

DVD Recorder LVW-5005 LVW-5001



Usar's Manual

Table of contents

Getting started	Audio CD recording
Accessories	
Important safety instructions	· ·
Warnings, cautions and others	
Disk information	<u>4</u>
Controls and displays	Playback
Remote control	5
Front panel connections	
Display window	
Rear panel connections	•
Connecting up	PAUSE/STEP, STOP, DISPLAY
Connecting the antenna cable and television	TOP MENU, MENU
For better picture	9 Navigation operation
Component out	9 SLOW, SEARCH
S-Video out	9 A-B REPEAT, SUBTITLE
For better sound 1	
Connection to a stereo audio amplifier or receiver 1	
Connection to a digital audio device	IDEC/MD2 file and Audio CD playbook
Digital out optical	
Connecting a satellite box	or Lo mo playbaok
Connecting a sateline box	in 5 lie playback 20
Quick setup	Audio CD playback
Initial setup 1	2 Slide show
Aspect ratio 1	2
Video outptut 1	
Audio 1	
TV channel setup	Naming a title
-	Protecting a title
Automatic TV channel search 1	Overwrite a title
Adding or deleting TV channel manually 1	S Fracing a title
Fine tuning TV channel manually 1	is -
Swapping TV channel manually (following TV) 1	3
Channel Editing 1	4 Easy Guider
	Playback 28
Recording	Record on DVD 28
	Record on CD-R/CD-RW
Before recording 1	
Recording television programs 1	
Adding new recordings 1	7 Finalize 30
Changing chapter intervals 1	GUI operation
Playback with the DVD menu 1	
Recording from a VCR or V8 / Hi8 / DV 1	Firmware lindate
The front panel and rear panel connection	-
Use "Easy Guider" to record DV signal	
"One touch record" to record the DV signal	•
DV control	
Record on CD-R/CD-RW discs	
Create a correct disc format	
VCD/SVCD recording	21 Troubleshooting Guide

Accessories

Please check and identify the supplied accessories.

☐ 1x Remote control



☐ 1x AC Power cord



☐ 2x Batteries



Important safety instructions

- Read instructions. Read all the safety and operating instructions before operating the product.
- Retain instructions. Keep the safety and operating instructions for future reference.
- Heed warnings. Adhere to all warnings on the product and in the operating instructions.
- Follow instructions. Follow all operating and use instructions.
- Cleaning Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Attachments Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- Water and Moisture Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- 8) Accessories Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
- CART A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
- 10) Ventilation Slots and openings in the cabinet provide ventilation, ensure reliable operation of the product, and protect it from overheating. Do not block or cover these openings. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. Do not place this product 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.
- 11) Power Sources This product 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 product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 12) LOCATION The appliance should be installed in a stable location
- 13) NONUSE PERIODS The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 14) Grounding or Polarization -
 - If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the 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 should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
 - If this product is equipped with a three-wire grounding type plug, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.
- 15) 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 product.
- 16) 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. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- 17) Lightning For added protection for this product 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 product due to lightning and power-line surges.
- 18) Power Lines An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, take extreme care to keep it from touching such power lines or circuits; contact with them might be fatal.
- Overloading Do not overload wall outlets, extension cords, or integral convenience receptacles. This can result in a risk of fire or electric shock.
- 20) Objects and Liquids Do not push objects of any kind into this product through openings; they may touch dangerous voltage points or short out parts, resulting in a fire or electric shock. Liquids of any kind should not be used on or around this product.
- 21) Servicing Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 22) Damage Requiring Service Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged,
 - If liquid has spilled or objects have fallen into the product,
 - If the product has been exposed to rain or water,
 - If the product does not function properly after following the operating instructions, contact Lite-On Customer Service for technical support.
 - If the product has been dropped or damaged in any way,
 - When the product exhibits a distinct change in performance.
 This indicates a need for service.
- 23) Replacement Parts When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 24) Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- 25) Wall or Ceiling Mounting Mount the product to a wall or ceiling only as recommended by the manufacturer.
- 26) Heat Keep this product away from heat sources, such as radiators, heat registers, stoves, or amplifiers.
- 27) Battery Usage Battery leakage may result in bodily injury or damage to the unit. In order to avoid battery problems, please follow these instructions.
 - Install all batteries correctly, with + and aligned as marked on the unit.
 - Do not mix batteries (old/new, carbon/alkaline, etc.).
 - Remove batteries when the unit is not used for a long time.

Warnings, cautions and others



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OF THIS UNIT. THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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



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

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN THE COVER AND DO NOT REPAIR YOURSELF REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO MOISTURE AND ENSURE THAT OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED AWAY FROM THE APPARATUS.

CAUTION! — POWER (1) button

Disconnect the mains plug to shut the power off completely. The POWER (1) button in any position does not disconnect the main line. Power can be controlled from the remote.

PRODUCTS WITH 525P PROGRESSIVE SCAN OUTPUTS NOTICE REQUIREMENTS

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE "STANDARD DEFINITION" OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525P DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

THE FOLLOWING APPLIES ONLY FOR U.S.A.

CAUTION!

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the

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

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

IMPORTANT FOR LASER PRODUCTS

- 1) CLASS 1 LASER PRODUCT
- DANGER: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 3) **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

CAUTION!

- CD-R/RW discs recorded using a personal computer or a CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the player's lens.
- Unfinalized CD-R/RW discs can be played, but not all time information (playing time, etc.) will be displayed.
- Check the copyright laws in your country before recording from DVD VIDEO, SVCD, Video CD, Audio CD, MP3 and JPEG discs. Recording of copyrighted material may infringe copyright laws.

Legal Notices Regarding Macrovision's Property Rights

"U.S. Patent Nos. 4,631,603; 4,577,216; 4,819,098; 4,907,093; and 6,516,132."

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

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Disc information

■ Playable Disc types

Disc Types	Logos	Characteristics
DVD-VIDEO	VIDEO VIDEO	This unit can playback DVD-Video discs and the region code is printed on the rear of the unit.
DVD - R/RW DVD + R/RW	DVD-Revirietée DVD-R	DVD - R, DVD - RW and DVD + R, DVD + RW, discs written in the DVD-Video format and finalized.
Video CD (VCD) Super Video CD (SVCD)	OSG OSG DGTAL VDES GLEEN VDED	Video with CD sound, VHS quality & MPEG-1 compression technology.
Audio CD (CD-DA)	OISC DIGITAL AUDIO	CD is recorded as a Digital Signal with better audio quality, less distortion and less deterioration of audio quality over time.
CD-R/RW (JPEG/MP3)	OISC OISC Recordance Ballyriable	This unit can play CD-R and CD-RW discs recorded with Audio CD or Video CD format, or with JPEG/MP3 files. Close the sessions or finalize the disc after recording.

■ Recordable Disc types

Disc Types	Logos	Characteristics
DVD + R/RW	US US OND-REMOVED OND-RE	DVD + R disc written in the DVD + VR format. DVD + RW disc written in the DVD + VR format.
DVD - R/RW (LVW-5005 model only)	RW RAT	DVD - R disc written in the DVD + VR format. DVD - RW disc written in the DVD + VR format.
CD - R/RW (LVW-5005 model only)	OISC OISC RECORDING BROWNINGS	CD - R/CD - RW disc written in the MPEG1 or MPEG2 video format or written in PCM Audio mode.
"DVD Dual" & "All Write" (LVW-5005 model only)	DUSI All write.	"DVD Dual" Written on both DVD + R/DVD + RW/DVD - R/DVD - RW disc.
		"All Write" – Written on all recordable DVD disc and CD - R/CD-RW disc.

Notes

The DVD-Video/DVD+RW/DVD+R/ Logos are trademarks of the respective companys.

For best result use discs with the above logos and that conform to specifications. The unit cannot play other discs correctly. Do not use irregular shaped discs (e.g. heart-shaped), as these can damage the unit.

It may not be possible to play CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW in all cases due to the type of disc or condition of the recording.

Unplayable disc types

The unit does not playback discs listed below. If you try to play back these discs, excessive noise may cause damage to speakers.

- Unfinalized discs from other DVD-Recorder.
- 2) DVD-ROM, DVD AUDIO, CD-ROM, PHOTO CD, SACD
- 3) DVD-RAM, DVD-VR format

■ Region Code of DVD-Video

This unit can playback DVD-VIDEO discs compatible with the region code is printed on the rear of the unit.

Examples of playable DVD-VIDEO discs:



■ Audio System

Dolby Digital Linear PCM



■ Video System (NTSC & PAL)

This DVD-Recorder supports both NTSC&PAL system.

■ Aspect Ratio

LB 4:3 (Letter Box) Standard

4:3 4:3 Pan&Scan

16:9 (Wide-Screen)

■ Others

Audio: Appears at the beginning of a scene record with multiple audio languages.

Subtitle: Appears at the beginning of a scene recorded with multiple subtitle languages.

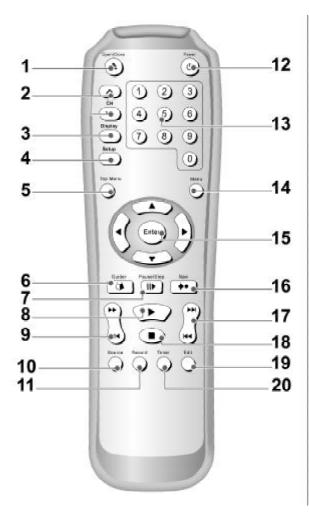
Angle: Appears at the beginning of a scene recorded from multiple angles.

■ All Write Technology (LVW-5005 model only)

"ALL WRITE" technology makes it alright to record on almost all of the recordable discs. (DVD+RW, DVD+R, DVD-RW, DVD-R, CD-RW or CD-R discs)

Controls and displays

Remote Control



- 1) Open/Close button (▲ OPEN/CLOSE)
- 2) CH _ button (Channel)
- 3) Display button (DISPLAY)
- 4) Setup button (SETUP)
- 5) Top menu button
- 6) Easy Guider button (Guider)
- 7) Pause/Step button (**II** ► PAUSE/STEP)
- 8) Play button (►PLAY)
- 9) F.F./REW. button(▶▶ F.F/ ◀◀ REW.)
- 10) Source buttons (SOURCE)
- 11) Record button (RECORD)
- 12) Power button ((1) POWER)
- 13) Numbered button (1~9, 0)
- 14) Menu button (MENU)
- 15) Cursor (▲▼◀▶), Enter button (ENTER)
- 16) Navigation button (NAVI)
- 17) Next/Previous button

 (▶▶ NEXT/ |◀◀ PREVIOUS)
- 18) Stop button (STOP)
- 19) Edit button (EDIT)
- 20) Timer button (TIMER)

To install batteries

 Open the battery compartment and insert the batteries. Make sure the polarity (+ and -) matches the marks inside the remote control.



