delay time of the center or rear left and right speakers so that the sound from all speakers will arrive simultaneously to the listener.

Delay Time Setting

1. Center delay time setting

If the distance of Dc is equal to or longer than the Df in the figure, set the mode to 0ms. Otherwise, change the setting according to the table below.

$$(A) = Df - Dc$$

2. Surround delay time setting

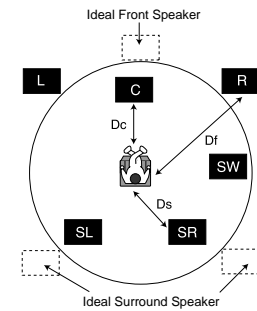
If the distance of Df is equal to the Ds in the figure, set the mode to 0ms. Otherwise, change the setting according to the table below.

$$(B) = Df - Ds$$

3. Front delay time setting

If the distance of Ds or Dc is longer than the Df in the figure, change the setting according to the table below.

$$(C) = Ds \text{ or } Dc - Df$$



Ex) If the distance from front speakers to the listener is 3m and from rear speakers from the listener is 3.64m, Delay time of the Front Speaker is $3.64m(Ds) - 3m(Df) = 0.64m$ (C), $0.64m$ (C)/ $0.34m=2ms$.

If the Rear Speakers are closer, change the delay time of rear speaker.

The distance of (A) and (C)	Value (ms)
0.00	0
1.02	3
2.04	6
3.06	9
4.08	12
5.10	15

The distance of (B)	Value (ms)
0.00	0
2.04	6
4.08	12
6.12	18
8.16	24
10.20	30

How to set delay time

1 Each time you press the [DELAY] button, the setting of speaker is changed belows.

FL (Front Left) → CT (Center) → FR (Front Right) → SL (Surround Left) → SR (Surround Right)

You can select delay time by pressing ▼/▲.

- Front, Center Speaker : 0~15ms
- Rear Speaker : 0~30ms (But, sound field is in MOVIE or PL EMUL mode, it is possible to adjust up to 40ms)

2 On completing entering, the screen of delay time will be disappear in 5 seconds.

Setting the sound level

Setting the sound level of the desired channel

1 Press [LEVEL] button.

2 Press [LEVEL] button to select a desired speaker to set.

Each time you press the [LEVEL] button, it changes in the following order;

FL (Front Left) → CT (Center) → FR (Front Right) → SL (Surround Left) → SR (Surround Right) → WF (Subwoofer).

3 Press [▲ / ▼] button to adjust the sound level of the selected channel. (-7.5 dB ~7.5 dB)

LEVEL	VOLUME	LEVEL	VOLUME
7.5	42	2.5~3.0	47
6.5~7.0	43	1.5~2.0	48
5.5~6.0	44	0.5~1.0	49
4.5~5.0	45	-7.5~0	50
3.5~4.0	46		

In case of level setting, the maximum value of volume is changed as left tables:

4 Repeat step 2-3 and adjust the sound level of the other channels. On completing entering, the screen of sound level will be disappear in 5 seconds.

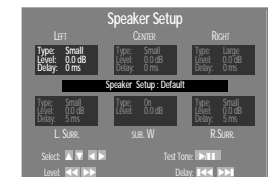
Setting the Balance between each channel by using the test tone

- In Dolby Digital and Dolby Pro Logic mode by using the test tone function you can easily adjust the sound balance of the speakers from the listener's position in DVD initial setup mode. (speaker setup)

1 Select the test tone mode by pressing [PLAY/PAUSE] button.

A hiss noise comes out for 2 seconds from each speakers in the following order;

FL (Front Left) → CT (Center) → FR (Front Right) → SL (Surround Left) → SW (Subwoofer) → SR (Surround Right) → ...



2 To adjust the sound level and delay time, press ◀◀, ▶▶, ◀◀ or ▶▶ in the appropriate channel during operating the test tone.

