EN	User Manual
FR	Manuel d'Utilisation
ES	Manual del Usuario

EN: For further assistance, call the customer support service in your country.
To obtain assistance in the U.S.A., Canada, Puerto Rico, or the U.S. Virgin Islands, contact Philips Customer Care Center at 1-866-310-0744

FR: Pour obtenir de l'aide supplémentaire, communiquez avec le centre de service à la clientèle de votre pays.
• Pour obtenir de l'aide aux États-Unis, au Canada, à Puerto Rico ou aux Îles Vierges américaines, communiquez avec le centre de service à la clientèle Philips au : 1-866-310-0744

ES: Para obtener más información, llame al servicio de soporte al cliente de su país.
• Para obtener asistencia en los Estados Unidos, en Canadá, Puerto Rico o en las Islas Vírgenes de los Estados Unidos, comuníquese con Centro de atención al cliente de Philips al 1-866-310-0744

Lea este manual antes de usar el product.

EN: To obtain a more detailed electronic copy of this manual, go to *www.philips.com/support*
FR: Pour obtenir une copie électronique plus détaillée de ce manuel, allez sur *www.philips.com/support*
ES: Para obtener una copia electrónica más detallada de este manual, visite *www.philips.com/support*

PHILIPS

*Registering your model with Philips makes you eligible for all of the valuable benefits listed below, so don't miss out. Register online at **www.productrecords.com/phl** to ensure:*

English

* Product Safety Notification
By registering your product, you'll receive notification - directly from the manufacturer - in the rare case of a product recall or safety defect.

* Additional Benefits
Registering your product guarantees that you'll receive all of the privileges to which you're entitled, including special money-saving offers.

Know these
safety *symbols*

| ⚡ | **CAUTION**
RISK OF ELECTRIC SHOCK
DO NOT OPEN | ⚠ |

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

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

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

☐ The symbol for CLASS II (Double Insulation)

The important note and rating are located on the rear or bottom of the cabinet.

| **For Customer Use** |
| Please write the model and serial number of your unit (located on the cabinet) in the space below for future reference. |
| Model No. _____ |
| Serial No. _____ |

PHILIPS *Visit our World Wide Web Site at http://www.philips.com/support*

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

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

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

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

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.

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

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

FCC WARNING
This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

RADIO-TV INTERFERENCE
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:-
1. Reorient or relocate the receiving antenna.
2. Increase the separation between the device and the receiver.
3. Connect the device into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio / TV technician for help.

Disconnect the mains plug (the AC plug) to shut the Unit off when trouble is found or when not in use. The mains plug (the AC plug) shall remain readily available.

CAN ICES-3 (B)/NMB-3(B)

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
WARNING: Batteries (Battery pack or battery installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

LASER SAFETY
This apparatus is classified as a CLASS 1 LASER PRODUCT.
This apparatus employs a laser. Only a qualified service person should remove the cover or attempt to service this apparatus, due to possible eye injury.

CLASS 1 LASER PRODUCT
PRODUCT CON LASER CLASE 1

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

EN

IMPORTANT COPYRIGHT INFORMATION

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited. This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

Never use a gas duster on this Unit.
The gas trapped inside of this Unit may cause ignition and explosion.

Do not place the Unit on the furniture that is capable of being tilted by a child and an adult leaning, pulling, standing or climbing on it. A falling Unit can cause serious injury or even death.

This apparatus should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. Make sure to leave a space of 7.8 inches (20cm) or more around this apparatus.

To Avoid the Hazards of Electrical Shock and Fire
- Do not handle the power cord with wet hands.
- Do not pull on the power cord when disconnecting it from an AC outlet. Grasp it by the plug.
- Do not put your fingers or objects into the Unit.

Location and Handling
- Do not install the Unit in direct sunlight, near strong magnetic fields or in a place subject to dust or strong vibration.
- Avoid a place with drastic temperature changes.
- Install the Unit in a horizontal and stable position. Do not place anything directly on top or bottom of the Unit. Depending on your external devices, noise or disturbance of the picture and/or sound may be generated if the Unit is placed too close to them. In this case, please ensure enough space between the external devices and the Unit.
- Depending on the environment, the temperature of this Unit may increase slightly. This is not a malfunction.
- Be sure to remove the disc and unplug the AC power cord from the outlet before carrying the Unit.