Do not use rechargeable type batteries.

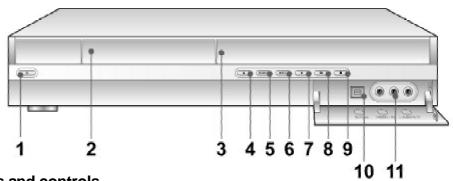
Remote sensor

The remote has a range of approximately 3M and works best when pointed directly at the unit. (at angles up to 30° from the front of the unit)



Controls and displays

Front panel connections

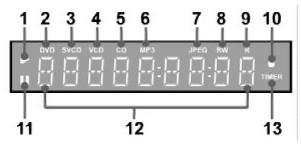


Names of parts and controls

- 1) POWER ON / OFF Turns the recorder on and off.
- 2) DISC TRAY To accept a disc.
- 3) DISPLAY Operation indicators are displayed here.
- 4) OPEN/CLOSE Opens or closes the disc tray.
- 5) SOURCE Select equipment connected to the line inputs.

- RECORD Starts recording.
- 7) PLAY Plays a disc.
- 8) PAUSE Pauses playing or recording a disc.
- Stops playing or recording a disc.
- 10) DV-LINK (IEEE-1394) Jack Connects digital video camcorder with this DV jack.
- 11) LINE IN (VIDEO/AUDIO L/R) Jacks Connects the input of external equipment.

Display Panel

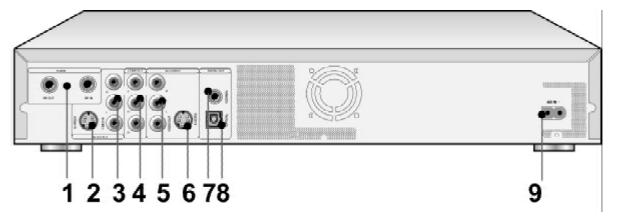


Display window function

- 1) Play indicators
- 2) DVD indicators
- 3) SVCD indicators
- 4) VCD indicators
- 5) CD indicators
- 6) MP3 indicators
- JPEG indicators
- 8) RW indicators DVD+RW indicators (LVW-5001, LVW-5005 model)
 - **DVD-RW indicators (LVW-5005 model)** CD-RW indicators (LVW-5005 model)
- R indicators DVD+R indicators (LVW-5001, LVW-5005 model) DVD-R indicators (LVW-5005 model) CD-R indicators (LVW-5005 model)
- 10) Record indicators
- 11) Pause indicators
- 12) Multi-information window
- 13) Timer recording mode

Controls and Displays

Rear panel connections



Names of parts

VHF/UHF IN/OUT Jacks
 Antenna cables input and output.

Note:

Playback signals don't go through here. Make proper connections before using this DVD Recorder.

- 2) LINE IN (S-VIDEO) Jack S-Video signal input.
- AV2 Rear IN (VIDEO/AUDIO L/R) Jacks Composite signal input.
- COMPONENT VIDEO OUTPUT (Y/Pb/Pr) Jacks
 Component signal output.

- 5) **LINE OUT (VIDEO/AUDIO L/R) Jacks** Composite signal output.
- 6) LINE OUT (S-VIDEO) Jack S-Video signal output.
- DIGITAL AUDIO OUT (COAXIAL) Jack
 Connects an amplifier or receiver having a digital input jack.
- 8) DIGITAL AUDIO OUT (OPTICAL) Jack
 Connects an amplifier or receiver having a digital input jack.
- 9) AC IN Terminal

Connecting up

Before making connections

- 1) Do not connect the AC power cord until all other connections are made.
- 2) Connect VIDEO OUT of the unit directly to the video input of your TV. Connecting VIDEO OUT of the unit to a TV via a VCR may cause a viewing problem when playing back a copy-protected disc. You may also have a viewing problem when connecting the unit to an integrated TV/Video system.

Connecting to the antenna outlet and the television

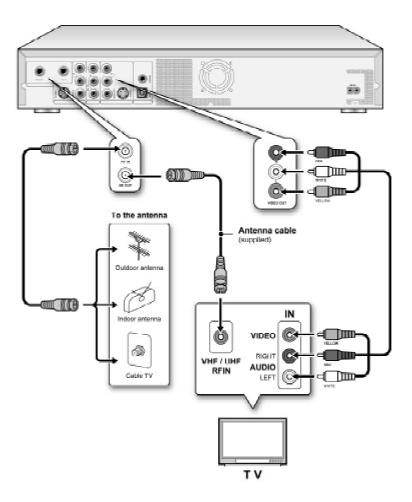
Before using the unit, follow the steps below to connect the unit to the antenna cable and TV.

Connecting to a TV with COMPOSITE jacks

Use a RF cable (supplied) to connect the RF IN on the unit to the antenna outlet.

Use a RF cable (same as supplied) to connect the RF OUT on the unit to the RF input on the television.

Use AUDIO/VIDEO cables (supplied) to connect the AUDIO/VIDEO output on the unit to the audio/video input on the television.



Notes:

- 1. Do not place this unit on top of other equipment that may generate heat. Excessive heat may cause this unit to malfunction.
- 2. For Digital Cable and Satellite TV users please connect your decoder's output to this unit's input.

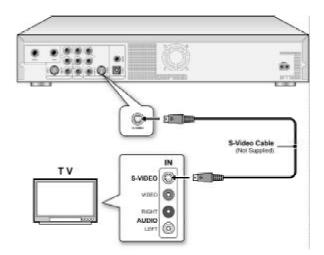
For better picture

There are two types of connections (S-Video, and Component video) that provide higher quality viewing.

1. Connecting to a TV via S-Video out

Connecting to a TV with a S-Video jack

Use a S-Video cable (not supplied) to connect the S-Video output on the unit to the S-Video input on the television.



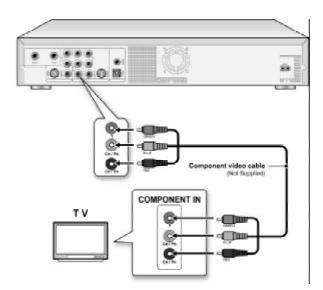
Notes:

- 1. Enter system setup to enable S-Video (refer to the section titled "Quick Setup").
- 2. When using S-Video connections, please remove all other video output connections.
- 3. In this configuration, the Red and White audio connections are required.

2. Connecting to a TV via COMPONENT out

Connecting to a TV with component jacks

Use COMPONENT cables (not supplied) to connect the **COMPONENT output** on the unit to the COMPONENT input on the television.



Notes:

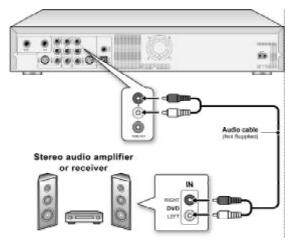
- 1. Enter system setup to enable COMPONENT (refer to the section titled "Quick Setup").
- 2. When using COMPONENT connections, please remove all other video output connections.
- 3. In this configuration, the Red and White audio connections are required.

For better sound

There are two types of audio connections, analog and digital.

Connecting to a stereo audio amplifier or receiver

Use an audio cord (same as supplied) to connect the **AUDIO OUT** on the DVD recorder to the audio input on a stereo amplifier or a receiver.

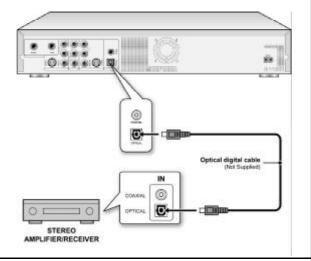


Connecting to a digital audio device

Connect an amplifier with Dolby Digital and DTS decoders to enjoy surround sound.

Digital out optical

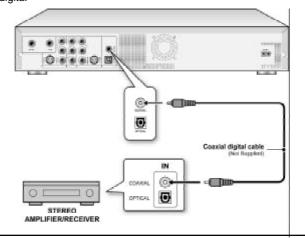
Use a fiber-optic cable (not supplied) to connect the **DIGITAL OUT OPTICAL** (digital optical output) on the DVD recorder to the digital optical input on an stereo amplifier or a receiver.



Digital out coaxial

Use a coaxial cable (not supplied) to connect the **DIGITAL OUT CO- AXIAL** (coaxial digital output) on the DVD recorder to the coaxial digital

input on an stereo amplifier or a receiver.



CONNECTING SATELLITE RECEIVER OR CABLE BOX

Connecting the cable box/satellite box and television

Before using the unit, follow the steps below to connect the unit to the cable box and TV.

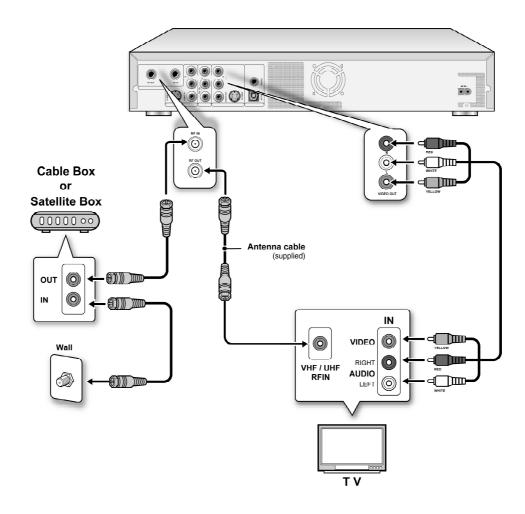
Connecting to a satellite box or a cable box with COMPOSITE jacks

Use a RF cable (supplied) to connect the RF IN on the cable box/satellite receiver to the antenna outlet.

Use a RF cable (same as supplied) to connect the RF OUT on the cable box/satellite receiver to the RF input on the DVD Recorder.

Use a RF cable (same as supplied) to connect the RF OUT on the DVD Recorder to the RF IN on the television.

Use AUDIO/VIDEO cables (supplied) to connect the AUDIO/VIDEO output on the unit to the audio/video input on the television.



Quick setup

Initial setup

Remote control & Setup menu

Confirm the antenna is connected correctly, and follow the steps below to make the personal adjustments for using the DVD-Recorder.