Playable Disc

- DVD, Video CD (Version 1.1, 2.0), S-VCD and Audio CD

Disc type	Playable	Restriction
DVD	Possible	Region number 2 or Region number All (DVD-5, DVD-9, DVD-10, DVD-18)
Video CD	Possible	Version 1.0/1.1/2.0, SVCD/CVD
CD	Possible	PCM
CD-G	Possible	Only Audio playback
CD-ROM	Possible	MP3 File
CD-R	Possible	Video-CD/CD/CD-ROM (MP3 File)
CD-RW	Possible	Video-CD/CD/CD-ROM (MP3 File)
DVD-R	Possible	DVD Video
DVD+R	Possible	DVD Video
DVD-RW	Possible	DVD Video
DVD+RW	Possible	DVD Video
DVD-ROM	Impossible	
DVD-RAM	Impossible	
Photo CD	Impossible	

REGION MANAGEMENT INFORMATION

This unit is designed and manufactured to respond to the Region Management information that is recorded on a DVD disc. The region number of this player is "2". If the region number described on the DVD discs does not correspond to the Region number of this player, the player will not play this disc. This player will play DVD discs made for "ALL" regions. Therefore, this player will play DVD discs marked with labels containing the region number "2" or "ALL".



(Region 2)



(Region ALL)

Terms related with DVD

- DVD** A DVD (abbreviation of Digital Versatile Disc or Digital Video Disc) can include 135 minutes of video information. And for audio, it can hold up to 8 kinds of languages and 32 kinds of subtitle languages. By using MPEG-2 video compression and digital 3D surround sound, DVD realizes high-defined screen and quality sound like a movie theater.
- CDDA** A CDDA (abbreviation of Compact disc digital audio) is a music disc that is currently used.
- MP3** Audio compression format that enables audio files to be stored and transferred on a computer with a relatively small file size. It enables you to enjoy CD quality music. (Short for MPEG-1 Layer 3)
- PBC** This is recorded on a Video CD 2.0, Video CD 3.0, SVCD and CVD. The scenes or information to be viewed (or listened to) can be selected interactively with the TV monitor by looking at the menu shown on the TV monitor. It stands for PlayBack Control.

Terms related with DVD

- CHAPTER** It means the information recorded in a DVD. A title in a DVD is divided into many tracks, of which a track is called as a chapter. A certain scene of a screen can be quickly searched with the chapter number.
- TITLE** It means the information recorded in a DVD. A DVD can be divided into many titles.
- TRACK** It means the information recorded in a video CD and audio CD. A disc consists of many tracks, for which a user can search a certain position.
- dts** Digital Theatre System is a 5.1-channel surround sound system, which is widely used in movie theatres around the world. It enables the bit rate to be increased to provide good sound quality. "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.
- Multi Angle** Some DVD discs contain the various scenes that have been simultaneously shot from a number of different angles.
- PCM** Linear PCM is a signal-recording format used in a CD, while CD is recorded in 44.1kHz/16bit, a DVD is recorded in 48kHz/16bit up to 96kHz/24bit.
- Dolby Digital** Dolby Digital enables the delivery of mono through 5.1-channel audio at data rates from 32 kbps to 640 kbps, thus offering flexibility and economical performance as well as uncompromised sound quality.
- Bitstream** Digital audio data that is decoded into an analog signal for subsequent output to speakers.
- Lt/Rt** It indicates L/R of Dolby Digital 2CH Downmix output.
- Downmix** DOWNMIX is reproducing the proper audio when audio format recorded on a disc differs from the output audio channel configuration. For example, with just one stereo speaker system you can hear full 5.1 channel audio.
- RGB** This stands for red, green and blue. It means the video signal separated into its three primary colour components ready to drive the picture tube almost directly. Two signalling connections are needed to make the television accept the synchronisation and RGB signals. All this is in the SCART connector. Not all televisions have RGB inputs.
- SCART** An acronym (Syndicat des Constructeurs d'Appareils Radiorécepteurs et Téléviseurs) for a connector used with many kinds of audio-visual equipment. It is also called Peritel and Euro-connector.

Handling Disc

- To keep a disc clean condition, please do not touch a side containing play information.
- Do not attach a bit of paper or sticky tape on it.
- Do not expose a disc to a direct sunlight or electric heating systems.
- After using it, please keep a disc in a case.



Cleaning Disc

- Before using it, please rub it from center toward outside with clean clothes.
- Do not use any type of solvent such as thinner, benzol (benzene), commercial cleaning goods or antistatic sprays.