Dew Condensation Warning
- Dew condensation may form inside the Unit in the following conditions. If so, do not use this Unit at least for a few hours until its inside gets dry.
  - The Unit is moved from a cold place to a warm place.
  - Under conditions of high humidity.
  - After heating a cold room.

Notice for Progressive Scan Use
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 picture problems with 525 (480) progressive scan output, it is recommended that the user switch the connection to the 'standard definition' output. If there are questions regarding your TV set compatibility with this 525p (480p) DVD player, please contact our customer service center.

Maintenance

Servicing
- Please refer to relevant topics on "Troubleshooting" on page 27 when trouble is found.
- If you need to call a customer service representative, please know the model number and serial number of your product before you call. This information is displayed on the back of the product. Also, please take a moment to identify the problem you are having, and be prepared to explain this to the representative. If you believe the representative will need to help you with operations, please stay near the product. Our representatives will be happy to assist you. For online reference, please visit our website at **www.philips.com/support**

Cleaning the Cabinet
- Wipe the front panel and other exterior surfaces of the unit with a soft cloth.
- Never use a solvent, thinner, benzene or alcohol to clean the unit. Do not spray insecticide liquid near the unit. Such chemicals may discolor the surface or damage the unit.

Cleaning Discs
- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to the outside of the disc. Do not wipe in a circular motion.
- Do not use solvents such as benzene, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

Cleaning the Disc Lens
- If the DVD drive in this unit is having problems reading discs, please refer to the relevant sections in the Troubleshooting section of this user manual to perform basic troubleshooting. If this does not work, try a lens cleaning disc. At this point if you are still having trouble reading discs, please call our customer support center for further troubleshooting.

Caring for Video Cassettes
- Use only cassettes with the **VHS** mark.
- Remove any light adhesive stick-on notes from the video cassette before putting the cassette in the VCR. Removable labels can jam the VCR.

Caring for the VCR's Video Heads
- Periodic maintenance is required to maintain your DVD/VCR Dual Player's excellent performance. The VCR has an Automatic Head Cleaner. However, the video heads will require replacement eventually. Only an authorized service center should perform this service.

Disc Handling
- Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.
- Always store the disc in its protective case when it is not used.
- Note that discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played back on this unit. Do not attempt to play such discs, as they may damage the unit.

Testing the Remote Control
- If the remote control is not working properly, you can use a digital camera (including a cellular phone with built-in camera) to see if it is sending out an infrared signal. Please note that some cell phone cameras with IR filters will not work. You can verify if your cell phone camera is suitable for this test by using other working remotes in your house and see if they flash.

How to perform the test?
1. Point the IR transmitter of the remote control towards the lens of the digital camera (or cell phone camera).
2. Turn on the digital camera and look at the IR transmitter of the remote control through the LCD display of the digital camera.
3. While looking at the LCD, press the buttons on your remote control you want to test.
   a. If your remote control is working properly, the IR transmitter of the remote control will create a noticeable flash on the LCD of the digital camera.
   b. If it does not flash, replace the batteries in your remote with new batteries and try again. If it still does not flash, your remote control may be damaged or defective. Please contact customer service for replacement options.

Notice
Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. or their respective owners. P&F USA reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly. The material in this manual is believed adequate for the intended use of the system. If the product, or its individual modules or procedures, are used for purposes other than those specified herein, confirmation of their validity and suitability must be obtained. P&F USA warrants that the material itself does not infringe any United States patents. No further warranty is expressed or implied. P&F USA cannot be held responsible neither for any errors in the content of this document nor for any problems as a result of the content in this document. Errors reported to P&F USA will be adapted and published on the P&F USA support website as soon as possible.

Warranty
No components are user serviceable. Do not open or remove covers to the inside of the product. Repairs may only be done by Service Centers and official repair shops. Failure to do so shall void any warranty, stated or implied. Any operation expressly prohibited in this manual, any adjustments, or assembly procedures not recommended or authorized in this manual shall void the warranty.

Important
Registering your model with Philips makes you eligible for all of the valuable benefits listed below, so don't miss out. Register online at **www.productrecords.com/phl** to ensure:

Product Safety Notification
By registering your product you receive notification - directly from the manufacturer - in the rare case of a product recall or safety defect.

Additional Benefits of Product Ownership
Registering your product guarantees that you receive all of the privileges to which you're entitled, including special money-saving offers.