- 1. Press [() POWER] to turn on the unit.
- 2. Press [SETUP] to display the setup menu.
- Press [▲] [▼] to select the "System", "Language", "Playback", "Record", "Audio", "TV Tuner" and press [▶] or press [◄] to return to the previous or next menu.
- Press [▲] [▼] to select the item that you want to change and press [▶] or press [Enter].

System --- Video Output

System --- TV Type ---> Date ---> Time

Language --- OSD

Playback -- Aspect Ratio

Audio --- Digital Output (PCM / Bit Stream)

Record --- Quality (HQ, SP, EP and SLP)

- 5. Press [ENTER] to confirm the setting.
- 6. Press [SETUP] to exit the setup menu or press [◀] to return to the previous menu.

Notes:

To record TV programs using the timer record feature, you must set the time accurately.

Manually setting the date and time

Set the date manually

- Press [Setup] on the remote control. The setup menu will appear.
- 2. Select "System" using [▲] or [▼] and press [ENTER].
- 3. Select "Date" using [▲] or [▼] and press [ENTER].
- Change the day/month/year in the highlighted field using [▲]
 or [▼] or the number buttons 0..9 on your remote control
 and confirm with [ENTER]
- When all settings are correct, press [◄] until return to the main level
- 6. To exit the setup menu, press [Setup].

Set the time manually

- Press [Setup] on the remote control. The setup menu will appear.
- 2. Select "System" using [▲] or [▼] and press [ENTER].
- 3. Select "Time" using [▲] or [▼] and press [ENTER].
- Change the "hour/minute/second" in the highlighted field using [▲] or [▼] or the number buttons 0..9 on your remote control.
- Change the "AM/PM" using [▲] or [▼] and confirm with [ENTER].
- When all settings are correct, press [◀] until return to the main level.
- 7. To exit the setup menu, press [Setup].

Notes:

Check that the clock is correctly set before setting the timer recording. If not, the timer recording cannot be made.

Setting video output

 Press the [Setup] button and the setup menu will be displayed.

- 2. Select "System" using [▲] or [▼] and press [ENTER].
- Select "video output" as "COMPONENT" or "PROGRESSIVE" using [▲] or [▼] and press [ENTER].
- When all settings are correct, press [◀] to return to the main menu.
- 5. To exit the setup menu, press the [Setup] button.

Progressive scan mode

You can change the video output mode when you press [SETUP] button and to select the "System-->Video

Output-->Progressive".

(Video will not be displayed correctly if connected to an incompatible television.)

Video output mode:

480I: Interlace video **480P:** Progressive video







Notes

You must connect to the component video input terminalsi on a **480P** compatible television.

Aspect ratio

Select "4:3" (regular) or "16:9" (widescreen) to suit your television. If you have a regular 4:3 television, you can also selecthow viboon some discs is pessented.

4:3 Letter Box

(select when you connect the unit to a normal (4:3) TV.)

When playing back a DVD-VIDEO disc recorded in wide picture format, the picture is shown with black bars at the top and bottom.



4:3 Pan & Scan

(select when you connect the unit to a normal (4:3) TV.)

When playing back a DVD-VIDEO disc recorded in wide picture format, the picture is zoomed to fill the screen vertically, and the left and right sides of



the image are chopped off. Note, however, that the picture will be shown in the 4:3 LB mode even if you select the 4:3 PS mode depending on the disc.

16:9 Wide Screen

(select when you connect the unit to a wide-screen (16:9) TV.)



Notes:

You cannot change the "Aspect Ratio" setting during playback.

Audio

Digital Output

PCM / Bit Stream

(Enable digital audio output with PCM or encoded data)

DTS Out

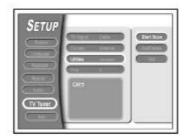
ON/OFF

TV channel setup

Automatic TV channel search

When the automatic channel search function is activated, the TV channels are searched and stored in a specific order. If the channel assignments of your TV content provider changes or if you are reinstalling the DVD-Recorder, you may need to start this procedure again. This will replace the stored TV channel with the new ones.

- 1.Ensure the antennas are securely connected to the DVD-Recorder.
- 2.Switch on the TV set and the DVD-Recorder.
- 3.Press [SETUP] to bring up the "SETUP" menu, press [▲] [▼] to select the "TV TUNER" and press [▶].
- 4.Press [▲] [▼] to select "Utilities" and press [▶].
- 5.Press [▲] [▼] to select "START SCAN" and press [ENTER] to start auto channel search.

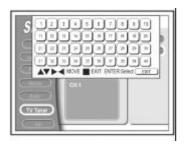


- 6.The auto TV channel search starts. The procedure may take few minutes.
- 7.When all the TV channel have been searched and stored, press [SETUP] to exit.

Adding or deleting TV channel manually

After you have performed the automatic channel search, you may like to add or delete some of the TV channels. This function allows adding or deleting channel manually.

- 1.Press [SETUP] to display the "SETUP" menu, press [▲] [▼] to select "TV TUNER" and press [▶].
- 2.Press [▲] [▼] to select "Uilities" and press [▶].
- 3.Press [▲] [▼] to select "Add/Delete" and press [ENTER] to bring up the add/delete menu.



4.Press [◀] [▶][▲] [▼] to select the channel(s) that you want to add or delete and press [ENTER] to confirm it.



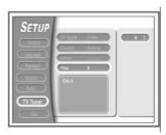
Move the cursor to the TV channel and you can press [ENTER] again to cancel delete operation.

5.Press [◀] [▶][▲] [▼] to select "EXIT" and press [ENTER] to save setting and exit the add/ delete menu.

Fine-tuning TV channel manually

After you have performed the automatic channel search you may like to fine tune the TV channel signal manually. Follow the steps below to complete fine tune.

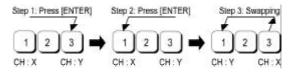
- 1.Press [SETUP] to bring up the "SETUP" menu, press [▲] [▼] to select the "TV TUNER" and press [▶].
- 2.Press [▲][▼] to select "FINE" and press [▶].
- 3.Press [▲][▼] to fine tune the channel signal.



Swapping TV channel manually (following TV)

This function allows users to manually swap the TV channel order stored in DVD-Recorder to match the TV channel order stored in users' TV set.

- 1.Press [SETUP] to display the "SETUP" menu, press [▲] [▼] to select the "TV TUNER" icon and press [▶].
- 2.Press [▲] [▼] to select "Swap" and press [ENTER] to bring up the "SWAP" menu.
- 3.Select the TV channel(s) to be swapped and press [ENTER] to mark it/them.
- 4.Press [▲] [▼][◀] [▶] to select a new channel position and press [ENTER] to swap.



- 5.To swap more TV channels, repeat step "3" to complete the settings.
- 6.Select "EXIT" to save the setting and exit the "SWAP" menu.

Channel Editing

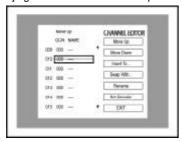
Before channel editing

Ensure that the antenna cables are securely hooked up to the unit.

Adding or deleting TV channel manually

- 1.Turn on the TV set and the DVD-Recorder, and press [Source] to switch the input signal source of the unit to "TV."
- 2.Press [EDIT] to bring up the "Channel Editor" menu, press [▲] [▼] to select one of the TV channels and press [ENTER].

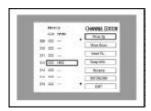
Move the cursor to the TV channel to make the selection and press [ENTER] again to cancel the delete operation.



Moving up or moving down the TV channel

- 1.Press [EDIT] to appear the "Channel Editor" menu, press [▲] [▼] to select one of the "TV Channel" and press [▶].
- 2.Press [▲] [▼] to select the "Move Up" or "Move Down" and press [ENTER].

The TV channel will change the address.
Each time you press [▲] or [▼] the item changes as follows.





Renaming TV channels

- 1.Press [EDIT] to bring up the "Channel Editor" menu, press [▲] [▼] to select one of the TV channels and press [▶].
- 2.Press [▲] [▼] to select "Rename" and press [ENTER]. The display for entering a title name appears.
- 3. Select the desired characters from the keypad. Press [ENTER] after each entry.
- 4.When you finish entering the title name, press [◀] [▶] [▲] [▼] to select "Finish."

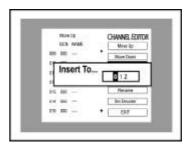
Notes:

You only can enter up to 5 characters for a name.



Inserting the TV channels

- 1.Press [EDIT] to bring up the "Channel Editor" menu, press [▲] [▼] to select one of the TV channels and press [▶].
- 2.Press [▲] [▼] to select "Insert to" and press [ENTER].

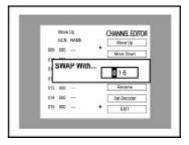


3.Press [◀] [▶][▲] [▼] to enter the "Channel number," and press [ENTER]. The channel will be moved to where you want to.

Swapping TV channels

This function allows you to manually swap the TV channel order stored in the unit to match the TV channel order stored in your TV set

- 1.Press [EDIT] to bring up the "Channel Editor" menu, press [▲] [▼] to select one of the "TV Channel" and press [▶].
- 2.Press [▲] [▼] to select "Swap with" and press [ENTER].
- 3.Press [◀] [▶][▲] [▼] to enter the "Channel number," and then press [ENTER] to swap. The order of the channels will be swapped with the channel number selected.



- 4.To swap other TV channels, repeat step 3 to complete the settings.
- 5.Press [◀] [▶][▲] [▼] to select "EXIT," press [ENTER] to save the setting and exit the "Channel Editor" menu.

Before recording

LVW-5001 model only

LVW-5001 DVD Recorder records on both DVD+R and DVD+RW discs. Please use qualified recordable DVD+R/RW discs to ensure best recording quality. Check our Web site for the qualified discs list.

LVW-5005 model only

LVW-5005 DVD Recorder is a versatile DVD-Recorder that employs the "ALL WRITE" technology to make it alright to record on almost all of the recordable discs. You may use DVD+RW, DVD+R, DVD-RW, DVD-R, CD-RW or CD-R discs to record. Please use qualified recordable DVD+R/RW disc to ensure the best recording quality. Check our Web site for the qualified discs list.





Notes:

- 1.CD-R, DVD+R & DVD-R are write once DVD discs.
- 2.CD-RW, DVD+RW & DVD-RW are re-writable DVD discs.
- You cannot add new recording to a DVD-R/DVD-RW/DVD+R disc after the disc is finalized.
- 4.In some cases, you may not be able to add new recording to the recordable DVD discs that contain recordings recorded by other DVD-Recorders.

