Table of contents

Accessories

Please check and identify the supplied accessories. Use numbers indicated in parentheses when asking for replacement parts.

☐ **1x Remote control**   ☐ **1x AC Power cord**   ☐ **1x RF Cable**

☐ **2x Batteries**   ☐ **1x Audio/Video cable**   ☐ **1x DVD+RW disc**

IMPORTANT SAFETY INSTRUCTIONS

1) **Read instructions.** Read all the safety and operating instructions before operating the product.
2) **Retain instructions.** Keep the safety and operating instructions for future reference.
3) **Heed warnings.** Adhere to all warnings on the product and in the operating instructions.
4) **Follow instructions.** Follow all operating and use instructions.
5) **Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6) **Attachments** – Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7) **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, near a swimming pool, etc.
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.
9) **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, a plug having a third (grounding) pin, 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. See figure at right.
17) **Lighting** – 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.
19) **Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles. This can result in a risk of fire or electric shock.
20) **Object and Liquid Entry** – Never 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. Never spill liquid of any kind on the 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 operate normally by following the operating instructions. Adjust only those controls covered by the operating instructions. An improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,
    • 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.
24) **Heat** – Situate this product away from heat sources, such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
26) **Battery usage CAUTION** – To prevent battery leakage that may result in bodily injury or damage to the unit:
    • 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 SCREWS.
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 persons.

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

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFOR-
MANCE OF PROCEDURES OTHER THAN THOSE SPECI-
FIED HEREIN MAY RESULT IN HAZARDOUS RADIATION
EXPOSURE.
DO NOT OPEN COVERS 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 RAIN, MOISTURE, DRIPPING OR SPLASHING AND
THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS
VASES, SHALL BE PLACED ON THE APPARATUS.

Caution –– POWER ⏻ button
Disconnect the mains plug to shut the power off completely.
The POWER ⏻ button in any position does not disconnect the mains line. The power can be remote controlled.

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 FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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

• Reorient or relocate the receiving antenna.
• Increase the separation between the 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
2) DANGER: Visible 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.
• DVD-RW discs written in the VR format • DVD-ROM, DVD-RAM, DVD AUDIO, CD-ROM, PHOTO CD, 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

Disc Information

■ **Playable Disc types**

Disc Types	Logos	Characteristics
DVD-VIDEO	**DVD** VIDEO **DVD** VIDEO	This unit can playback DVD VIDEO discs and the region code is printed on the rear of the unit. Example： ① ② ③ ④ ⑤ ⑥
DVD-R/RW DVD+R/RW	**RW** DVD+ReWritable **RW** DVD+R **DVD** RW **DVD** R R4.7	DVD-R, DVD-RW and DVD+R, +RW, discs written in the DVD-VIDEO format and finalized.
Video CD (VCD) Super Video CD (SVCD)	**disc** DIGITAL VIDEO **disc** SUPER VIDEO	Video with CD sound, VHS quality & MPEG-1 compression technology.
Audio CD	**disc** 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)	**disc** Recordable **disc** ReWritable	This unit can play CD-R and CD-RW discs recorded with CD Audio 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	**RW** DVD+ReWritable **RW** DVD+R	DVD+R discs written in the DVD+R Video format. DVD+RW discs written in the DVD+RW Video format.

Notes:

The DVD Logo is a trademark.
Use discs with the above logos and that conform to specifications. The unit cannot play other discs correctly. Do not use irregularly 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 and 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, noise may generate causing damage to speakers.
1) Unfinalized discs
2) DVD-RW discs written in the VR format
3) DVD-ROM, DVD AUDIO, CD-ROM, PHOTO CD, SACD

■ **Region Code of DVD Video**
This unit can playback DVD VIDEO discs and the region code is printed on the rear of the unit.

Examples of playable DVD-VIDEO discs:

① ② ③ ④ ⑤ ⑥

Notes:
The unit's region code is printed on the rear of the unit.

■ **Audio System**

DD DOLBY DIGITAL Dolby Digital   Linear PCM

dts DIGITAL OUT DTS (Digital Theater Systems)

■ **Video System (NTSC & PAL)**
NTSC is used. This unit converts PAL system DVD-Audio to NTSC for play. The picture is compressed to show it in its entirety, but this may cause it to be stretched vertically.

■ **Aspect Ratio**

LB 4:3 (Letter Box) Standard

4:3 4:3 Pan&Scan

16:9 16:9 (Wide-Screen)

■ **Others**

6)) Audio: Appears at the beginning of a scene recorded with multiple audio languages.

.1. 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.
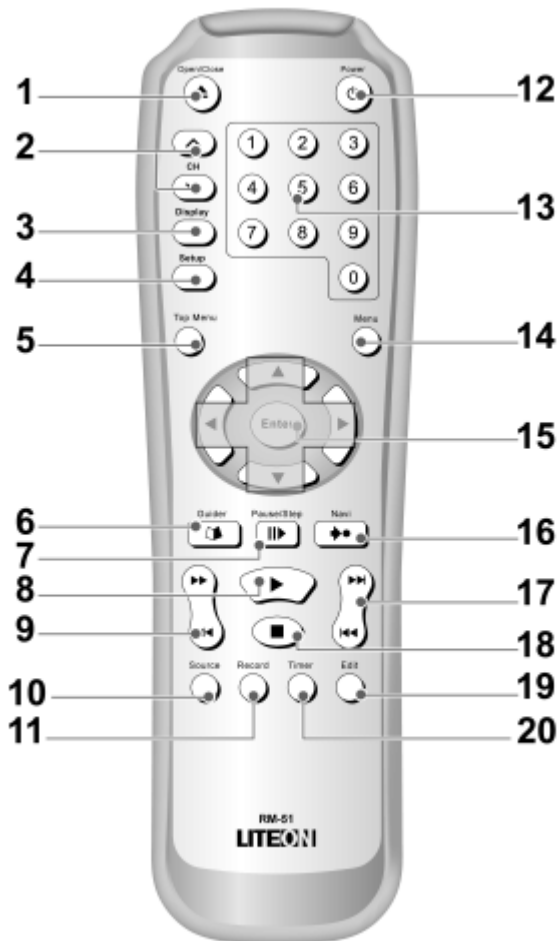
■ **Playable File Types**
JPEG, MP3

■ **To Clean Discs**
Wipe DVD-Video, VCD, SVCD, CD discs with a damp cloth and then wipe dry.
Do not touch the surface of the disc.