For further assistance
For further assistance, call the customer support service in your country.
To obtain assistance in the U.S.A., Canada, Puerto Rico, or the U.S. Virgin Islands, contact Philips Customer Care Center at 1-866-310-0744

Environmental Care
The packaging of this product is intended to be recycled. Contact your local authorities for information about how to recycle the packaging. For Product recycling information, please visit - www.recycle.philips.com

Disposal of used batteries
The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless, in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

Contents

SETUP

VCR FUNCTIONS

DVD FUNCTIONS

INFORMATION

Welcome!

This DVD/VCR Dual Player combines a Digital Video Disc (DVD) player and a Hi-Fi Video Cassette Recorder (VCR) into one unit, letting you play DVDs, Audio Compact Discs (Audio CDs), and Video Cassettes on one piece of equipment.
Read this owner's manual carefully to learn how to use the features listed below.

VCR Features

- Automatic Head Cleaner
- Slow Motion
- Recording : One-Touch and Timer
- Tracking Adjustment

- Searching : Time, Index, Forward and Reverse
- 19 Micron head
- Tape Counter
- Satellite Link

- English, French and Spanish Menus and Displays
- Still Picture
- Repeat Playback

Disc Features

- Audio Language choices *
- Camera Angles *
- DVD menus in a desired language *
- Markers
- Subtitles *

- Parental Control *
- Paused / Fast / Slow / Step-by-Step Playback
- Progressive Scan
- Random Playback
- Repeat : A-B Repeat

- Resume On
- Specific Time / Title/ Chapter / Track Search
- Program Playback
- Zoom

* If available on the disc

Package Contents

The following items are provided with your new DVD/VCR Dual Player.
- Remote Control and two AAA (1.5 V) batteries
- One set of Audio (red and white tips) and Video (yellow tips) cables
- This User Manual and Quick Start Guide

Available Disc Features...

All features described in this manual are not available on every disc. If the feature is not available on the disc, you cannot use the DVD/VCR Dual Player to make it available. An "X" will appear in the top right corner of the TV screen if you try to access a feature that is not currently available.

English

Symbols Used in This Manual

The following symbols appear in some headings in this manual.

VHS : Description refers to video cassette tapes.

DVD : Description refers to DVD-VIDEO.

CD : Description refers to audio CD.

Note to CATV system installer:

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

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

Connecting to RF Modulator (Not Supplied)

If your TV has antenna in jack only, it is still possible to connect this Unit to your TV by using an RF modulator. In this case, follow the instructions below.

1) Disconnect the power cords of the Unit from the AC outlet.
2) Make the connection as illustrated below.
3) **Set your RF modulator's channel 3/4 switch to either 3 or 4**, whichever the TV channel is least used in your area. If your RF modulator has a modulator/antenna switch, set it according to the manual supplied with the RF modulator.
4) Plug in the power cords of the Unit to the AC outlet.
5) **Turn on your TV and choose the same channel as you set the RF modulator's channel 3/4 switch to.** For more details, follow the manual supplied with the RF modulator.
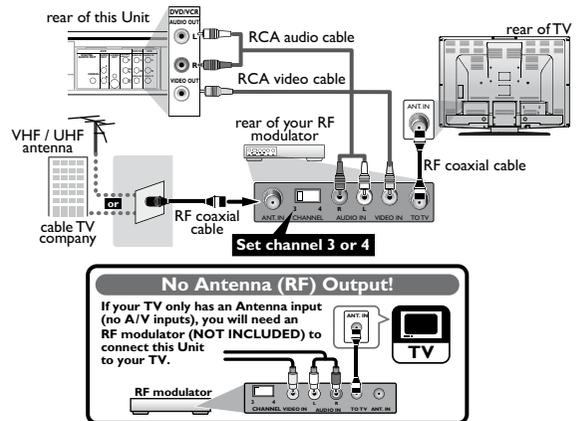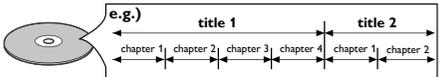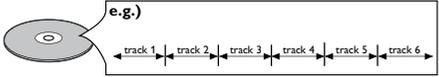

Note(s):

• RF modulator is not supplied with this Unit. You need to purchase this separately.
• The picture quality may suffer if this Unit is connected through an RF modulator to an RF only TV.