Recording televison programs

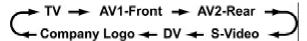
1.Press [U POWER] to turn the unit on.

2.Press [▲ OPEN/CLOSE] to open the tray and insert a recordable DVD disc.

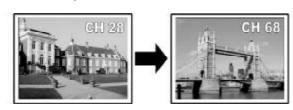
Press the button again to close the tray.

When you insert a new recordable DVD disc, the DVD-Recorder will automatically start the disc preparation process.

3.Press [SOURCE] to change the "signal-input source" and select the "TV" input.



4.Press [CH] or press [▲] [▼] to select the channel you want to record.



Notes:

You can also use the numbered buttons to select a channel.

5.Press [RECORD] to start recording.

After pressing [RECORD] , it may take a few moments to initialize.



Recording continues until you stop the recording or when disc is full

To stop recording

When you press [STOP], it may take a few moments for recording to stop and the session to close.



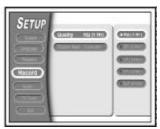
To pause recording

Press [**II**▶ PAUSE] to pause recording, and press [**II**▶ PAUSE] to resume recording.



To change the recording mode.

Press [SETUP].



The new setting can't change the current recording mode but will be activated during the next session.

One-touch recording

Use one-touch recording to start recording immediately in 30 minute blocks. Each time you press the record button, the recording time is extended by another 30 minutes.

To check the disc status while recording

Press [DISPLAY], the recording information appears.



Adding new recordings

Adding new recordings after other recording sessions.

Press [RECORD] to start recording, and press [■ STOP] at the point you want to stop.



Note:

Each new recording session is placed after the previous session unless a certain recording title is set to be overwritten.

Changing Chapter Interval

Creating chapters while recording

The DVD-Recorder can automatically divide a session into chapters by inserting chapter marks at 5/10/15/20/25/30-minute interval during the recording process.

- 1.Press [SETUP] to display the "SETUP" menu.
- 2.Press [▲] [▼] to select the "RECORD" and press [▶].
- 3.Press [▲] [▼] to select the "CHAPTER MARK" icon and to set up the time.



4.Press [SETUP] to exit the "SETUP" menu.

Notes:

- 1. During recording, press [EDIT] to add chapter mark(s) in the recorded session manually.
- 2. You can also start recording using the "Easy Guider menu."

Press [GUIDER], select "RECORD" and then press [ENTER]. Follow the steps to set the recording mode.

- 3.Before you start, please ensure that the disc has enough available space for the recording.
- You cannot change the channel or recording mode during recording.

Playback with the DVD menu

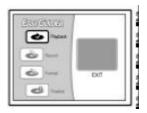
Selecting a recorded session on a disc

The "DVD Menu" displays all the titles (programs) recorded on the disc and you can select the one you want to play.

1.Press [▶ PLAY] or [GUIDER]

The "DVD Menu" menu appears when you press [▶ PLAY] or when you press [▶ GUIDER] to select "PLAYBACK" icon, and display all of the title (program) on the recordable DVD disc.



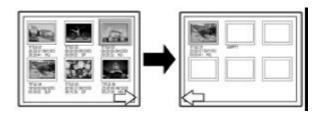


2.Press [◀] [▶] to select a title (program) you want to play and press [ENTER].



To scroll the "DVD Menu" display by page.

Press $[\blacktriangleleft]$ $[\blacktriangleright]$ $[\blacktriangle]$ to select " \bigcirc " or " \bigcirc " icon or press $[\blacktriangleright]$ NEXT] or $[\![\blacktriangleleft]$ PREVIOUS], and the entire "DVD Menu" advances to the next/previous page of recorded titles (programs).



Notes:

- 1.If a power failure occurs, the program you are recording may be lost.
- 2.Before you start, please check if the disc has enough available space for the recording.
- You cannot change the channel or recording mode during recording.
- 4.Before playing a DVD+R disc on another player, you need to finalize the disc.

LVW-5005 model only

Before playing a DVD+R/DVD-R/DVD-RW disc on compatible equipment, you will need to finalize the disc.

Recording from a VCR or Camcorder/ Hi8 / DV

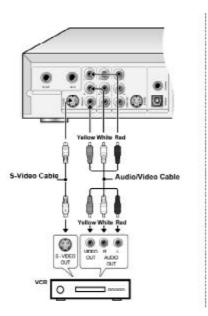
Before starting to record

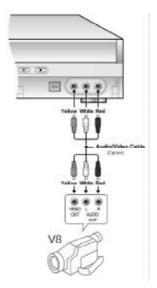
This DVD-Recorder can accept standard CVBS (RCA) analog audio/video cable or IEEE-1394 cable and record Camcorder onto DVD in the digital video format of your choice. The unit functions much like a digital VCR. Examples of use include archiving videotapes or transferring from a Video Cassette Recorder or DV/V8 Camcorder to a recordable DVD disc.

This DVD-Recorder allows basic DV control with the DVD Recorder's remote control when connected via the DV Link.

The front panel and rear panel connection

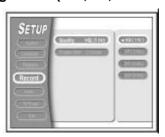
Connect a Video Cassette Recorder or Camcorder to the unit's input terminals.





To start recording

1.Press [SETUP] to select "RECORD" to set the recording mode. (HQ, SP, EP or SLP)



- 2.Place a recordable DVD disc on the tray with the disc's label facing up.
- 3.Press [SOURCE] to select the signal-input (TV, AV1-Front, AV2-Rear, S-Video, DV).

- 4.Start to play on the VCR or Camcorder.
- 5.Press [RECORD] on the DVD-Recorder to record your video/audio signal from the VCR or V8 Camcorder onto a recordable DVD disc.



6.Press [■ STOP] to stop recording.

To pause recording

Press [**II** ▶ PAUSE] to pause recording, and if you want to restart recording, press the [**II** ▶ PAUSE] button to resume recording.

DV recording

Before you to start to record DV contents

This DVD Recorder allows basic DV control functions with the Remote Control. The DVD Recorder is equipped with a camcorder control (Play, Stop, FF or Reverse) feature via the DV Link connection. Simply move the screen cursor to the desired function and press [ENTER] at DV input screen.

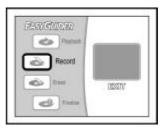
Use "Easy Guider" to record DV signal

- 1.Power on your TV and this DVD-Recorder.
- 2.Place a recordable disc on the tray. Make sure the disc's label is facing up.
- 3.Connect the DV cable (IEEE-1394 4-pin cable) to both the DV Camcorder and the DVD-Recorder.

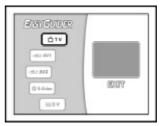


Notes:

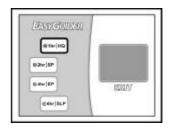
- 1. The DV-Link input jack on this unit is for use with DV compatible camcorder only.
- 2.Only DV signals can be input to the DV-Link jack on this DVD Recorder.
- 3.Do not connect a MICRO MV format video camcorder to this DV-Link (IEEE-1394) jack.
- 4. You cannot connect more than two pieces of video input sources at a time to the front panel connector of this DVD-Recorder.
- 4.Power on the DV Camcorder. Start "Playback mode" on the DV Camcorder.
- 5. "Pause" the DV Camcorder where you want to record.
- 6.Press [M GUIDER] on the remote control. This actives the Easy Guider menu.
- 7. Press [▲] [▼] and to select the "RECORD" icon, and press [ENTER] to confirm.



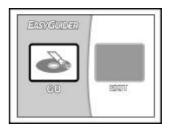
8.Press [▲] [▼] to select "DV" Input, and press [ENTER] to confirm.



9.Press [\blacktriangle] [\blacktriangledown] to select a recording quality and press [ENTER] to confirm.



10.Press [ENTER] to start recording.



This DVD-Recorder will stay in "Pause" mode when no DV input signal is detected.

11.To pause recording.

Press [**|| ▶** PAUSE] on the remote control to pause recording . Press [**|| ▶** PAUSE] again, if you want to resume recording.

12.To stop recording.

Press [

LVW-5001 model

Before playing a DVD+R disc on compatible equipment, you will need to finalize the disc.

LVW-5005 model

Before playing a DVD+R/DVD-R/DVD-RW disc on compatible equipment, you will need to finalize the disc.

"One Touch Record" to record DV contents

Before you start to record DV contents

When you do not need to operate your DV, this unit allows basic DV control on DVD Recorder Remote control.

- 1.Power on your TV and this DVD-Recorder.
- 2.Place a recordable DVD disc in the tray. Make sure the disc's label is facing up.
- 3.Connect the DV Cable (IEEE-1394 4-pin cable) to both the DV Camcorder and the DVD-Recorder.
- 4.Power on the DV Camcorder. Set "Playback mode" on the DV Camcorder.
- 5. "Pause" the DV Camcorder where you want to record.
- 6.Press [SOURCE] to change the "Signal-Input source" and select the "DV" input.

7.Resume DV Camcorder playback and press [RECORD] to start recording.



8.To pause recording.

Press [| PAUSE] on the remote control to pause recording .

Press [PAUSE] again, if you want to resume recording.

9.To stop recording.

Press []

DV control

After recording is stopped, a DV control bar will appear on the screen. This allows basic DV control utilizing the DVD Recorder's Remote Control.



- 1.Press [◀] [▶] to select (▶▶), to fast-forward the DV Camcorder.
- 2.Press [◀] [▶] to select (◀◀), to rewind the DV Camcorder.
- 3.Press [◀] [▶] to select (■), to stop the DV Camcorder playing.
- 4.Press [◀] [▶] to select (▶), to start the DV Camcorder playing.
- 5.Press [◀] [▶] to select (▮▮), to pause the DV Camcorder playing.

Recording (LVW-5005 model only)

Record on a CD-R/CD-RW disc

Before to start recording

LVW-5006 DVD Recorder is a versatile DVD recorder that can record video in either VCD / SVCD or audio CD format on CD-R/RW discs. Please use qualified recordable disc to ensure the best recording quality. Check our Web site for the qualified discs list.

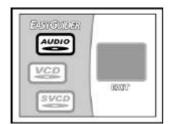
Notes:

Ensure to activate the "erase" function before you started to record.

Creating a correct disc format

Place an empty CD-R or CD-RW disc on the tray

1.Press [→ GUIDER] to display the "Easy Guider" menu, press [▲] [▼] to select the "Erase" and then press [ENTER].