Basic information about VCR and Videotape

Terms related with VCR

AFT	Automatic fine tuning, a circuit that automatically adjusts TV reception to optimum condition.
CABLE	Cable television.
Index Search	A feature of this VCR that automatically records an index each time recording begins. It helps you locate a particular segment of the tape quickly and easily.
LP	Long Play, an intermediate tape recording speed that combines most of the picture/audio quality obtainable at the standard recording speed with some of the tape economy of Extended Play (EP).
OSD	On-screen display of information pertinent to the features of the VCR.
OTR	One-touch recording, a feature that allows you to record the program you're watching by pressing the REC key. Each press of the key increases the recording time by 30 minutes, up to 10 hours.
RF	Radio frequency, the composite audio/video signal supplied to a TV receiver (or other video component) by an antenna or cable system.
Safety tab	The plastic tab at the back of a video tape cassette which, when removed, prevents accidental erasure of a recording.
SP	Standard play, the recording speed to use when the best picture quality is of prime importance (and when total recording time is not).

What is dew condensation symptom?

- If a VCR is moved from a cool place to a warm and damp place or a place facing a direct cool wind from air-conditioner...and others, temperature varies sharply, which makes dew on head drums of VCR.

If dew condensation occurs,

- 1 First, turn it on for one or two hours before using it.
- 2 Do not use it because it may develop troubles of a VCR or videotape.

How to use a head cleaner

- In case of a old or contaminated videotape, screen may not be clean from the contamination of VCR heads. Please remove contaminants using a head-cleaner like below order.

- 1 Insert a head-cleaner into VCR.
- 2 Press [PLAY/PAUSE] for 5 seconds, and then press [▶▶] for about 10 seconds.

PLAY (5 secs)



FF (10 secs)

- 3 Eject a head-cleaner from VCR.
 - If the screen is not clean yet, please repeat the above 2 or 3 times more.
 - A head-cleaner is not for sale. Please ask it for the nearest agent.
 - In case a user ask the removal of contaminants of us, the user should pay extra charges.

Before doubting about troubles (DVD)

Symptom	Checks
• The player does not play.	<ul style="list-style-type: none"> ▶ If a DVD is from overseas, it may not be played. Please check a DVD's region code whether it has the relative region code 2 or All. ▶ Please check whether a DVD is inserted in a right direction. ▶ If it is a CD-ROM for PC or DVD-ROM, it does not work.
• No sound comes through.	<ul style="list-style-type: none"> ▶ Play mode may be "SLOW" or "PAUSE"(In abnormal speed play, no sound comes through) ▶ Did you connect the parts in right way? ▶ Please check the operative condition of TV or amplifier. ▶ From SETUP, please check "AUDIO" items.
• A disc is playing but screen does not appear or poor screen appears.	<ul style="list-style-type: none"> ▶ Did you turn on your TV sets? ▶ Did you connect the parts in right way? ▶ The play may be in "PAUSE". ▶ A disc may have some contaminants or be damaged. ▶ A disc may be bad one.
• Sound is irregular.	<ul style="list-style-type: none"> ▶ Please check the connection with Dolby Digital amplifier. ▶ Please check the plugs are connected with one another tightly. ▶ Some contaminants may be remained in connection terminal.
• Remote control does not work.	<ul style="list-style-type: none"> ▶ Please check the degree of remote control, distance or any interruption. ▶ Battery may be weak or exhausted. ▶ When you operate DVD, use it by pressing [DVD] button. ▶ Unplug the power plug and plug it again.
• Dolby Digital sound does not work.	<ul style="list-style-type: none"> ▶ Dolby Digital sound can be worked in the Dolby Digital amplifier only. ▶ Please check "Dolby Digital" mark on your DVD. ▶ Please check the connection is correct.
• [AUDIO] or [SUBTITLE] button does not work.	<ul style="list-style-type: none"> ▶ If a DVD does not include language information, it does not support the function.
• [ANGLE] button does not work while a DVD is playing.	<ul style="list-style-type: none"> ▶ "ANGLE" is supported only in a DVD contains multi angle scenes. Also a user can confirm the support with the "ANGLE" mark on screen.
• "MENU" does not appear while a DVD is playing.	<ul style="list-style-type: none"> ▶ Please check the degree of remote control, distance or any interruption. ▶ Please check a battery in remote control whether it is exhausted or not. ▶ A DVD may not contain menu information.
• The file name of MP3 (CD-R) appears with strange letters.	<ul style="list-style-type: none"> ▶ The file name of MP3 recognize only the Alphabet (A~Z, a~z), numbers (0~9) and a special symbol on keyboard (-, !, @, #, \$...) and 10 letters can be displayed in maximum. ▶ The letters except above case will be displayed like "----".
• Any MP3 (CD-R) file isn't displayed.	<ul style="list-style-type: none"> ▶ If the surface of disk is injured, the file display and playback can be impossible.