Controls and Displays

Remote Control

1) Open/Close button (▲ OPEN/CLOSE) .... See Page 11

2) CH ⋀⋁ button (Channel) .... See Page 11

3) Display button (DISPLAY) .... See Page 11

4) Setup button (SETUP) .... See Page 10

5) Top menu button .... See Page 11

6) Easy Guider button (Guider) .... See Page 11

7) Pause/Step button (‖▶ PAUSE/STEP) .... See Page 11

8) Play button (▶ PLAY) .... See Page 11

9) F.F./REW. button(▶▶ F.F/ ◀◀ REW.) .... See Page

10) Source buttons (SOURCE) .... See Page 10

11) Record button (RECORD) .... See Page 10

12) Power button (POWER) .... See Page 14

13) Numbered button (1~9,0) .... See Page 12,14

14) Menu button (MENU) .... See Page 12

15) Cursor (▲▼◀▶), Enter button (ENTER) ...... See Page 12

16) Navigation button (NAVI) .... See Page 12

17) NEXT/PREVIOUS button

 (▶▶| NEXT/ |◀◀ PREVIOUS) .... See Page 11

18) Stop button (■ STOP) .... See Page 11

19) Edit button (EDIT) .... See Page 12

20) Timer button (TIMER) .... See Page 12
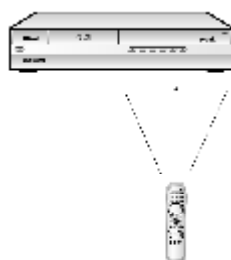
To install batteries

- Open the battery compartment and Insert the batteries.Make sure the polarity (+ and -) matches the marks inside the remote control.
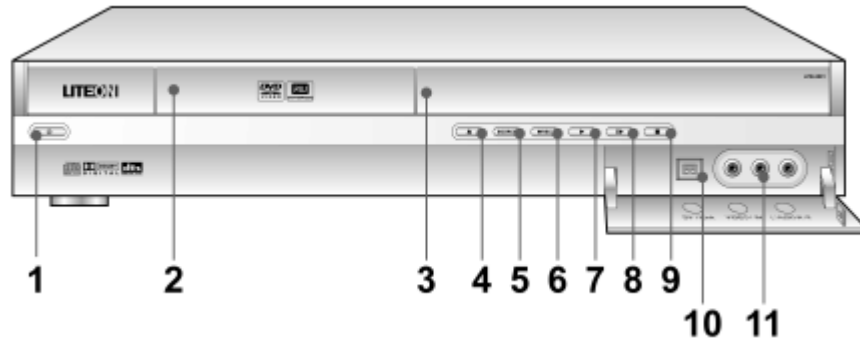
- Do not use rechargeable type batteries.

Remote sensor

The remote has a range of approximately 5M and works best when pointed directly at the unit.(at angles up to 60° from the front of the unit)

Front panel connections
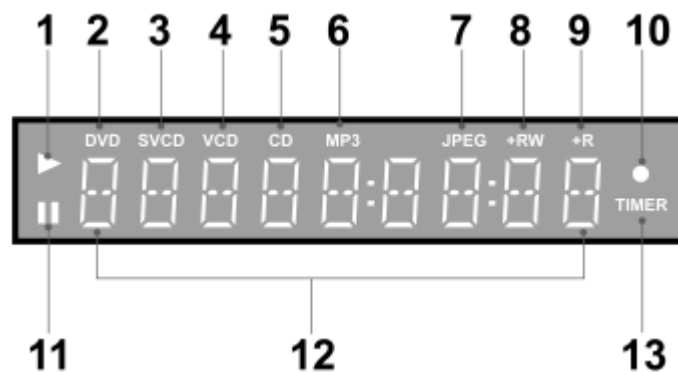

Names of parts and controls

1) **POWER ON / OFF**
   Turns the recorder on and off.

2) **DISC TRAY**
   Opens 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.

6) **RECORD**
   Starts recording.

7) **PLAY**
   Plays a disc.

8) **PAUSE**
   Pauses recording or playing a disc.

9) **STOP**
   Stops playing a disc.

10) **DV-LINK (iEEE-1394) Jack**
    Connects digital equipment with a DV jack.

11) **LINE IN-2 (VIDEO/AUDIO L/R) Jacks**
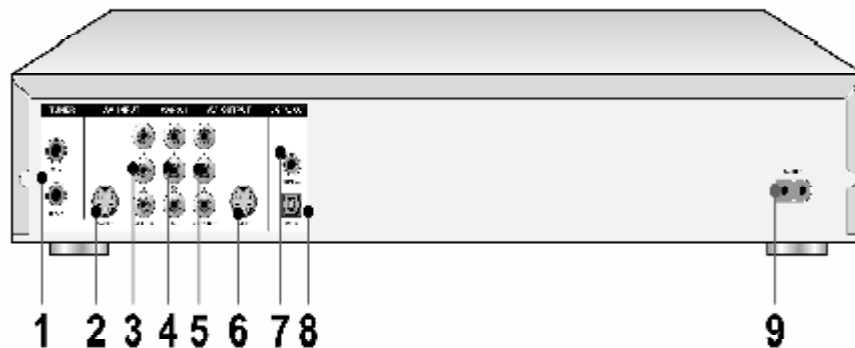   Connects the input of external equipment.

Display window

Display window function

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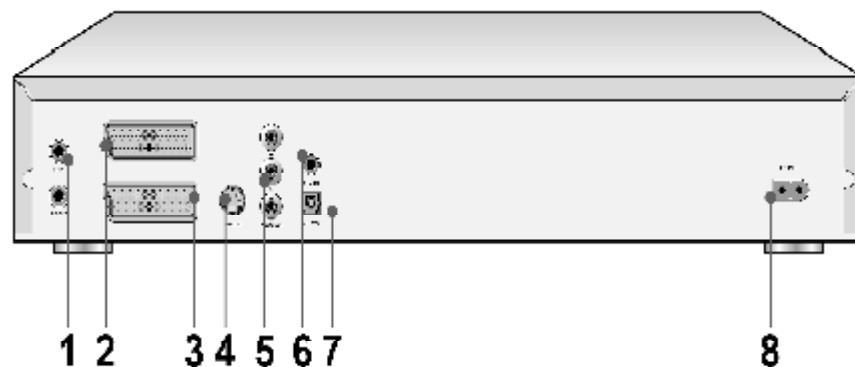12) **Multi-information window**
13) **Timer recording mode**

Rear panel connections (For 5001A/5001D)

Names of parts

1) **VHF/UHF IN/OUT Jacks**
   Connects antenna cables.

2) **LINE IN-1 (S-VIDEO) Jack**
   Connects the output of external equipment.

3) **LINE IN-1 (VIDEO/AUDIO L/R) Jacks**
   Connects the output of external equipment.

4) **COMPONENT VIDEO OUTPUT (Y/Pb/Pr) Jacks**
   Connects equipment having component video input jacks.

5) **LINE OUT (VIDEO/AUDIO L/R) Jacks**
   Connects the input of external equipment.

6) **LINE OUT (S-VIDEO) Jack**
   Connects the input of external equipment.

7) **DIGITAL OUT (COAXIAL) Jack**
   Connects an amplifier or receiver having a digital input jack.

8) **DIGITAL OUT (OPTICAL) Jack**
   Connects an amplifier or receiver having a digital input jack.

9) **AC IN terminal**
   Connects the power cord.

Rear panel connections (For 5001B)

Names of parts

1) **VHF/UHF IN/OUT Jacks**
   Connects antenna cables.

2) **SCART IN Jack**
   Connects the input of external equipment.

3) **SCART OUT Jack**
   Connects the output of external equipment.

4) **LINE OUT (S-VIDEO) Jack**
   Connects the input of external equipment.

5) **LINE OUT (VIDEO/AUDIO L/R) Jacks**
   Connects the input of external equipment.

6) **DIGITAL OUT (COAXIAL) Jack**
   Connects an amplifier or receiver having a digital input jack.