Recording mode (an empty 700MB disc)

Mode	Resolution 352 x 480 (NTSC) 352 x 576 (PAL)		Recording Time
SVCD			34 minutes
VCD	352 x 240 (NTSC)	352 x 288 (PAL)	68 minutes
Audio CD	44.1KHz 1	.41Mbits/sec	66 minutes

- 2.Press $[\blacktriangle][\blacktriangledown]$ to select which recording format to record and then press [ENTER].
- 3. When the disc preparation process is completed and the format is created, select "Exit" and press [ENTER] to exit the erase menu.

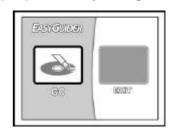
VCD/SVCD recording

To start recording

- 1.Place a well-prepared CD-R or CD-RW disc onto the disc tray with the disc's label facing up.
- 2.Press [→ GUIDER] to display the "Easy Guider" menu, press [▲] [▼] to select the "Record" and then press [ENTER].
- 3.Press [▲] [▼] to select the signal-input (TV, AV1-Front, AV2-Rear, S-Video, DV) and press [ENTER].

Notes

- You can't perform any recording before you the CD-R/CD-RW disc is prepared.
- 2. Only single format is allowed on a single disc.
- You can't change the format of CD-R disc after the disc preparation process.
- 4.To change the format of a CD-RW disc, you must use the "erase" function to create a new format.
- 5.All contents on the disc will be erased after the disc preparation process.
- 4.Press [GO] to record your signal onto the disc.



5.Press [■ STOP] to stop recording.

To pause recording

Press [III PAUSE] to pause recording. If you want to restart recording, press the button or [RECORD] again.

Audio CD recording

To start audio track recording

- 1.Place a CD-R / CD-RW disc prepared in the audio CD format onto the tray with the disc's label facing up.
- 2.Press [→ GUIDER] to display the "Easy Guider" menu, press [→] [▼] to select the "Record" and then press [ENTER].
- 3.Press [▲] [▼] to select the audio signal input (TV, AV1-Front, AV2-Rear, S-Video, DV) and press [ENTER].
- 4.Press [RECORD] to record your audio signal onto a recordable CD disc.
- 5.Press [EDIT] to create a new audio track into disc during recording.
- 6.Press [■ STOP] to stop audio recording.

Notes:

- 1.Press the [Edit] button one, a new audio track will be automatically created by 2-sec interval.
- 2.Audio source input during the 2-sec interval will be recorded as the beginning of the new track.

Timer record

Prior to timer record

Please check that the recordable DVD disc or recordable CD disc (LVW-5005 model only) has enough available space for the timer recording function. Before you start to record, follow the steps to set the date, time, picture quality and channel of the program manually.

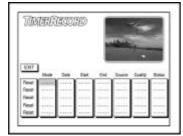
Setting the timer

1.Press [\bigcirc POWER] to turn the unit on.

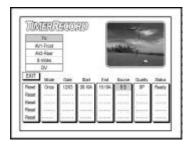
2.Press [≜ OPEN/CLOSE] to open the tray and place a recordable DVD disc or recordable CD disc (LVW-5005 model only) on the tray.

If you use an new recordable DVD disc, disc preparation process will take place in the background automatically.

3.Press [TIMER] to display the "Timer-Record" menu.



4.Press [▲][▼] to select one of the timer setting list and press [▶].



5.Press [◀] [▶] to select "Mode" and then press [ENTER].

Each time you press $[\blacktriangle]\,[\blacktriangledown]$, the item changes as follows.

Mode: Once <-> Weekly <-> Daily

6.Press [◀] [▶] to select "Date" and then press [ENTER] .

Each time you press [▲] [▼] , the item changes as follows.

For Once: DATE: 1 2: 25 (MM/DD)

For Weekly: **DATE: SAT**

(SUN/MON/TUE/WED/THU/FRI/SAT)

For Daily: DATE: X X : X X (not work)

7.Press [◀] [▶] to select "Start Time" and then press [ENTER] to set the "Recording start time".

TIME: 0 1: 28 A (HH/MM/AM or PM)

8.Press [◀] [▶] to set "End Time" and then press [ENTER] to set the "Recording end time."

9.Press [◀] [▶] to select "Source" and then press [ENTER] to set the "Recording source."

TV <-->AV1-Front<-->AV2-Rear<-->S-Video<-->DV

10.Press [◀] [▶] to select "Quality" and then press [ENTER] to set the "Recording quality."

LVW-5001 model only:

Mode: HQ <-> SP <-> EP <-> SLP

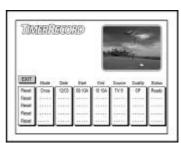
LVW-5005 model only:

Mode:HQ <-> SP <-> EP <-> SLP <-> SVCD<-> VCD<-> Audio CD

If you enter a wrong selection

Press [◀] [▶] to re-select the item you want to change.

11.Press [▲][▼] to select the "Exit" icon and then press [ENTER] to exit the "Timer-Record" menu.



12.Press [POWER] to turn off the unit and activate the timer record function.

Notes

1.When the timer record function is active, the "Timer" LED on front panel will light up.

2.Timer Record continues until you stop the recording or the disc is

To stop recording during timer record

When you press [STOP], it may take a few seconds for recording to stop.

To check the disc status while timer recording

Press [DISPLAY] and the timer recordi information appears.

Playback

DVD/VCD/SVCD video disc playback

Before you can start to enjoy the digital audio and video on DVDs, be sure that you have made the necessary settings in the Setup screen menus outlined in the previous section to correspond to your home system. Having made these settings, you are now ready to start using the player to enjoy DVDs, Video CDs, and CDs.

Basic playback

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

■Press [① POWER] to turn on the unit.

Press to turn the unit on or off. Lights up in red when the power is off.

- ■Press [OPEN/CLOSE] to open the disc tray and place the disc label-up on the disc tray.
- ■Press [► PLAY] to start playback.
- ■Press [►► F.F.] to perform fast forward scanning.

Press repeatedly to play the disc forward at 2x, 4x, 8x, 16x.

F.F.
$$(\rightarrow 2x \rightarrow 4x \rightarrow 8x \rightarrow 16x \rightarrow)$$

■Press [◀◀ REW] to perform fast reverse scanning.

Press repeatedly to play the disc reverse at 1x, 2x, 4x, 8x, 16x.

■Press [►► NEXT] to advance to the next chapter/track.

Press repeatedly to skip to the next chapter during playback.

■Press [| → PREVIOUS] to reverse to a previous chapter.

Press repeatedly to return to the beginning of previous chapters during playback.

- ■Press [|| PAUSE/STEP] to pause playback.
- ■Press [|| PAUSE/STEP] again to start "frame by frame mode".

Press repeatedly to advance DVDs and Video CDs frame by frame during playback in pause mode.

Press [▶ PLAY] to restart normal playback .

■Press [■ STOP] to stop playback.

■ Press [DISPLAY] to display the information of DVD/VCD/SVCD Disc.

■Press [TOP MENU] to display the disc menu on the TV screen.

Press to return to the DVD's title or disc root menu for the current title during playback.

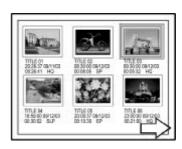
VCD SVCD

Press [0,1~9] the numbered buttons to select an item of the title menu.

DVD

Press $[\blacktriangle]$ $[\blacktriangledown]$ $[\blacktriangleright]$ to select an item and press [ENTER].





■Press [MENU] to display the title menu on the TV screen.

Press $[\blacktriangle]$ $[\blacktriangledown]$ $[\blacktriangleright]$ to select an item and press [ENTER].

Notes

The [MENU] button only functions while the unit is in playback mode. Depressing this button during other operations won't work on this unit.

Playback

Navigation operation

During playback, press [Navi.] to display the "Navigation"



SLOW MOTION

Select a slow-motion speed. You can choose to play the Disc at +1/2x, +1/4x or -1/2x, -1/4x.

SEARCH

Locating a desired position in the current title or track (time search).

Press the numeric buttons (0 to 9) to enter the desired time or title.

Example (for DVD VIDEO)

To playback from

TITLE:CHAPTER: 001/001 or TIME:01:27:33 (H:M:S)

Example (for SVCD/VCD)

To playback from

TIME: 0 1: 27:33

Press [◀] to correct a mistake.

Press [◀] repeatedly to move back to the digit where you entered a wrong number, and reenter the correct one.

Press [ENTER], to start playback from the specified time.

Notes:

Moving the cursor left through each menu takes you to the previous level. Moving the cursor left at the first menu selection closes the dialog box.

A-B REPEAT

Starting to repeat a desired part.

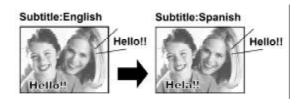
Select "Point A" at the beginning of the part you want to repeat.

Select "Point B" at the end of the part you want to repeat.

The unit locates "A" and starts repeat playback between "A" and "B."

Select [Cancel] . The A-B repeat mode turns off, then normal playback continues.

SUBTITLE During playback to select a subtitle language from those available on the current disc.

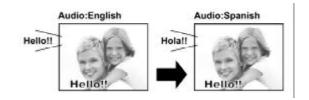


Notes:

Some DVDs include subtitles in different languages. If you want to choose subtitles, follow these steps.

AUDIO

To select a different audio language or soundtrack during DVD playback.

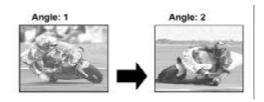


Notes:

Multiple languages or soundtracks must be available on the DVD.

ANGLE

To select a different camera angle during DVD playback.



Notes:

Multiple angles must be available on the DVD-disc. (within the current title) or track for playback.

INFORMATION

To enable or disable the DVD/VCD/SVCD disc information.

To exit the Navigation

Press [▶ •Navi.] again or [◀] to exit the "Navi" mode.

JPEG/MP3 file and Audio CD playback

The unit can play an Audio CD, JPEG, or MP3 file on a disc.

JPEG file playback

Playing JPEG files

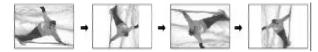
1.Place the JPEG disc on the tray.

The disc will begin playback automatically.

2.Press [◀] or [▶] to advance to the next picture, or return to the previous picture.



3.Press [▲][▼] to select "Rotate RIGHT" or "Rotate LEFT" and "Rotate UP" or "Rotate DOWN."