Before doubting about troubles (VCR)

Before doubting about troubles (VCR)

Symptom	Checks
• "Power On" does not work.	<ul style="list-style-type: none"> ▶ Please check whether a power plug is inserted in an electric outlet.
• It does not work even in "Power On".	<ul style="list-style-type: none"> ▶ Please check whether a videotape is inserted in. ▶ Try to insert a plug again.
• A videotape is not inputted in.	<ul style="list-style-type: none"> ▶ Please check whether a power plug is inserted in an electric outlet. ▶ Please check whether a videotape is in. ▶ Please check whether a videotape is inserted in a right direction (a side of transparent window should be on the upside) ▶ Have you inputted a videotape again just after the tape was ejected? Please try it again after fully ejecting it. ▶ When a videotape forces to be ejected, the tape may not be inputted. In the case, please pull out an outlet, and then push the tape smoothly.
• On inputting a videotape, the tape is re-ejected.	<ul style="list-style-type: none"> ▶ That's why a safe mode to protect a videotape is operated automatically. Please pull out the tape and input it again.
• A videotape is not ejected.	<ul style="list-style-type: none"> ▶ In case the product is used for a long time, a videotape may not be ejected for a film inside may be stretched. In the case, please pull out a power plug for about 10mins and then press [EJECT] button.
• A channel on video and a play screen does not appear.	<ul style="list-style-type: none"> ▶ Please check your antenna's connection. ▶ TV channel should be fixed on video channel. ▶ Please check your antenna's signal whether it may be weak. In case of its weakness, please use a frequency amplifier connected with the device. ▶ Press [TV/VCR] and then let "VCR" is displayed on the display panel.
• Noise (screen noise) appears on screen.	<ul style="list-style-type: none"> ▶ While in no use of VCR, was it turned on? ▶ While in recording a program, do you watch another channel? ▶ Select TV by pressing [TV/VCR] button on remote control.
• Noise appears on screen after recording.	<ul style="list-style-type: none"> ▶ While in playing a videotape, there may happen some noise or blot in the part of the beginning of a videotape or resuming "PAUSE", which are not breakdown.
• While in playing, noise appears.	<ul style="list-style-type: none"> ▶ Please press [TRACKING +/-] for better screen. Videotape may be poor. Try to change it to another one.
• Sound and screen are irregular. • Sound comes out but screen does not appear. • Screen is irregular and stripes appears. • "Screen Error" message is displayed in a screen.	<ul style="list-style-type: none"> ▶ Please use a head-cleaner to clean VCR heads. VCR heads may be contaminated.
• While recording and playing, the top of screen extremely waves.	<ul style="list-style-type: none"> ▶ Since VCR Play signals are not stable like a TV signals, screen may be unstable or curved while in playing. To fix the problem, please horizontal adjustment.
• A screen is not clear.	<ul style="list-style-type: none"> ▶ In case videotape is the one recorded by other products or old one, stripe may appear on the screen. ▶ Try to adjust the screen by [TRACKING +/-] button. ▶ Try to use a head-cleaner.