7) **DIGITAL OUT (OPTICAL) Jack**
   Connects an amplifier or receiver having a digital input jack.

8) **AC IN terminal**
   Connects the power cord.

Connecting Up

Before making connections

1) Do not connect the AC power cord until all other connections have been 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 monitor problem when playing back a copy-protected disc. You may also have a monitor problem when connecting the unit to an integrated TV/Video system.

Connecting the Antenna cable and Television

Before using the unit, follows the steps connects the unit to the antenna cable and TV.

For 5001A/5001D Only

Connecting to a TV with a COMPOSITE jacks
You can use the COMPOSITE OUT jacks to connect the unit to TV.
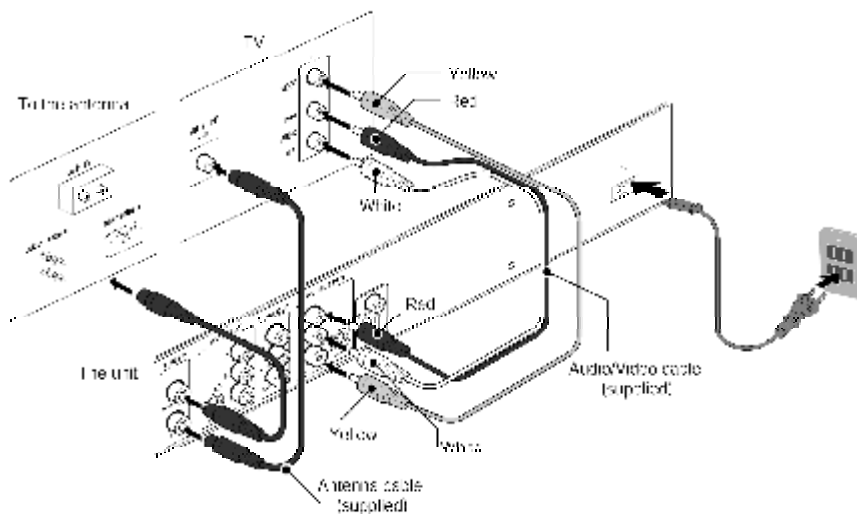
For 5001B Only

Connecting to a TV with SCART jack
You can use the SCART OUT jack to connect the unit to your TV. (For Europe Only)

Notes
Connect the unit directly to your television.

Do not place the unit on top of amplifiers or equipments that may become hot. The heat can damage the unit.

For Better Picture (For 5001A/5001D Only)

There are two types of connection, S-Video, Component.

1. S-Video Out

Connecting to a TV with an S-Video jack
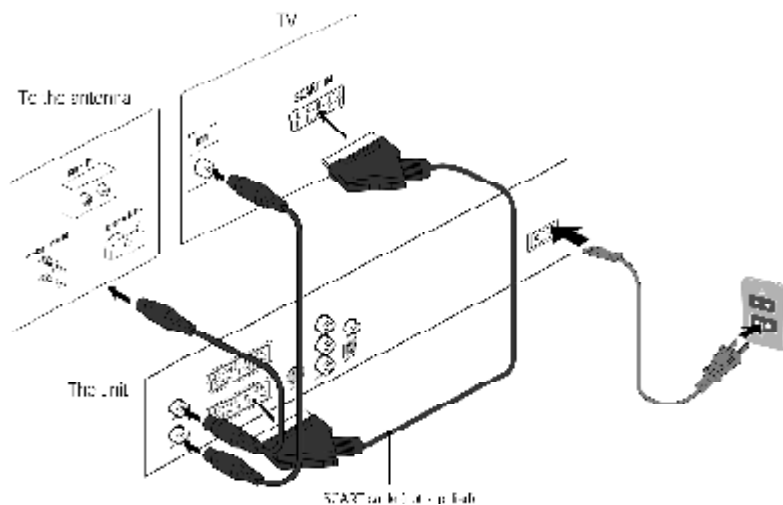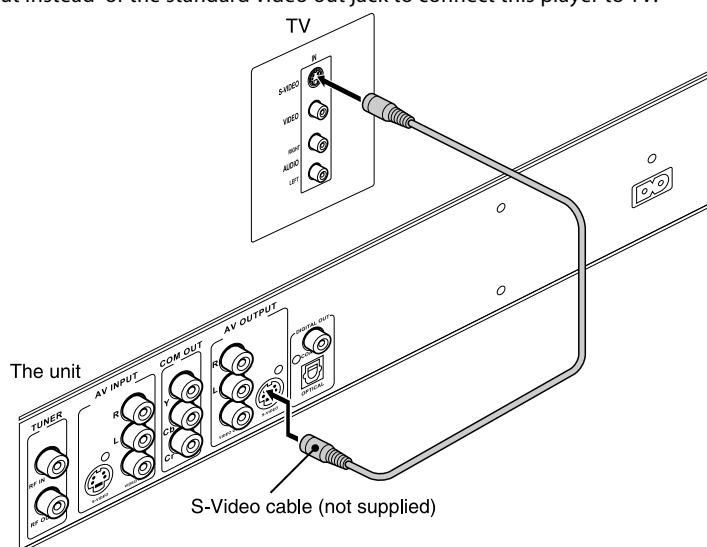You can use the S-Video output instead of the standard video out jack to connect this player to TV.

The unit

S-Video cable (not supplied)

Notes

When using the S-Video output jack, do not connect other VIDEO OUT jacks on the unit. Please set the correct video output from the unit by pressing "SETUP" button on the remote control to setup
"System --> Output --> S-Video".

2. Component Out

Connecting to a TV with component jacks
You can enjoy picture of high-quality colour reproduction by using the component video output instead of the standard video out jack to connect this player to your TV.

The unit

Red Blue Green

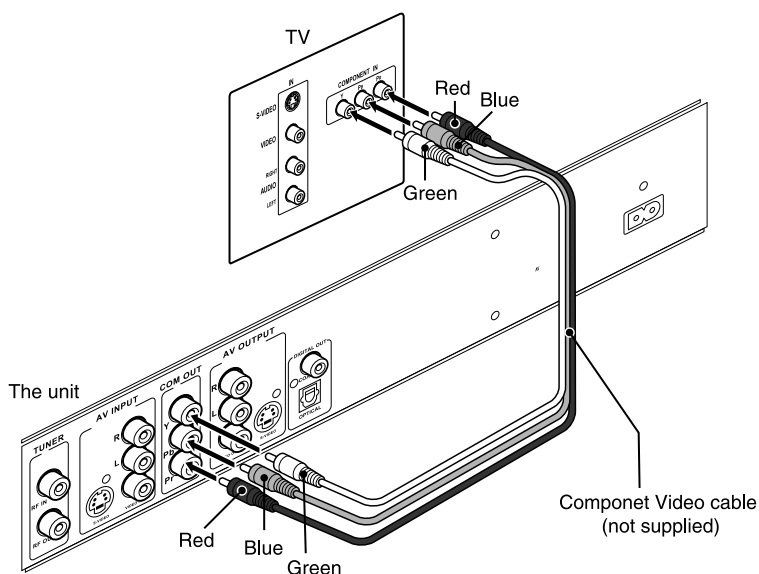Componet Video cable (not supplied)

Red Blue Green

Notes

When using the S-Video output jack, do not connect other VIDEO OUT jacks on the unit. Please set the correct video output from the unit by pressing "SETUP" button on the remote control to setup "System --> Output --> Component".