- 4.Press [||▶ PAUSE] to pause the picture playback.
- 5.Press [■ STOP] to stop the picture playback.

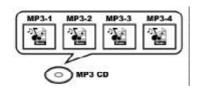
MP3 file playback

Playing MP3 files

1.Place the MP3 disc on the tray.

The disc will begin playback automatically.

2.Press [►► NEXT] or [► PREVIOUS] to advance to the next or return to previous MP3 files.



- 3.Press [II▶ PAUSE] to pause the MP3 file playback.
- 4.Press [STOP] to stop the MP3 file playback.

Audio CD playback

Playing Audio CDs

1.Place the Audio CD on the tray.

The disc will begin playback automatically.

- 2.Press [▶▶ NEXT] or [I◀◀ PREVIOUS] to advance tracks or return to previous track.
- 3.Press [**||▶** PAUSE] to pause the playback.
- 4.Press [■ STOP] to stop the playback.
- 5.Enter the numbered button (0~9) to select the desired audio track, and press [ENTER].

Begin playing from a selected track.

Slide show

Concurrent play JPEG and MP3 files on the same disc.

1.Place the disc on the tray.

The disc will begin playback automatically.

- 2.Press [▶PLAY] to start playback.
- 3.Press [▶▶ NEXT] or [I◀◀ PREVIOUS] to advance to the next or previous MP3 files.

Or press [◀] [▶] to skip the picture.

- 4.Press [▲][▼] to select "Rotate RIGHT" or "Rotate LEFT" and "Rotate UP" or "Rotate DOWN."
- 5.Press [II▶ PAUSE] to pause the slide show playback.

Press [STOP] to stop the slide show playback.

Notes:

- 1.If an MP3 file name includes any 2-byte character, the unit may not display the file name correctly,
- 2.The unit cannot support ID3 tag.
- 3. The unit does not support MP3-Pro or WMA files.
- 4. The unit supports discs recorded with multiple sessions.
- 5.The unit only can playback picture or tracks with the following file extensions; JPG or jpg and MP3 or mp3 etc.
- 6. The time required for reading disc contents may vary for different discs. This is dependent upon the numbers of groups (folders) and tracks (files) recorded and etc.
- 7.You cannot advance or reverse playback by pressing F.F. or REW. during JPEG/MP3 disc playback.
- 8. You cannot play audio track by pressing the numbered buttons during MP3 disc playback.
- 9. This unit supports MP3 file bitrates of: 32Kbps ~ 320Kbps.

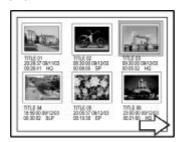
Editing

Before starting to edit

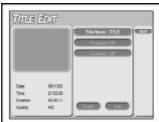
This section explains the basic editing functions on the unit. Please finish all the editing before finalizing the disc. You cannot edit a finalized disc.

DVD menu and Edit menu (DVD-R/-RW/+R/+RW discs only)

 Press [⊕ PLAY] or [→ GUIDER] to display the "DVD Menu."



- 2. Select the session you like to edit.
- 3. Press [EDIT] to display the "Title Edit" menu.



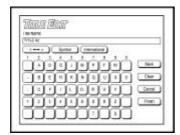
Naming a title (DVD-R/-RW/+R/+RW discs only)

 Press [▲] [▼] to select the "Edit" icon, and then press [ENTER].

The display for entering a title name appears.



2. Select the desired characters from the keypad, and press [ENTER] after each entry.



When you finish entering the title name, and press [◄] [▶] [▲] [▼] to select "Finish."

Note:

- 1. You only can enter up to 8 characters for a name.
- 2. This function is not applicable to a finalized DVD+R disc.

Protecting a title(DVD+R/+RW/-R/-RW discs only)

 Press [▲] [▼] to select "Protection" and then press [ENTER].



2. Press [◀] [▶] to select the "On" icon and then press [ENTER].

Notes

- 1.When a title is protected, it cannot be erased or overwritten.
- 2.When a disc in under the process to create a new format, the protected contents will be deleted permanently.
- 3. This function is not applicable to a finalized DVD+R disc.

Overwriting a title(DVD-R/-RW/+R/+RW discs only)

 Press [▲] [▼] to select "Overwrite" and then press [ENTER].



Press [◀] [▶] to select "On" and then press [ENTER].

The "Overwrite" mode is set.

Note:

- 1.For DVD+R disc recording each new recording is always placed right after the previous recording. The original recordings cannot be overwritten.
- 2.For DVD+RW discs, each new recording session can either be placed right after the previous recording or directly overwrite the selected recording title.
- 3. When the overwrite function is turned on, the recording can be overwritten. When the function is turned off, the subject cannot be overwritten. The overwrite function is turned off as the default setting.
- 4. This function is not applicable to a finalized DVD+R disc.

Erasing a title(DVD-R/-RW/+R/+RW discs only)

 Press [▲] [▼] to select "Erase" and then press [ENTER].

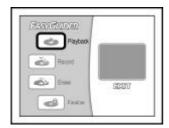
Note

- 1. After erasing the titles on the DVD+R discs, the erased space could not be utilized or re-allocated.
- 2. This function is not applicable to a finalized DVD+R disc.

Easy Guider

Playback

 Press [GUIDER] to display the Easy Guider menu.



2. Press [▲] [▼] to select the "Playback" icon and then press [ENTER].

The "DVD Menu" appears.



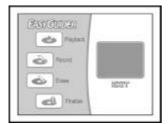
3. Press [◀] [▶] to select a title (program) you want to play and press [ENTER].

Press [**II** ▶ PAUSE] to pause playback. Press [▶ PLAY] to resume normal playback.

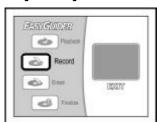
Press [■ STOP] to stop playback.

Record

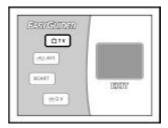
Press [GUIDER] to display the Easy Guider menu.



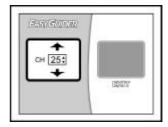
2. Press [▲] [▼] to select the "Record" icon and then press [ENTER].



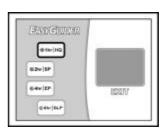
 Press [▲] [▼] to select the Signal-Input (TV, AV1-Front, AV2-Rear, S-Video, DV) and press [ENTER].



If you select "TV", press $[\blacktriangle]$ $[\blacktriangledown]$ to select the channel you want to record and press [ENTER].



 Press [▲] [▼] to select the recording mode and press [ENTER]. (HQ, SP, EP or SLP)



Recording Mode	Recording Time (on empty 4.7GB disc)	
на	60 mins	
SP	120 mins	
EP	240 mins	
SLP	360 mins	

- 5. Press [ENTER] to confirm recording.
- 6. Press [■ STOP] to stop recording.
- 7. Press [**II** PAUSE] to pause recording.

Notes:

You can select "EXIT" or press the [GUIDER] button again to exit the "Easy Guider" menu.

LVW-5005 model only

LVW-5005 employs the "ALL WRITE" technology and can record on almost all of the recordable discs. You may use either DVD+RW, DVD+R, DVD-RW, DVD-R, CD-RW or CD-R discs to record.





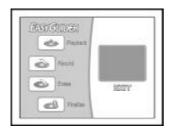
Easy Guider

Notes:

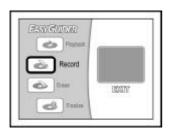
Ensure to prepare the disc before you start to record.

VCD/SVCD/Audio CD recording

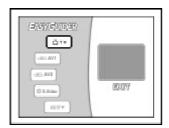
1. Press [GUIDER] to display the "Easy Guider" menu.



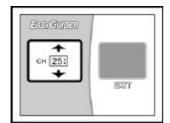
2. Press [▲] [▼] to select the "Record" icon and then press [ENTER].



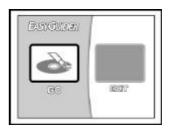
3. Press [▲] [▼] to select the signal- input (TV, AV1-Front, AV2-Rear, S-Video, DV) and press [ENTER].



If you select "TV," press [▲] [▼] to select the channel you want to record and press [ENTER].



4. Press [ENTER] to start recording.



VCD / SVCD / Audio CD recording quality

Mode	Resolution		Recording Time
SVCD	352 x 480 (NTSC)	352 x 576 (PAL)	34 minutes
VCD	352 x 240 (NTSC)	352 x 288 (PAL)	68 minutes
Audio CD	44.1KHz 1.41Mbits/sec		66 minutes

Easy Guider

Erase

Before you utilize the "erase" function on a disc, please make sure that important content is safely backed up. All the disc contents will be deleted.

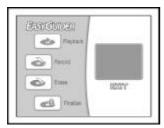
LVW-5001 model only

For DVD+RW disc, you can utilize the "erase" function on the disc if you want to create an empty disc.

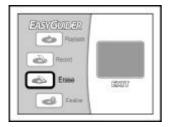
LVW-5005 model only

For DVD+RW, DVD-RW and CD-RW discs, you can utilize the "erase" function on the dosc if you want to create an empty disc.

Press [GUIDER] to display the "Easy Guider" menu.

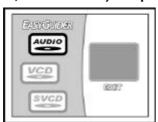


2. Press [▲] [▼] to select the "Erase" icon and then press [ENTER].

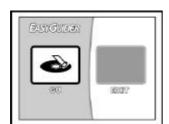


LVW-5005 CD-R/CD-RW format

3. Press [▲] [▼] to select a recording format (Audio CD, VCD or SVCD) and press [ENTER].



The DVD-Recorder starts the disc preparation process.



4. When the disc preparation process is completed, press [ENTER] to exit the erase menu.

Finalize

LVW-5001 model only

For DVD+R disc:

Finalizing is necessary when you play discs recorded with this unit on other DVD player or PC.

You must finalize the DVD+R disc before it can be playback on other DVD players.

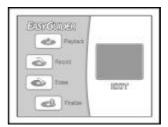
LVW-5005 model only

For DVD+R/DVD-R/DVD-RW discs:

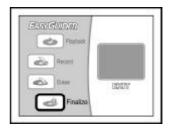
Finalizing a disc is a necessary step when you want to share your digital content with others. Once a DVD+R or a DVD-R/-RW disc is finalized, it can be played back on other DVD players or on PCs.

For DVD+RW disc, finalizing is not reguired.

1. Press [M GUIDER] to display the "Easy Guider" menu.



2. Press [▲] [▼] to select the "Finalize" icon and then press [ENTER].



3. Press [ENTER] to start.

The recorder starts finalizing the disc.