EN

About Cassette Tapes and Discs

Playable Media

Type of media	Mark (logo)	Region code	Recorded signals	Media size	Tape speed and disc types
cassette tape	VHS	—	analog video	tape width 1/2 inches (12.65 mm)	SP: 1-5/16 inch/sec. (33.40 mm/sec.) SLP: 7/16 inch/sec. (11.12 mm/sec.)
DVD-VIDEO *1, 2, 3, 5, 9	DVD VIDEO	⊕ or ⊕	digital video (MPEG2)	5 inches (12 cm) or 3 inches (8 cm)	e.g.) title 1 — chapter 1, chapter 2, chapter 3, chapter 4; title 2 — chapter 1, chapter 2
DVD-RW DVD-R *1, 3, 4, 5, 6, 7, 8, 9, 10	DVD RW / DVD R	—			
audio CD *3, 5, 9	COMPACT disc DIGITAL AUDIO	—	digital audio	5 inches (12 cm) or 3 inches (8 cm)	e.g.) track 1, track 2, track 3, track 4, track 5, track 6
CD-RW CD-R *3, 4, 5, 8, 9	COMPACT disc DIGITAL AUDIO ReWritable / COMPACT disc ReWritable / COMPACT disc DIGITAL AUDIO Recordable / COMPACT disc Recordable	—			

DVD is a trademark of DVD Format/Logo Licensing Corporation.

If you cannot play back a disc which bears one of the marks above, check the following.

*1: This Unit conforms to the NTSC color system. Discs recorded in other color systems such as PAL cannot be played back.

*2: Certain DVD-VIDEO does not operate as described in this manual due to the intentions of the disc's producers.

*3: Scratched or stained discs may not be played back.

*4: Some discs cannot be played back because of incompatible recording conditions, characteristics of the recorder or special properties of discs.

*5: You can play back discs which bear the marks above. If you use nonstandardized discs, this Unit may not play them back. Even if they are played back, the sound or video quality will be compromised.

*6: You may play back the unfinalized DVD-RW/-R recorded in the video format on our brand's DVD recorder. However, depending on the recording status of a disc, the disc may not be played back at all or normally (the picture or sound may not be smooth, etc.). In this case, you need to finalize the disc with the DVD recorder. Refer to the manual accompanying the DVD recorder.

*7: Only discs recorded in the video format and finalized can be played back.
Unfinalized discs cannot be played back. Depending on the recording status of a disc, the disc may not be played back at all (the picture or sound may not be smooth, etc.).

*8: If the recorded portion of the disc is too small (less than 2-3/16 inches (55 mm) across), it may not play back properly.

*9: Do not glue paper or put stickers on to the disc. These may damage the disc and the Unit may not read it correctly.

*10: Discs recorded in the VR (video recording) format cannot be played back.

Unplayable Discs

NEVER play the following discs as a malfunction may result!

DVD-RAM, DVD-audio, CD-i, photo CD, video CD, DVD with region codes other than 1 or ALL, DTS-CD, DVD-ROM for personal computers, CD-ROM for personal computers, CD-RW/-R with MP3, Windows Media™ Audio or JPEG files, HD DVD, Blu-ray Disc™.

On the following disc, the sound MAY NOT be heard.

super audio CD

Note(s):
• Only the sound recorded on the normal CD disc layers can be delivered. The sound recorded on the high density super audio CD disc layers cannot be delivered.

Any discs without compatibility indications and not mentioned in the "Playable Media" chart above are not playable.
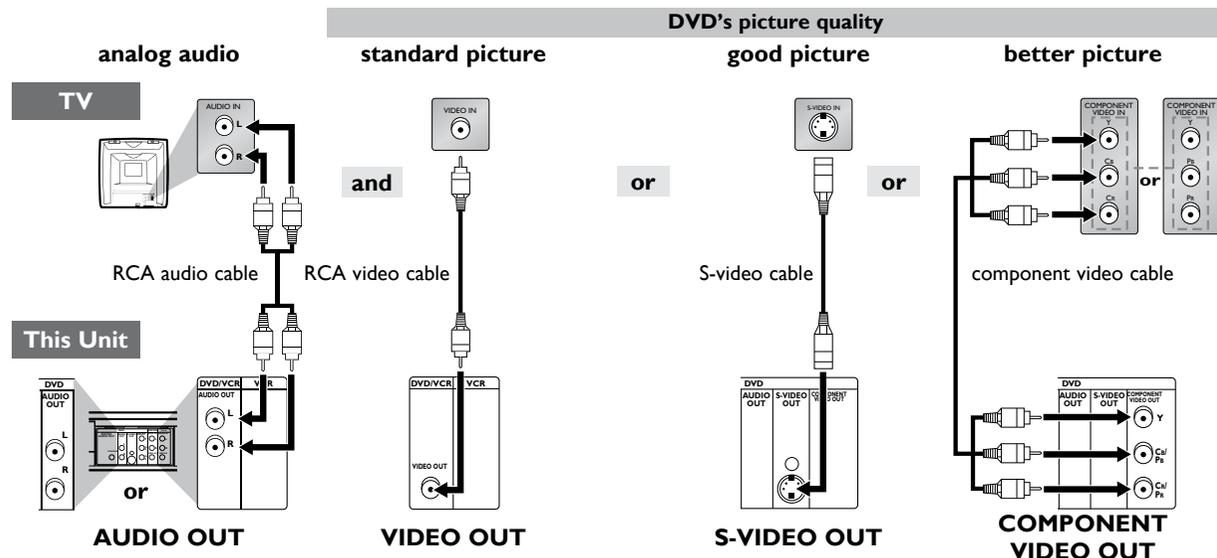
Continued on next page.