For Better Sound

There are two types of connection, analog and digital.

Connecting to a stereo audio amplifier or Receiver

Use the supplied audio cord to connect the AUDIO OUT on the
player to the audio input on the stereo amplifier or receiver.
(see page 23 to activate the analog audio output)
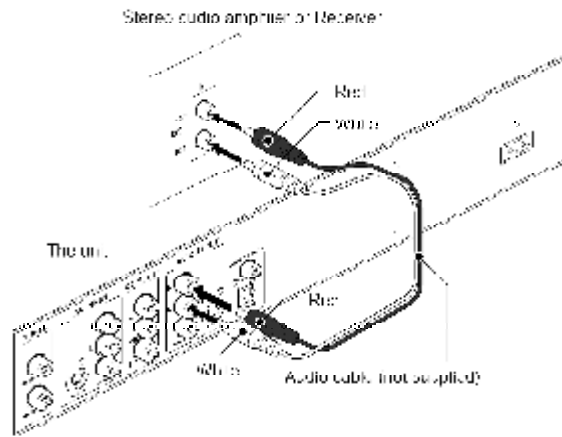
Connecting to a digital audio device

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 player to the
digital optical input on an AV amplifier or receiver.
(see page 23 to activate the digital audio output)
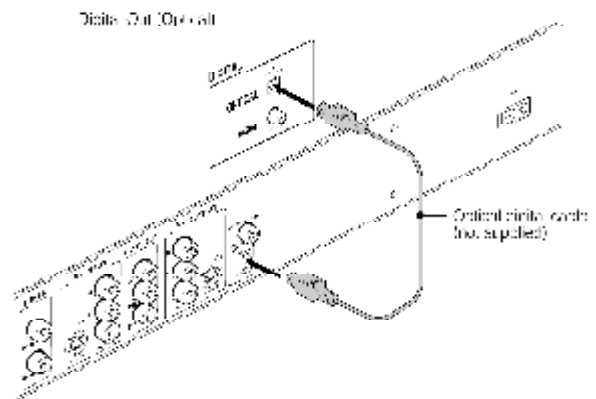
DIGITAL OUT COAXIAL

Use a coaxial cable (not supplied) to connect the DIGITAL OUT
COAXIAL (coaxial digital output) on the player to the coaxial
digital input on an AV amplifier or receiver.
(see page 23 to activate the digital audio output)
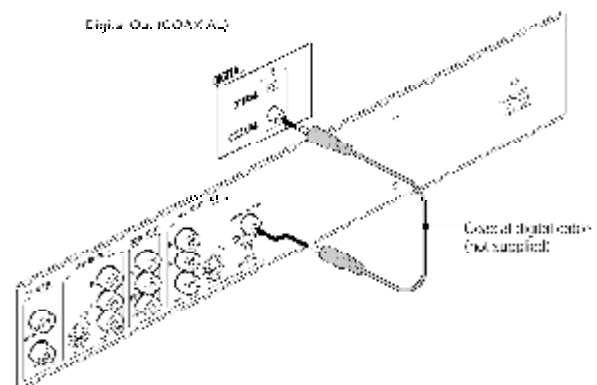
Quick Setup

Initial Setup

Remote Control & Setup Menu

Confirm the antenna is connected correctly, and follow the steps below to make the minimum number of basic adjustments for using the recorder.

1) Pres [⏻ POWER] , to turn on the unit.
2) Press [SETUP] , to appear the setup menu.
3) Press [▲] [▼] , to select the "System", "Playback", "Record", "Audio", "TV Tuner" and press [▶] or press [◀] to return to preview layer.
4) Press [▲] [▼] , to select the item that you want to change and press [▶] or [Enter].

    System ➔   System Language (see page 22)

         ➔   TV Type   ➔   Date   ➔   Time

    Playback ➔   Aspect Ratio

    Audio   ➔   Digital Output (PCM/Bit stream)

    Record ➔   Quality (HQ,SP,EP,SLP)
5) Press [ENTER]
6) Press [SETUP] , to exit the setup menu or press left arrow key to return to preview layer.

Notes:

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

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 select how video on some discs is shown

4:3 Letter Box (Factory preset)

(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 setting during playback.
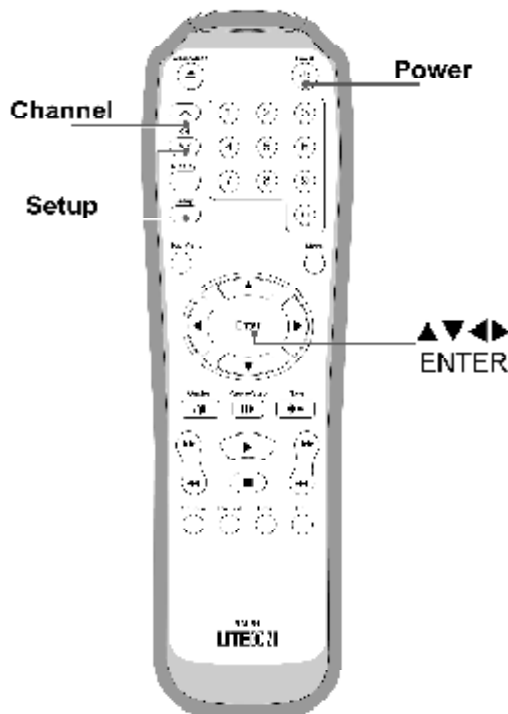
Progressive Scan mode (For 5001A/5001Donly)

You can change the video output mode when you press [SETUP] and to select the

"System➔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.

Audio

Digital Output

PCM / Bitstream

(Enable digital audio output with PCM or encoded data)

DTS Out

ON / OFF

Recording

Before Recording

This recorder can record on DVD+R/DVD+RW disc. Before you record,read the following and select the disc type according to your needs.

Recording televison programs

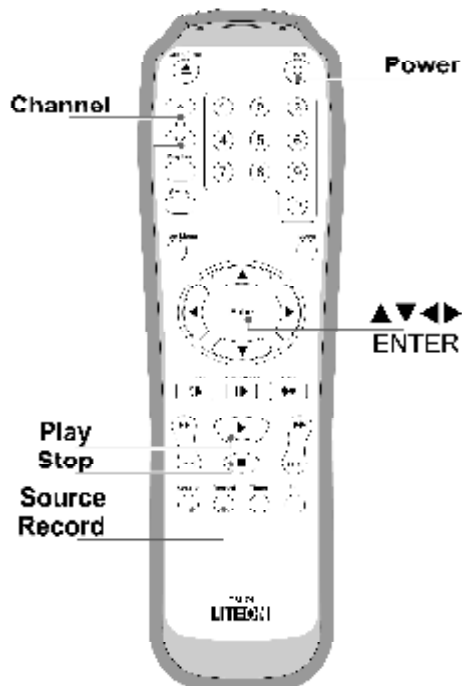**1.Press [⏻ POWER] , to turn the unit on.**

2.Press [▲ OPEN/CLOSE] , to open the tray and insert a DVD+R or DVD+RW disc.