During "Erase" or "Finalize" operations, you can select "EXIT" or press the [GUIDER] button again to exit the "Easy Guider" menu.

LVW-5005 model only

LVW-5005 employs the "ALL WRITE" technology and can record on almost all of the recordable discs. You may use either DVD+RW, DVD+R, DVD-RW, DVD-R, CD-RW or CD-R discs to record.





GUI operation

Changing settings

This chart displays the settings for this unit. Change the settings to suit your preferences and to setup the unit in the environment in which it is being used.



- 1) Press [SETUP] to display the setup menu.
- Press [▲] [▼] to select "System" "Language" "Playback"
 "Record" "Audio" or "TV Tuner," and press [▶] or press
 [◄] to return to preview layer.
- 3) Press [▲] [▼] to select the item and press [▶] or [ENTER].
- 4) Press [▲] [▼] to set the option and press [ENTER].

To exit the SETUP menu

Press [SETUP] or and press [◀] until you return to the main level.

System

Video Output

Switch video output signal.

S-Video

Component

Progressive

TV Type

Select type of the TV output.

NTSC PAL

Clock Format

Select the clock format to set the system clock.

 M/D/Y-12Hr
 D/M/Y-12Hr
 Y/M/D-12Hr

 M/D/Y-24Hr
 D/M/Y-24Hr
 Y/M/D-24Hr

Date

Set the date of the system clock.

Time

Set the time of the system clock.

HH:MM:SS AM/PM

Auto-Sleep

Off/30/60/90/120mins

Default

---- (Off) Restore

Notes:

Video will not be displayed if the selected video output on the player is different from the video output connection.

Language

OSD

Select a system operating language. The options are : English, French, Spanish

Menu Language

Select a menu operating language. The options are : English, French, Spanish

Audio Language

Select a audio operating language. The options are : English, French, Spanish

Subtitle Language

Select a subtitle operating language. The options are : English, French, Spanish

Playback

Aspect Ratio

Settings of audio and video parameters when playing back.

16:9 Wide 4:3 Pan 4:3 L.Box

Parenta

Set content control for supported DVD.

Set Level (Off, 1~8)

The parental control level are:

 1: Kid Safe
 2: G
 3: PG

 4: PG-13
 5: PG-R
 6: R

 7: NC-17
 8: Adult
 Off

Password

Set a system protect password. Password is needed for the changing the setting.

OLD Password (XXXX) *(Default:0000)

NEW Password (XXXX) Confirm (XXXX)

Slide Time

Set the slide show interval while playing JPEG files.

Off 3~99 Seconds

VCD PBC

Enable/Disable play back control for VCD and SVCD.

ON OFF

Record

Record Quality

Set the default quality of recording.

 HQ (1hr)
 SP (2hrs)
 LP (3hrs)

 EP (4hrs)
 SLP (6hrs) *(Default:SP)

Chapter Mark

Set the interval of chapter auto-insertion while recording.

Off 5/10/15/20/25/30 mins *(Default:5 mins)

GUI Operation

Audio

Digital Output

Settings of digital audio output.

PCM (Enable digital audio output with PCM data)
Bit Stream (Enable digital audio output with encode data)

DTS Output

Enable/Disable Digital Theater System output.

ON (Enable Digital Theater System mode)

OFF (Disable Digital Theater System mode)

Firmware update

As the firmware is continuously refined for greater stablity and compatiblity of the player, user may chose to update the latest firmware form http://www.liteonit.com.tw/liteweb/csd.htm

All operations are written in PDF file. Please follow the instructions step by step to complete the firmware update.



Caution:

Improper firmware update may cause the system to malfunction.

TV Tuner

TV Signal ---> Antenna, Cable or auto (Select the type of antenna input)

Country ---> Select your location

Utilities ---> Start Scan or Add/Delete or Swap (Select to start rescaning channel or add/delete a channel or to swap the TV channel)

Fine --> -24 ~ -1 0 +1 ~ +24

(Select to fine tune the channel frequency manually)

Glossary

480i/480p

Indicates the number of scanning lines and scanning format of an image signal.

480i indicates 480 scanning lines with interlace format, and 480p indicates 480 scanning lines with progressive format.

Aspect ratio

Aspect ratio refers to the length to height ratio of TV screens. The ratio of a standard TV is 4:3, while the ratio of a high-definition or wide TV is 16:9. The letter box allows you to enjoy a picture with a wider perspective.

Bitstream

The digital form of multi-channel audio data (e.g., 5.1-channel) before it is decoded into its various channels.

Chapter / Title

Chapter is the smallest division and title is the largest division on a DVD VIDEO. A chapter is a division of a title and similar to a track for Video CD or Audio CD.

Component video

Video signals with three channels of separate information that makes up the picture. There are some types of component video, such as R/G/B and Y/Cb(Pb)/Cr(Pr).

Composite video

A single video signal commonly used in most consumer video products that contains all luminance, color, and synchronization information.

Dolby Digital®

A six-channel system consisting of left, center, right, left rear, right rear and LFE (Low-Frequency Effect channel, for use with a subwoofer) channels. It requires a Dolby Digital® decoder, either in the player or in an external receiver to regenerate the sound. All processing is done in the digital domain.

Not all Dolby Digital discs contain six (5.1) channels of information.

DTS® (Digital Theater Systems)

DTS® stands for Digital Theater Systems. DTS® is a Digital Surround audio encoding format configured with six (5.1) channels, similar to Dolby Digital®. It requires a DTS® decoder, either in the player or in an external receiver to regenerate the sound. All processing is done in the digital domain.

Not all DTS discs contain six (5.1) channels of information.

DVD-R

DVD-R is a recordable disc that is the same size as a DVD-Video. Contents can be recorded only once to a DVD-R,and will have the same format as a DVD-Video.

DVD-RW

DVD-RW is a recordable and rewritable disc that is the same size as a DVD-Video. DVD-RW has two different modes: VR mode and Video mode.DVD created in video mode has the same format as a DVD-Video ,while discs created in VR(Video Recording)mode allow the contents to be programmed or edited

DVD+R

DVD+R is a recordable disc that is the same size as a DVD-Video. Contents can be recorded only once to a DVD+R,and will have the same format as a DVD-Video.

DVD+RW

DVD+RW is a recordable and rewritable disc. DVD+RW use a recording format that is comparable to a DVD-Video format.

Interlace output

NTSC, the video signal standard, has 480 interlaced (I) scan lines, The Interlaced scanning system places lines of the second half of the picture in-between lines of the first half of the picture.

JPEG

A popular file format for still image compression and storage. JPEG stands for "Joint Photographic Experts Group". There are three sub-types of the JPEG format as follows.

- Baseline JPEG: used for digital cameras, the web, etc.
- Lossless JPEG: an old type, rarely used now.

Linear PCM audio

PCM stands for "Pulse Code Modulation". Linear PCM is the usual method for digitally encoding audio without compression, and is used for the audio tracks on DVD VIDEO discs, Audio CDs, etc.

MP3

MP3 (MPEG1 audio layer 3) is a compressed audio file format. Files are recognized by their file extension ".mp3" or ".MP3".

MPEG

MPEG stands for "Moving Picture Experts Group". This is an international standard for compression of moving images. On some DVDs, digital audio has been compressed and recorded in this format.

NTSC (National Television System Committee)

The initials stand for National Television Standards Committee. This is the committee that established the standards for television systems in the United States. The NTSC standard broadcasts 525 or 480 lines of resolution per second, and 30 frames per second of refresh rate, 60 Hz field frequency. NTSC TV system is widely used in USA, Canada, Latin America and Taiwan etc.

PAL (Phase Alternation by Line)

PAL (Phase Alteration Line) is the color television broadcast standard throughout the Western Europe (except in France, where SECAM is the standard), Australia, China, Singapore and Malaysia etc. It has 625 lines of vertical resolution per second and 25 frames per second refresh rate, 50 Hz field frequency.

PBC

Playback Control. A special feature on a Video CD or Super VCD that enables interactive use.

S-Video

A video signal which improves picture quality over standard composite connections. Used on Super VHS, DVD, high end TV monitors, etc.

Track

SVCD, VCD, Audio CD discs use tracks to divide up the content of a disc.

Specifications (LVW-5001 model only)

MEDIA TYPES SUPPORTED (Read Only):

DVD-R/RW, DVD+R/RW, DVD-ROM, CD-R/RW, CD-ROM

CONTENT FORMAT SUPPORTED:

- 1) DVD-Video
- 2) DVD+VR (DVD+VR format is compatible with DVD-Video in most case)
- 3) Video CD
- 4) Super VCD
- 5) Audio CD
- 6) MP3

Maximum number of files recognizable: 1000 files Compression rate: between 32 kbps and 320 kbps

7) JPEG

Maximum number of pictures recognizable: 1000 files

RECORDABLE DISC SUPPORTED:

DVD+R (DVD+VR Mode)
 DVD+RW (DVD+VR Mode)

VIDEO RECORDING QUALITY

Mode	Hour	Bit Rate	Encode	NTSC	PAL
HQ	1	9.5Mbps	MPEG2	720X480	720X576
SP	2	5.1Mbps	MPEG2	720X480	720X576
EP	4	2.5Mbps	MPEG2	352X480	352X576
SLP	6	1.7Mbps	MPEG1	352X240	352X288

VIDEO RECORDING FORMAT

MPEG2: DVD+VR (HQ/SP/LP/EP mode) MPEG1: DVD+VR (SLP mode)

TV STANDARD & VIDEO RESOLUTION

Scan Frequency Number of lines	NTSC 60Hz 525 lines	PAL 50Hz 625 lines
DVD-Video • Horiz.Resolution • Vertical Resolution	720 pixels 480 lines	720 pixels 576 lines
SVCD • Horiz.Resolution • Vertical Resolution	352 pixels 480 lines	352 pixels 576 lines
VCD • Horiz.Resolution • Vertical Resolution	352 pixels 240 lines	352 pixels 288 lines