Symptom	Checks
• A screen at pause is trembling or slow screen is not clear.	<ul style="list-style-type: none"> ▶ Try to use a head-cleaner. ▶ Try to adjust the screen by [TRACKING +/-] button.
• Recording a TV program is impossible.	<ul style="list-style-type: none"> ▶ Please check whether a channel is fixed on video. If not, you have to turn it into "TV" by pressing [INPUT] button. ▶ Please check whether the timer recording info is right. ▶ Are RF cables inputted antenna connection terminal correctly? ▶ Does a PR number selected in display section appear? ▶ Please check a tab on a tape whether it is broken or not. (If it was broken, please scotch-tape it) ▶ Check whether the screen is displayed in VCR Only Channel. Press [INPUT] button in this remote controller to adjust in "General Broadcast" condition. ▶ Is the rounded line (RF cable) connected in "ANT.IN" terminal?
• Once pressing [REC], a videotape is ejected automatically.	<ul style="list-style-type: none"> ▶ Please check whether the clock is right. ▶ Please check whether the timer recording info is right. ▶ Please check a tab on a tape whether it is broke or not. (If it was broken, please scotch-tape it)
• In spite of pressing [PR/PRESET], a channel can not be set.	<ul style="list-style-type: none"> ▶ You may not memorize channels. ▶ Please check your channel setting or press a number button.
• While duplicating, screen is not clean and distorted.	<ul style="list-style-type: none"> ▶ Some tapes or discs distributed in the market for lending is set to prevent copy in manufacturing. These tapes cannot be duplicated in a good condition.
• remote control does not work.	<ul style="list-style-type: none"> ▶ Battery may be weak or exhausted. ▶ A receiver of remote control may be different with a sender.
• Buttons on remote control do not work.	<ul style="list-style-type: none"> ▶ Remove barriers between the remote control and the unit. ▶ Is the remote control unit within 7m from the unit? ▶ Specified button is not operated in some status. ▶ In case a videotape is positioned in the end, "FF", "PLAY" and "REC" do not work. ▶ Please check whether another button is pressed.
• Index search does not work.	<ul style="list-style-type: none"> ▶ Are you playing a tape that is not recorded in this recorder? (Try to record it with the recorder.) ▶ You may start recording it in "REC-PAUSE". Please start recording it from stop condition.

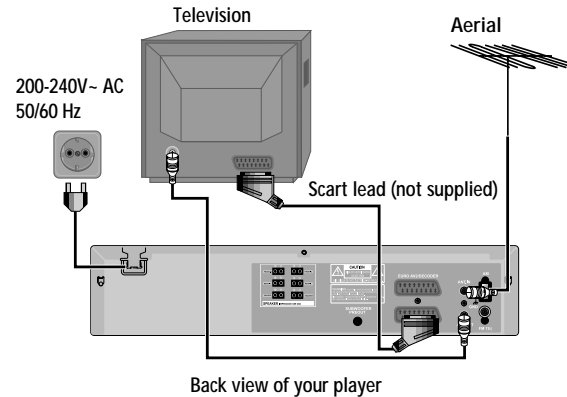
Specifications

Power	200-240V~ AC 50/60Hz	
Consumed electricity	75W	
Weight	7.15kg	
Dimension (WxHxD)	430mm x 91mm x 370mm	
Operative temperature	+5°C~40°C	
Installation condition	Horizontal / Relative humidity under 80%	
Signal type	PAL COLOR	
Antenna Input/output	U/V-mixed: 75Ω unbalanced	
VIDEO input	1.0 Vp-p unbalanced, RCA JACK	
AUDIO input	-8.8dBm, RCA JACK	
VIDEO output	VIDEO output terminal, 1.0 Vp-p unbalanced, SCART JACK RGB output (75Ω In load R: 0.7Vp-p, G: 0.7Vp-p, B: 0.7Vp-p.)	
AUDIO output	Audio output terminal : -5.8dBm(VCR), 2.0Vrms(DVD), SCART JACK	
Playable tape	Very high dense tapes with VHS marks	
Playable disc	DVD, VIDEO-CD, CD (12cm), CD (8cm), MP3, CD-R, CD-RW	
Tape speed	SP:23.39 mm/s, LP: 11.70 mm/s	
Playtime	SP: 3hrs, LP: 6hrs (use of E-180 tape)	
Clock display	24hrs	
Time Recording	8 programs a month	
Persistence in power failure	1 min	
VIDEO S/N (VCR)	Over 43dB(Standard recording)	
Resolution	VCR	Over 240 lines (Standard recording)
	DVD	Over 400 lines (DVD Disc PLAY)
AUDIO (VCR)	Over 65dB (Hi-Fi), over 40dB (Mono)	
AUDIO (DVD)	90dB	
AUDIO dynamic range	90dB	
Speaker Output (Impedance) & (Size)	Center	30W (6Ω) (240 x 115 x 115)
	Front L/R	30W x 2 (6Ω) (140 x 115 x 200)
	Rear L/R	30W x 2 (6Ω) (108 x 88 x 164)
	Subwoofer	50W (6Ω) (198 x 350 x 355)
Amp Frequency Response	20Hz ~ 20KHz	
Radio Tuning Range	FM : 87.5 ~ 108.0 MHz, AM : 522 ~ 1611KHz	
Radio Intermediate Freq.	FM : 10.7 MHz, AM : 450 KHz	
FM Antenna Impedance	75 Ω (unbalance)	
AM Loop Antenna Inductance	12.5 uH (1KHz)	