Prees the button again to close the tray.
If you use an unused DVD+RW, background formatting will be start automatically.

Please insert another step to press [Source] and switch source

3.Press [CH ∧ ∨] ,or [▲] [▼] to select the channel you want to record.

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

4.Press [RECORD] , to start Recording.

After pressing [RECORD] , it may take a short while to start recording.

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

To stop recording

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

To pause recording

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

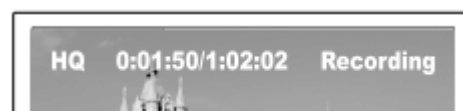### To change the recording mode.

Press [SETUP].
The new setting can't change the current recording but will active in next time.
(For more details of recording mode, see page 22)
e.q., when you select "HQ".

To check the disc status while recording

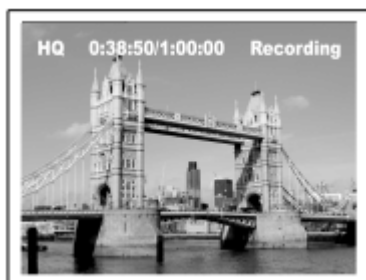Press [DISPLAY] , the recording information appears.

Recording

Adding new recordings

Adding new recordings after the end of all recordings

To add a new recording after the last recording on a disc, press and hold the button until "STOP" appears in the display.

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

Caution:

For DVD+R , each new recording is always placed after all previous recordings since previous recordings cannot be overwritten.

Chapter mark function

Creating chapters in a title

The recorder can automatically divide a recording into chapters by inserting chapter marks at 2~15 minute intervals during recording.

1.Press [SETUP] , to appear the "SETUP" menu.

2.Press [▲] [▼] , to select the "RECORD" and press [▶].

3.Press [▲] [▼] , to select the "CHAPTER MARK" and to set up the time.

3.Press [SETUP] , to exit the "SETUP" menu.

Notes:

1.You can also start and stop recording using the "Easy Guider" menu. Press [Guider] and select "RECORD" then press [ENTER] , and follow the steps to set the recording mode.
2.If the power is failure, the title(program) you are recording may be lost.
3.Before you start, please check that the disc has enough available space for the recording.
4.You cannot change the channel or recording mode during recording.

Playback with the DVD Menu

Selecting a recorded title(program) 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 "Play List" menu appears when you press [▶ PLAY] or when you press [✦■ GUIDER] to select "PLAYBACK" icon, and display all of the title(program) on the DVD+R/DVD+RW disc.

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

To scroll the "DVD Menu" display by page

Press [◀] [▶] , the entire "DVD Menu" menu changes to the next/previous page of titles (programs).
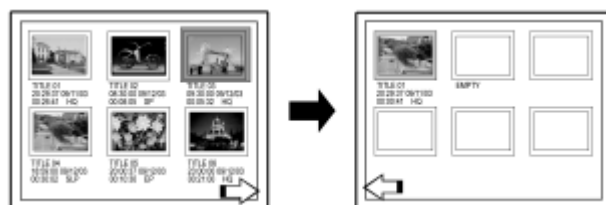
Notes:

1.If the power is failure, the program you are recording may be lost.
2.Before you start, please check that the disc has enough available space for the recording.
3.You cannot change the channel or recording mode during recording.
4.Before to play DVD+R on compatible equipment, please finalize it.

Recording

Recording from a VCR or DV/V8

Before to start recording

The unit can accept standard CVBS (RCA) analog audio/video signals or iEEE1394 cable and record them onto DVD in the digital audio or video format of your choice. In this way, the unit functions much like a digital VCR. Examples of use include digitizing videotapes onto DVD+R/DVD+RW, transferring from Video Cassette Recorder or DV/V8 to DVD+R/DVD+RW.

The front panel and rear panel connection

Connect a Video Cassette Recorder or DV/V8 to the unit's input terminals.

To start recording

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

2.Put a empty DVD+R or DVD+RW on the tray, with the disc's label facing up.

3.Press [SOURCE] , to select the AV- Input (TV, AV1, AV2, S-Video, DV , Liteon Logo).

TV → AV-1 → AV-2 → S-Video → DV → Logo

Notes:
When recording from the S-Video source, the audio input will be sourced from the red (right channel) and white (left channel) audio jacks (labeled "R" and "L", respectively) on the rear panel.

4.Start play on the Video Cassette Recorder or DV/V8.

5.Press [RECORD] , to record your video/audio from the Video Cassette Recorder or DV/V8 onto a DVD+R or DVD+RW.

6.Press [■ STOP] , to stop recording.

To pause recording

Press [II▶ PAUSE] to pause recording , and if you want to restart recording, press the button or [RECORD] again.

Timer Recording

Before Timer Recording
Please check that the disc has enough available space for the timer recording . Before you start to record , follow the steps and set the date , time , picture quality and channel of the program manually.
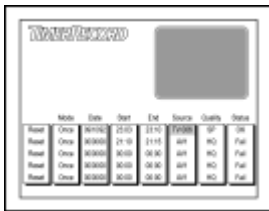
Setting the timer manually
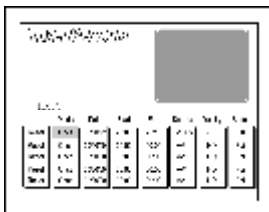
1.Press [⏻ POWER] , to turn the unit on.

2.Press [⏏ OPEN/CLOSE] , to open the tray and insert a DVD+R or DVD+RW disc.
If you use an unused DVD+RW, background formatting will be start automatically.

3.Press [TIMER] , to appear the "Timer-record" menu.

4.Press [▲][▼] , to select the "Timer Setting" and press [▶].

5.Press [◀] [▶] , to select the "Mode" , then press [ENTER] .
Each time you press [▲] [▼] , the item changes as follows.

Mode: <u>ONCE</u> <-> <u>WEEKLY</u> <-> <u>DAILY</u>

6.Press [◀] [▶] , to select the "Date" , then press [ENTER] .
Each time you press [▲] [▼] , the item changes as follows.

DATE: <u>1</u> <u>2</u> : <u>2</u> <u>5</u> (MM/DD)

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

TIME: <u>0</u> <u>1</u> : <u>2</u> <u>8</u> (HH/MM)

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

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

<u>TV</u> <-> <u>AV1</u> <-> <u>AV2</u> <-> <u>S-Video</u> <-> <u>DV</u>

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

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

If you make a mistake
Press [◀][▶] , to select the item you want to change.

11.Press [POWER] to turn off the unit and to start Timer recording function.

Timer Recording continues until you stop the recording or disc is full.

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

To check the disc status while timer recording
Press [DISPLAY] , the timer recording 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 [⏻ 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.

■ **Press [◀◀ REW] , to perform fast reverse scanning.**
Press repeatedly to play the Disc reverse at 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 appear an information of DVD/VCD/SVCD Disc.**
Manually remove the information window by press [DISPLAY] again to cancel the information window.

■ **Press [TOP MENU] , to appear a 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 [▲] [▼] [◀] [▶] to select an item and press [ENTER].

Starting play from where you stopped it.