VIDEO PERFORMANCE

 DA Converter
 10-bit/54MHz

 Composite Output
 1 Vp-p 75 Ohm

 S-Video Output
 Y : 1 Vp-p 75 Ohm

 C : 0.286 Vp-p 75 Ohm

 Components Output
 Y : 1 Vp-p 75 Ohm

P_B: 0.7 Vp-p 75 Ohm P_B: 0.7 Vp-p 75 Ohm

AUDIO RECORDING FORMAT

DVD+VR (HQ/SP/EP/SLP): Dolby Digital 2-channel

AUDIO fomat supported - Playback

Analog output 2channel
Digital output coaxial/optical

Format supported LPCM/Dolby Digital/MPEG

AUDIO PERFORMANCE

DA Converter 24-bit/96KHZ
AD Converter 24-bit/96KHZ
Signal-Noise (1kHz) ≥90dB
Dynamic Range (1kHz) ≥80dB
Cannel Separation (1kHz) ≥110dB
Total Harmonic Distortion (1kHz) ≤-65dB

TUNER

TV format NTSC-M

CONNECTIONS FRONT PANEL

Video Input RCA Connector (yellow) x1
Audio L/R Input RCA Connector (white/red) x1

IEEE 1394 Input Mini jack x1

REAR PANEL

Video Input RCA Connector (yellow) x1
Audio L/R Input RCA Connector (white/red) x1

S-Video Input 4-Pin Mini DIN x1

Video Output RCA Connector (yellow) x1 Audio L/R Output RCA Connector (white/red) x1

S-Video Output 4-Pin Mini DIN x1

Component / Y, P, P, (Green/Blue/Red) x1

Progressive Scan Output

Digital Audio Output Coaxial x1 Optical x1

GENERAL

Power Supply AC 100~120V 60 Hz Power Consumption Approx. 36 W

Operating Temperature $+5^{\circ}$ C to $+40^{\circ}$ C ($+36^{\circ}$ F to

+104°F) 5% to 80% RH

Operating Humidity 5% to 80% RH
Dimensions(W/H/D): 420 x 66 x 268 mm
Net Weight: Approx. 2.8 kg

Notes

The specifications and design of this product are subject to change without notice.

Specifications (LVW-5005 model only)

MEDIA TYPES SUPPORTED (Read Only):

DVD-R/RW, DVD+R/RW, DVD-ROM, CD-R/RW, CD-ROM

CONTENT FORMAT SUPPORTED:

- DVD-Video
- 2) DVD+VR (DVD+VR format is compatible with DVD-Video in most case)
- 3) Video CD
- 4) Super VCD
- 5) Audio CD
- 6) MP3

Maximum number of files recognizable: 1000 files Compression rate: between 32 kbps and 320 kbps

7) JPEG

Maximum number of pictures recognizable: 1000 files

RECORDABLE DISC SUPPORTED:

1) DVD+R (DVD+VR Mode)
2) DVD+RW (DVD+VR Mode)
3) DVD-R (DVD+VR Mode)
4) DVD-RW (DVD+VR Mode)
5) CD-R (SVCD/VCD Format)
6) CD-RW (SVCD/VCD Format)

VIDEO RECORDING QUALITY

Mode	Time	Bit Rate	Encode	NTSC	PAL
HQ	1hr	9.5Mbps	MPEG2	720X480	720X576
SP	2hrs	5.1Mbps	MPEG2	720X480	720X576
EP	4hrs	2.5Mbps	MPEG2	352X480	352X576
SLP	6hrs	1.7Mbps	MPEG1	352X240	352X288
SVCD	34mins	2.5Mbps	MPEG2	352X480	352X576
VCD	68mins	1.15Mbps	MPEG1	352X240	352X288

AUDIO RECORDING QUALITY

Mode Bit Rate Sampling Rate Audio CD 1.41 Mbits/sec 44.1KHz

VIDEO RECORDING FORMAT

MPEG2: DVD+VR (HQ/SP/LP/EP mode), SVCD

MPEG1: DVD+VR (SLP mode), VCD

TV STANDARD & VIDEO RESOLUTION

Scan Frequency Number of lines	NTSC 60Hz 525 lines	PAL 50Hz 625 lines
DVD-Video • Horiz.Resolution • Vertical Resolution	720 pixels 480 lines	720 pixels 576 lines
SVCD • Horiz.Resolution • Vertical Resolution	352 pixels 480 lines	352 pixels 576 lines
VCD • Horiz.Resolution • Vertical Resolution	352 pixels 240 lines	352 pixels 288 lines

VIDEO PERFORMANCE

DA Converter 10-bit/54MHz

AUDIO RECORDING FORMAT

DVD+VR (HQ/SP/n0 193ru.3g6-4cl4EP/SLP): Dolby Digital 2-channel

nannel

VCD/SVCD: MPEG1 layer 2

CD-DA: PCM

AUDIO fomat supported - Playback

Analog output 2channel
Digital output coaxial/optical

Format supported LPCM/Dolby Digital/MPEG

AUDIO PERFORMANCE

 $\begin{array}{ll} \text{DA Converter} & 24\text{-bit/96KHZ} \\ \text{AD Converter} & 24\text{-bit/96KHZ} \\ \text{Signal-Noise (1kHz)} & \geq 90\text{dB} \\ \text{Dynamic Range (1kHz)} & \geq 80\text{dB} \\ \text{Cannel Separation (1kHz)} & \geq 110\text{dB} \\ \text{Total Harmonic Distortion (1kHz)} \leq -65\text{dB} \\ \end{array}$

TUNER

TV format NTSC-M

CONNECTIONS

FRONT PANEL

Video Input RCA Connector (yellow) x1
Audio L/R Input RCA Connector (white/red) x1

IEEE 1394 Input Mini jack x1

REAR PANEL

Video Input RCA Connector (yellow) x1
Audio L/R Input RCA Connector (white/red) x1

S-Video Input 4-Pin Mini DIN x1

Video Output RCA Connector (yellow) x1
Audio L/R Output RCA Connector (white/red) x1

S-Video Output 4-Pin Mini DIN x1

Component/ Y, P_B, P_R (Green/Blue/Red) x1

Progressive Scan Output

Digital Audio Output Coaxial x1
Optical x1

GENERAL

Power Supply AC 100~120V 60 Hz

Power Consumption Approx. 36 W

Operating Temperature $+5^{\circ}$ C to $+40^{\circ}$ C ($+36^{\circ}$ F to $+104^{\circ}$ F)

 $\begin{array}{lll} \mbox{Operating Humidity} & 5\% \ \mbox{to } 80\% \ \mbox{RH} \\ \mbox{Dimensions(W/H/D):} & 420 \ \mbox{x } 66 \ \mbox{x } 268 \ \mbox{mm} \\ \mbox{Net Weight:} & \mbox{Approx.} & 2.8 \ \mbox{kg} \end{array}$

Notes:

The specifications and design of this product are subject to change without notice.

Troubleshooting Guide

Picture

The image from this unit does not appear on the television.

- --> Make sure that the TV is connected to the AUDIO/VIDEO terminal, SCART-S-VIDEO out terminal or COMPONENT VIDEO OUT terminals on this unit. (refer to "CONNECTING UP section)
- --> Make sure that the television's input setting is correct.
- --> Make sure that a disc is well-placed on the disc tray and is compatible to the local TV system (NTSC or PAL)
- --> Check whether the recorder is set to progressive with an incompatible TV. Reset by pressing [▶], "5," "0," "0," and "1" on the remote control and then press [ENTER].

The image from this unit appears with noises.

- --> The disc is distorted or flawed.
- --> If the picture output signal from the recorder passes through your VCR to get to your TV, or if you are connected to a combination T V/VIDEO player, the copy protection signal applied to some DVD programs could affect picture quality. If you still experience this problem even when you connect your recorder to your TV, try connecting your recorder to your TV's S-VIDEO output.

The image from an external input is distorted.

--> If the video signal from the external component is copyprotected, you can not connect via the recorder. Connect the component directly to your TV.

Sound

There is no sound

- --> Check the audio cable connection.
- --> Check if the audio cord is damaged.
- --> The input source setting on the amplifier is incorrect.
- --> There's no sound when the picture is paused or during scanning (even forwards at regular playback speed) or slow motion play. Press [PLAY] to resume regular playback.
- --> If the audio signal does not come through the DIGITAL OUT (OPTICAL or COAXIAL) jacks, check the AUDIO OUT settings.

The sound from this unit is not presented properly or is distorted.

- --> Check the audio cable connection.
- --> Check if the audio cord is damaged.
- --> Make sure that the amplifier/receiver or TV is set to the correct input and the volume is turned on.
- --> If the sound is distorted, try cleaning the cable plugs.

Playback

Can't playback a disc recorded using this recorder or another player

- --> If the disc was recorded in video mode, make sure that it's finalized.
- --> Some players will not play recordable DVD discs when recorded in video mode and finalized.
- --> Discs recorded with copy-once material cannot be played on non-CPRM compatible players.

The recorder starts playing the disc automatically.

--> The DVD VIDEO features an auto playback function.

No playback on DVD recorder.

- --> There's no recording on the disc. Check the disc first.
- --> A unplaybackable disc type is inserted. Check the playable disc type list.
- --> The way you inserted the disc is wrong. Insert the disc with the label side facing up. If there's no label on the disc, check the disc retailer.
- --> Wrong region code: The region code on the recorder and the disc must match.
- --> Parental control is on: you have to unlock it first. (default code of the recorder: 0000)
- --> Check of the cables are secured between the TV set and the recorder.

Timer Recording

Timer recording does not work properly

- --> The timer program is incorrect. Correct the program.
- --> Different timer program times overlap.
- --> The clock setting is wrong. Go to setup to set the right time and date.
- --> An already finalized DVD+R has been inserted: change disc.

The timer program remains even after recording finishes.

--> The timer program remains if set to daily or weekly.

Recording

Can't record.

--> You haven't inserted a disc or the disc you inserted cannot be recorded on. Insert a disc the unit can record onto.

An alternate audio track cannot be recorded.

- --> Second Audio Program (SAP) is not available for all programs.
- --> The recorder does not feature "Second Audio Program (SAP)" function.

Recording does not start immediately after you press the [RECORD] button.

--> Disc preparation process is taking place and will take a short while. (applicable to DVD-R/RW and DVD+R/RW discs)

TV channel

TV channels cannot be changed.

- --> Switch the input signal source of the recorder to "TV."
- --> Connect the antenna cables correctly.

Others

The disc does not open/close.

--> Contact your local dealer or local authorized service facility.

The unit stops at "HELLO" and does not respond to any other commands.

--> Turn the unit off and turn it on again. If the unit still does not respond to any commands, unplug the power cord, reconnect it and turn it on again. Contact local dealer or authorized service facility if the unit still does not work.