SETUP

Connections

Connection to a TV

If your TV does not have AUDIO/VIDEO input jack, see the section "Connecting to RF Modulator (Not Supplied)" on page 8.

VCR and Basic DVD Connection	Available for DVD only

DVD's picture quality

analog audio	standard picture	good picture	better picture

TV

AUDIO IN
L
R

VIDEO IN

S-VIDEO IN

COMPONENT VIDEO IN
Y
Cb
Cr

COMPONENT VIDEO IN
Y
Pb
Pr

RCA audio cable   RCA video cable   S-video cable   component video cable

This Unit

DVD AUDIO OUT
L
R

or

DVD/VCR VCR AUDIO OUT
L
R

DVD/VCR VCR VIDEO OUT

DVD AUDIO OUT S-VIDEO OUT COMPONENT VIDEO OUT

DVD AUDIO OUT S-VIDEO OUT COMPONENT VIDEO OUT
Y
Cb/Pb
Cr/Pr

AUDIO OUT   **VIDEO OUT**   **S-VIDEO OUT**   **COMPONENT VIDEO OUT**

Supplied cables used in this connection are as follows:
- RCA audio cable (L/R) x 1
- RCA video cable x 1

Please purchase the rest of the necessary cables at your local store.

Note(s):
- Connect this Unit directly to your TV. If RCA audio/video cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- DIGITAL AUDIO OUT (COAXIAL), DVD AUDIO OUT, S-VIDEO OUT and COMPONENT VIDEO OUT jacks are only useful in DVD mode.

If your TV is compatible with 525 (480) progressive scanning and you want to enjoy that high quality picture for DVD playing;

You must select the connection COMPONENT VIDEO OUT above and progressive scanning mode. To set the mode, set "PROG. SCAN" to "ON" in "DISPLAY" menu, so that the P-SCAN indicator on this Unit lights up. Refer to pages 24-25 for more details.
- When "PROG.SCAN" is "ON", video signals from the Unit's VIDEO OUT and S-VIDEO OUT jacks will be distorted or not be output at all for DVD playing. The picture will be OK for VCR use from the VIDEO OUT jack.

If your TV is not compatible with progressive scanning;

Use this Unit in interlace mode and set "PROG.SCAN" to "OFF" either in "DISPLAY" menu or by pressing and holding **[▶(PLAY)]** on the front of the Unit on the DVD side for more than 5 seconds or until the P-SCAN indicator on this Unit turns off.

After connecting to your TV:

You will need to switch to a VIDEO input on your TV. This is usually marked INPUT, SOURCE, TV/VIDEO or AUX.
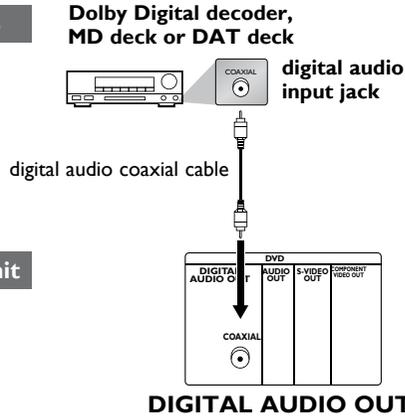Please refer to your TV Owner's manual for details.