DVD TITLE
> DVD
> Play Movie
> Audio Setup
> Subtitles
> Scene Selections

■ **Press [MENU] , to appear a chapter menu on the TV screen.**
Press [▲] [▼] [◀] [▶] , to select an item and press [ENTER].

Notes:
The [MENU] button does not work while stopped.
And this function depend on DVD Disc.

Playback

Navigation Operation

During playback, press [📖 NAVI.] to appear the "Navigation" menu.

SLOW   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:CHAP : 001/001
or TIME:0 1 : 2 7 : 3 3   (H:M:S)

Example (for SVCD/VCD)
To playback from
    TIME:0 1 : 2 7 : 3 3

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:
If continue move left while at the first field, then the search dialogue box will be closed.

A-B   Starting to repeat a desired part.
REPEAT 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 might include subtitles. 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.
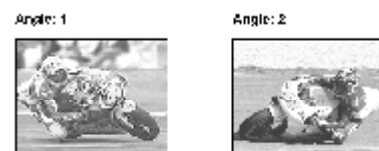
Notes:
Multiple angles must be available on the DVD-Disc.(within the current Title) or Track for playback.

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 a Audio CD or JPEG , MP3 file on a disc.

JPEG file playback
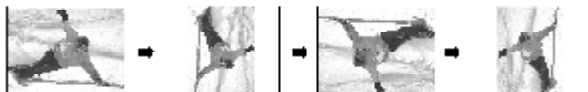
Playing JPEG file
1.Put the JPEG Disc on the tray.
The disc will be playback automatically.

2.Press [◄] or [►] , to skip the picture.

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

4.Press [‖► PAUSE] , to pause the picture playback.

5.Press [■ STOP] , to stop the picture playback.
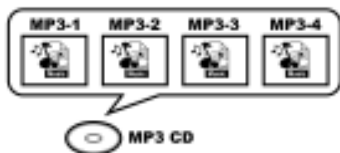
MP3 file playback

Playing MP3 file
1.Put the MP3 Disc on the tray.
The disc will be playback automatically.

2.Press [►►| NEXT] or [|◄◄ PREVIOUS] , to skip the MP3 file.

3.Press [‖► PAUSE] , to pause the MP3 file playback.

4.Press [■ STOP] , to stop the MP3 file playback.

Audio CD playback

Playing Audio CD

1.Put the Audio Disc on the tray.
The disc will be playback automatically.

2.Press [►►| NEXT] or [|◄◄ PREVIOUS] , to skip the track.

3.Press [‖► PAUSE] , to pause the track playback.

4.Press [■ STOP] , to stop the track playback.

5.Press [0~9] , enter the numberic to select a audio track, and press [ENTER].
Starting play from a selected track.

SlideShow

Concurrent Playing JPEG and MP3 file on the same disc

1.Put the Disc on the tray.
The disc will be playback automatically.

2.Press [►PLAY] , to start playback..

3.Press [►►| NEXT] or [|◄◄ PREVIOUS] , to skip the MP3 file.

Or press [◄][►] , to skip the picture.

4.Press [▲][▼] , to select "Rotate RIGHT" or "Rotate LEFT" and "Rotate UP" "Rotate down".

5.Press [‖► PAUSE] , to pause the slideshow playback.
Press [■ STOP] , to stop the slideshow playback.

Notes:
- The unit may not show the file name correctly If an MP3 file name includes any 2-byte character.
- The unit cannot support the ID3 tag.
- The unit cannot support the MP3-Pro and WMA file.
- The unit supports discs recorded with multiple sessions.
- The unit only can playback picture or tracks with the following file extensions; "JPG" or "jpg" and "MP3" or "mp3" etc.
- Time required for reading the disc contents may vary for different discs, depending on the numbers of groups (folders) and tracks (files) recorded, etc.
- You cannot advance or reverse playback by pressing F.F. or REW. during JPEG , MP3 disc playback.
- You cannot play select track by pressing the number buttons during MP3 disc playback.
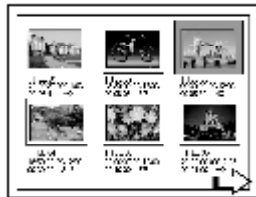- The unit supports MP3 file's bitrate: 32Kbps ~ 320Kbps

Editing

Before starting to edit

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

PLAY List and Edit menu

1) **Press [⏻ PLAY] or [📖 GUIDER] , to appear the "DVD Menu" menu.**

2) **Press [EDIT] , to appear the "Title Edit" menu.**

Naming a title

Appear the "Title Edit" menu

1) **Press [▲] [▼] , to select "Title Name", then press [ENTER].**
   The display for entering a title name appears.

2) **To enter character.**

3) **When you finish entering the title name,press [◀] [▶] [▲] [▼] to select "Finish".**

Protecting a title

Appear the "Title Edit" menu

1) **Press [▲] [▼] , to select "Protection", then press [ENTER].**

2) **Press [◀] [▶] , to select the "On", then press [ENTER].**
   The protection is set.

Overwrite setting

1) **Press [▲] [▼] , to select "Overwrite", then press [ENTER].**

2) **Press [◀] [▶] , to select the "On", then press [ENTER].**
   The "Overwrite" mode is set.

Erasing a title

Appear the "Title Edit" menu

1) **Press [▲] [▼] , to select "Erase", then press [ENTER].**

The title is erased.

Notes:
Both DVD+RW & DVD+R are erasable. But the erased space on DVD+R can't be reused.

Easy Guider

Playback

1) Press [📖 GUIDER] , to appear the "Easy Guider" menu.

2) Press [▲] [▼] , to select the "Playback" , then press [ENTER].
The "DVD Menu" appears.

3) Press [◄] [►] , to select a title(program) you want to play and press [ENTER].

Press [‖► PAUSE] , to pause playback.
Press [► PLAY] to restart normal playback .

Press [■ STOP] , to stop playback.

Record

1) Press [📖 GUIDER] , to appear the "Easy Guider" menu.

2) Press [▲] [▼] , to select the "Record" , then press [ENTER].

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

If you select "TV", press [▲] [▼] , to select the channel you want to record and press [ENTER].
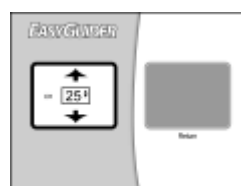
5) Press [▲] [▼] , to select the recording mode and press [ENTER]. (HQ , SP , EP or SLP)

Recording Mode	Recording time
HQ	60 minutes
SP	120 minutes
EP	240 minutes
SLP	360 minutes

Press [ENTER] , to confirm recording.

Press [■ STOP] , to stop recording.

Press [‖► PAUSE] , to pause recording.

Notes:
During "Playback" "Record" operating , you can select the "EXIT" to exit the "Easy Guider" menu.

Easy Guider

Format

Before you format the disc, please make sure nothing important is left on the disc, as all the disc contents will be erased.
For DVD+RW,you can reformat the disc if you want to create a empty disc.

1) Press [GUIDER] , to appear the "Easy Guider" menu.

2) Press [▲] [▼] , to select the "Format" , then press [ENTER].

The recorder starts formatting the disc.

3) When finish disc formatting , press [ENTER] to exit the format menu.