Quick-start guide

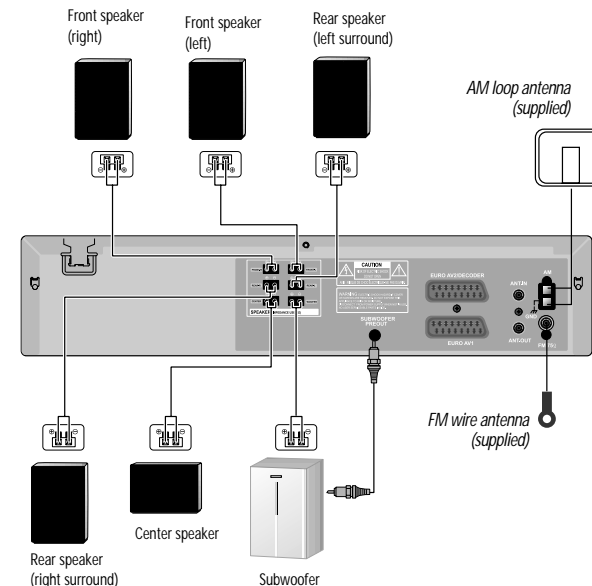
■ Please follow this guide from the beginning to the end. Before you start, unplug all the equipment from the mains supply.

Stage 1. Connecting the Player to your TV



- A** Fit the batteries into the remote control. Make sure that the (+) and (-) marks on the batteries agree with the (+) and (-) marks inside the battery compartment.
- B** Plug your aerial into the ANT IN socket of the player.
- C** Connect the black aerial lead provided from the ANT OUT socket of the player to your TV aerial socket.
- D** If you get the scart lead, connect your player to the TV as above. (You will get better pictures and sound quality if you connect your player with a scart lead.)

Stage 2. Connecting the Player to 5.1 CH Speaker system



- A** Be sure to match the speaker cord to the appropriate terminal on the components: + to + and - to -.
- B** If you get an active power subwoofer that has a power amplifier built-in, connect it to the subwoofer preout terminal.
- C** Plug AM loop antenna and FM antenna into the specified terminal on the back of player. Adjust the direction of the antenna in order to get the good condition of receiving.

• To obtain the best possible surround sound, adjust the speaker parameters (distance, level, delay time etc.) (See page 59-61)

Stage 3. Tuning in your TV



A Plug the player into the mains and turn it on by pressing the POWER button. RF 52 will now be displayed on the front panel.

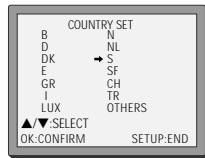
B Tune a spare channel of your TV until you see the blue 'Language Set' screen. Select the wanted language and country with ▲ or ▼ button. Press OK to confirm. Store this setting on your TV.

C If there is any distortion (lines, flickering and so on), the video usually recommends a new 'RF' number during the next stage (auto set). Press OK to confirm the new number. If the player does not recommend any RF channel, select the another transmission channel except RF 52 using numeric buttons.

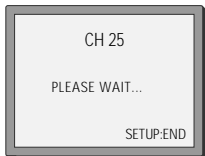
D If you have connected your player through the SCART lead, it is not necessary from B to C process. When you turn on the power of the player, TV shows 'Language Set' screen automatically.

E For selecting the country, refer to the followings.

B: Belgium	I: Italy	SF: Finland
D: Germany	LUX: Luxembourg	CH: Switzerland
DK: Denmark	N: Norway	TR: Turkey
E: Spain	NL: Netherlands	
GR: Greece	S: Sweden	



Stage 4. Auto set or Auto search



A After setting the language and country, 'Auto Set' or 'Auto Search' tunes in all the stations you can receive in your country and sorts them in a common order, for example, ARD on programme 1, ZDF on programme 2 and so on.

B If 'Clock Set' appears on the TV screen, please enter the time and date. Use the number buttons 0 to 9 on the remote control. Press OK to confirm.

C When 'Manual Set' appears on the TV screen, press MENU to end.