Finalize

For DVD+R only:
Finalizing is necessary when you play discs recorded with this unit on other DVD equipment.

1) Press [GUIDER] , to appear the "Easy Guider" menu.

2) Press [▲] [▼] , to select the "Finalize" , then press [ENTER].

3) Press [ENTER] to start .
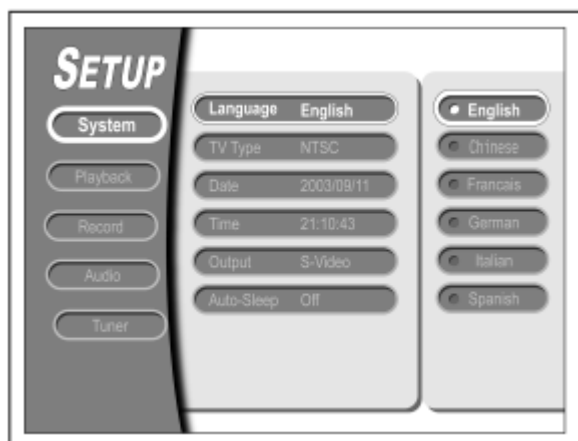The recorder starts finalizing the disc.

Notes:
During "Format" "Finalize" operating , you can select the "EXIT" to exit the "Easy Guider" menu.

GUI Operation

Changing settings

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

1) Press [SETUP] to appear the setup menu.

2) Press [▲][▼] to select "System" "Playback" "Record" "Audio" "TV Tuner" , and press [▶] and press [▶] or press [◀] to return to preview layer.

3) Press [▲][▼] ,to select the item and press [▶] or [ENTER].

4) Press [▲][▼] , and to set the option and press [ENTER].

To exit the SETUP menu

Press [SETUP] or and press [◀] till the main items and keep press to close.

System

Language
Select a system operating language.
  ENGLISH, TRADITIONAL CHINESE ,
  SIMPLIFIED CHINESE, FRANCAIS, GERMAN,
  ITALIAN, SPANISH,

TV Type
Select type of the TV output.
  NTSC   PAL

Date
Set a Date of the system clock.
  MM/DD/YYYY (Month/Day/Year)

Time
Set a Time of the system clock.
  HH:MM:SS   AM/PM

Output
Switch video output signal.
  S-Video   Component   Progressive

Auto-Sleep
  Off/30/60/90/120mins

Playback

Aspect Ratio
Settings of audio and video parameters when playing back.
  16:9 Wide   4:3 Pan   4:3 L.Box

Menu Langauge
Select a menu operating language.
  ENGLISH, CHINESE, FRANCAIS, GERMAN, ITALIAN, SPANISH,

Audio Langauge
Select a audio operating language.
  ENGLISH, CHINESE, FRANCAIS, GERMAN, ITALIAN, SPANISH,

Subtitle Langauge
Select a subtitle operating language.
  ENGLISH, CHINESE, FRANCAIS, GERMAN, ITALIAN, SPANISH,

Parental
Set content control for supported DVD.Password is needed for the changing the setting.
  Set Level (Off , 1~8)
  Set Password (XXXX)

Parental
Set a system protect password.
  OLD Password   (XXXX)
  NEW Password   (XXXX)
  Confirm

Slide Time
Set the slideShow 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)
  EP (4hrs)
  SLP (6hrs)

Chapter Mark
Set the interval of chapter auto-insertion while recording.
  Off   2~15 mins

Notes:
No video or distorted video will be displayed if the selected video output on the player is differ from the video output connection.

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)

Tuner

TV Signal
Select type of antenna input.
  Antenna   Cable

SCAN
Enable/Disable Digital Theater System output.
  ON   OFF

Channel Fine Tune
Adjust the channel frequency manually.
  -10 ~ -1 0 +1 ~ +10

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® (AC3)

A six-channel system consisting of left, center, right, left rear, right rear and LFE (Low-Frequency Effect channel, for use with a sub-woofer) 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+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

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:
1)   DVD+R   (DVD+R Video Format)
2)   DVD+RW   (DVD+RW Video Format)

VIDEO RECORDING QUALITY

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

VIDEO FORMAT
MPEG2 for DVD+VR , DVD-Video , SVCD
MPEG1 for DVD+VR , VCD

TV Standard & VIDEO RESOLUTION

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

VIDEO PERFORMANCE
DA Converter	10-bit/54MHz
Composite Output	1 Vpp 75 Ohm
S-Video Output	Y : 1 Vpp 75 Ohm
	C : 0.3 Vpp 75 Ohm
Components Output	Y : 1 Vpp 75 Ohm
	P_b : 0.7 Vpp 75 Ohm
	P_r : 0.7 Vpp 75 Ohm

AUDIO FORMAT
Dolby Digital	(AC-3)Multi-channel
DTS	Multi-channel
MPEG1	2-channel
MPEG2	Multi-channel
PCM	2-channel

AUDIO PERFORMANCE
DA Converter	24-bit/192KHZ
AD Converter	24-bit
Signal-Noise (1kHz)	90dB
Dynamic Range (1kHz)	80dB
Cannel Separation (1kHz)	80dB
Total Harmonic Distortion (1kHz)	-65dB

TUNER FORMAT
Signal	UHF/VHF/CATV
System	NTSC or PAL/SECAM

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*(A)(D)	RCA Connector (yellow) x1
Audio L/R Input*(A)(D)	RCA Connector (white/red) x1
S-Video Input*(A)(D)	4-Pin Mini DIN x1
Video Input*(B)	SCART Connector x1
Audio L/R Input*(B)	SCART Connector 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 / Progressive Scan Output*(A)(D)	Y, P_b, P_r (Green/Blue/Red) x1
Video Output*(B)	SCART Connector x1
Audio L/R Output*(B)	SCART Connector x1
Digital Audio Output	Coaxial x1
	Optical x1

*(A) For LVW-5001A standard model only.
*(B) For LVW-5001B SCART model only.
*(D) For LVW-5001D standard model only.
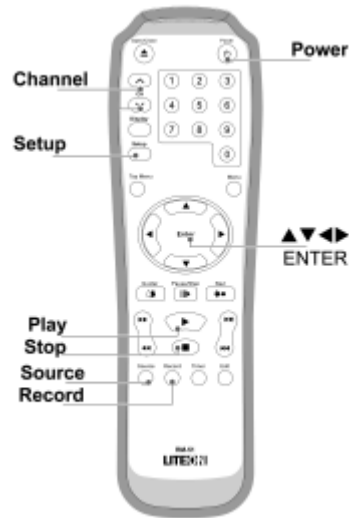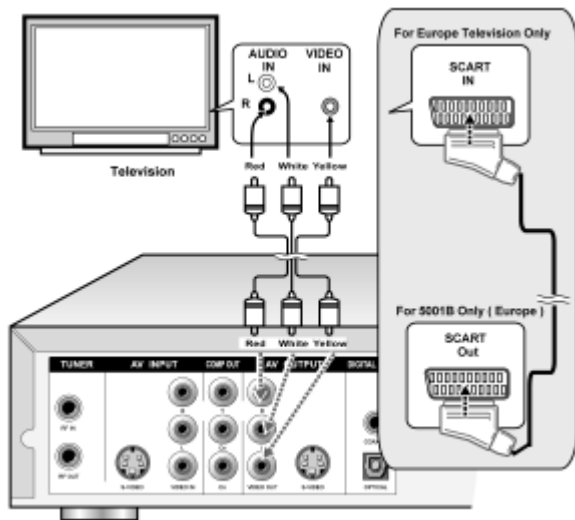
General
Power Supply	AC 100~240V , 50Hz/60 Hz
Power Consumption	36 W
Operating Temperature	+5°C to +40°C (+36°F to +104°F)
Operating Humidity	5% to 80% RH
Dimensions(W/H/D):	420 x 66 x 268 mm
Net Weight:	4.0 kg

Notes:
The specifications and design of this product are subject to change without notice, due to improvement.

Quick Installation Guide (Side A)
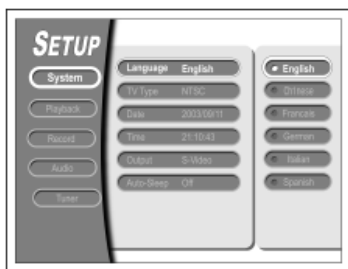
Connection to a Television

AUDIO IN VIDEO IN
L R

Television

Red White Yellow

For Europe Television Only

SCART IN

For 5001B Only (Europe)

SCART Out

TUNER AV INPUT COMP OUT AV OUTPUT SIGNAL

Red White Yellow

S-VIDEO VIDEO IN DV VIDEO OUT S-VIDEO OPTICAL

Power
Channel
Setup

▲ ▼ ◄ ►
ENTER

Play
Stop
Source
Record

LITEON

Initial Setup

Remote Control & Setup Menu

When you turn on the unit for the first time after purchase, press [SETUP] and follow the steps to set the unit.

1) Pres [⏻ POWER] to turn on the unit.
2) Press [SETUP] to appear the setup menu on the TV screen.
3) Press [▲] [▼] to select the "System","Playback","Record",, "Audio","TV Tuner" of the setup menu.
4) Press [►] or [ENTER] and [▲] [▼] to select the item you want to change.

SETUP

System	Language	English	● English
Playback	TV Type	NTSC	Chinese
Record	Date	2003/00/11	Francais
Audio	Time	21:10:43	German
Tuner	Output	S-Video	Italian
	Auto-Sleep	Off	Spanish

About Playback :
Language : System ➜Language (see page 22)
Aspect Ratio: Playback ➜TV Aspect (see page 22)
Video out : System ➜Output (see page 22)
Audio out : Audio ➜Digital Out (see page 23)

About Record :
System Time : System ➜Date / Time (see page 22)
Record Quality: Record ➜Quality (see page 22)
Chapter Mark: Record ➜Chapter Mark (see page 22)
TV Signal : Tuner ➜TV Signal (see page 23)

5) Press [SETUP] to end the settings.

⚠ No video or distorted video will be displayed if the selected video output on the player is differ from the video output connection.

Sytem Setting

System Language

Select system operating language."ENGLISH, TRADITIONAL CHINESE ,SIMPLIFIED CHINESE, FRANCAIS, GERMAN, ITALIAN, SPANISH".

TV Aspect

Select "4:3 Letter Box" or "4:3 Pan Scan" or "16:9 Wide Screen" to suit your TV.

Video Output

There are 3 types of video outputs available on this unit, including S-Video, Component, Progressive.
Connecting the correct video cable form the unit to the display unit and select the correct video output by pressing the [SETUP] button to setup.

Audio Output

This unit is capable of both analogue and digital audio output.
Connect analogue audio output by connecting RCA cables to LR audio jack on the back of unit.
For best audio effect, using digital optical cable to output the digital audio signal to the amplifier with Dolby Digital® & dts® decoder.

Record setting

Record Quality

Set the default recording mode.Select a quality you want to record "HQ , SP , EP , SLP".(see page 22)

Chapter Mark

Automatically divide a title(program) into chapters by inserting chapter marks at 2~15 minutes intervals during recording.
(see page 22)

Quick Installation Guide (Side B)

Disc Played

Disc Formats Supported
DVD-VIDEO/DVD-R/DVD-RW/DVD+R/DVD+RW/
CD-R/CD-RW/Audio CD/VCD/SVCD/JPEG/MP3

Video Formats Supported
MPEG2 for DVD and SVCD / MPEG1 for VCD
JPEG file

Audio Formats Supported
AUDIO CD / MP3 file
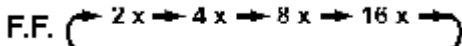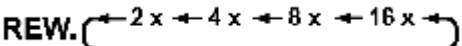
Recordable Disc

Disc Formats Supported
DVD+R/DVD+RW

Basic Play

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

■ **Press [⏻ POWER] , to turn on the unit.**
Press to switch the player on or to put in standby

■ **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.

$$ \text{F.F.} \quad 2x \rightarrow 4x \rightarrow 8x \rightarrow 16x $$

■ **Press [◀◀ REW.] , to perform fast reverse scanning.**
Press repeatedly to play the Disc reverse at 2x , 4x , 8x , 16x.

$$ \text{REW.} \quad 2x \leftarrow 4x \leftarrow 8x \leftarrow 16x $$

■ **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] , to pause playback.**

■ **Press [■ STOP] , to stop playback.**

■ **Press [TOP MENU] , to a disc menu appears on the TV screen.**

■ **Press [MENU] , to a chapter menu appears on the TV screen.**
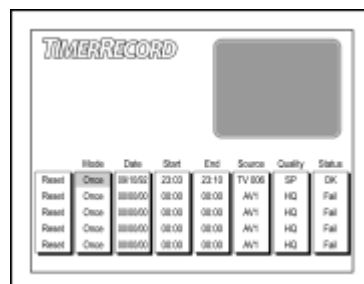
Recording from a TV , VCR or DV/V8

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

2) **Put a empty DVD+R or DVD+RW on the tray, with the disc's label facing up.**

3) **Press [SOURCE]** , to select a AV- Input (TV , AV1 , AV2 , S-Video, DV).

4) **Start play on the Video Cassette Recorder or DV/V8, or change the TV-channel.**

5) **Press [RECORD]** , to record your video/audio from the Video Cassette Recorder or DV/V8 ,TV program onto a DVD+R or DVD+RW.

6) **Press [■ STOP]** , to stop recording.

Timer Recording

Setting the timer manually
1) **Press [TIMER]** , to appear the "Timer Record" menu

2) **Press [◀] [▶]** to Select an item and to set the date.

To set the "Mode-->Onec-->Weekly-->Daily".
To set the "Date-->Month-->Day-->Year".
To set the "Start Time-->Hour-->Minute".
To set the "End Time-->Hour-->Minute".
To set the "Souce-->TV-->AV1-->AV2-->S-Video-->DV".
To select the "Quality-->HQ-->SP-->EP-->SLP".
press [POWER] to turn off the unit and start to timer recording.

Press [■ STOP] , to stop recording.

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 operation is written in PDF file. Please follow the instruction step by step to complete the firmware update.

⚠ **Caution:**
Improper firmware update may cause system malfunctioning.