Connection to an Audio System

Playing 2 Channel Analog Audio

stereo system

Audio

analog audio input jacks

RCA audio cable

This Unit

or

AUDIO OUT

Supplied cables used in this connection are as follows:
• RCA audio cable (L/R) x 1
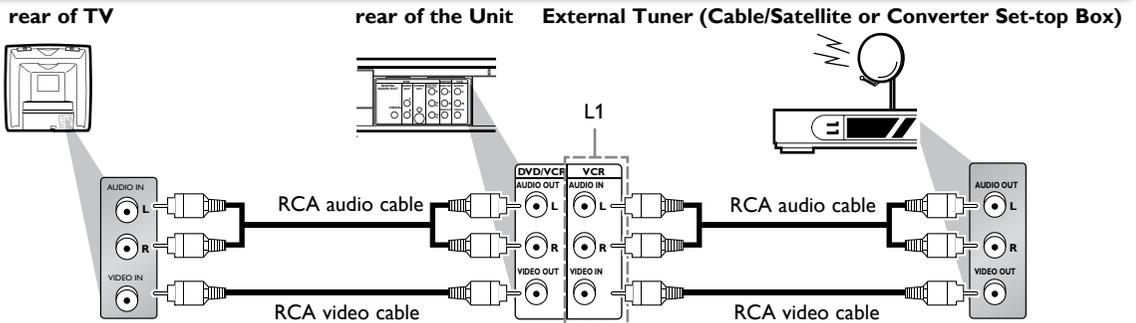Please purchase the rest of the necessary cables at your local store.
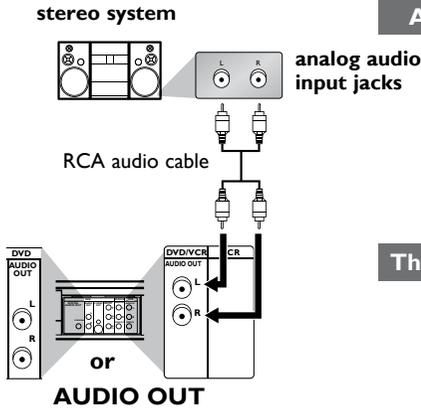
Playing Multi Channel Digital Audio

Dolby Digital decoder, MD deck or DAT deck

digital audio input jack

digital audio coaxial cable

DIGITAL AUDIO OUT

Connection	Setting	SETUP > QUICK > DOLBY DIGITAL
Connecting to a Dolby Digital decoder for Dolby Digital audio output.		BITSTREAM
Connecting to other device (an MD deck or DAT deck etc.) without Dolby Digital decoder.		PCM

* To complete these settings, refer to pages 24-25.

Note(s):
• The audio source on a disc in a Dolby Digital multi channel surround format cannot be recorded as digital sound by an MD or DAT deck.
• By hooking this Unit up to a Dolby Digital decoder, you can enjoy high-quality Dolby Digital multi channel surround sound as heard in the movie theaters.
• Playing back a DVD using incorrect settings may generate noise distortion and may also damage the speakers.

Connection to an External Tuner (Cable/Satellite or DTV to analog TV Converter Set-top box)

rear of TV   **rear of the Unit**   **External Tuner (Cable/Satellite or Converter Set-top Box)**

L1

RCA audio cable

RCA audio cable

RCA video cable

RCA video cable

Using the Unit with an External Tuner (Cable/ Satellite or Converter Set-top Box)
1. Connect RCA audio and video cables to the audio and video output jacks of your External Tuner (Cable/Satellite or Converter Set-top Box) and to the audio and video input jacks at the rear of the Unit.
2. Press **[INPUT]** on your Remote Control until "L1" is displayed on your TV.

Note(s):
• Your Cable/Satellite Set-top Box can be accessed only by connecting it to L1 (rear panel jacks) on the Unit.

L1: Rear panel terminals
L2: Front panel terminals

Refer to "Front & Rear Terminals" on page 13 for more information.

Supplied cables used in this connection are as follows:
• RCA audio cable (L/R) x 1
• RCA video cable x 1
Please purchase the rest of the necessary cables at your local store.

Special Note when connected to an External Tuner (Cable/Satellite or Converter Set-top Box):
• Only the active channel on your External Tuner may be viewed or recorded when connected to this Unit.
Do not change channels during a recording. You cannot record on the active channel while viewing another channel.
• Always use the LEFT (white) audio output jack from the External Tuner to ensure that the audio is mixed down correctly to mono for this Unit. If you use the RIGHT (red) jack, you will record the right audio only.

EN

Preparation for Use
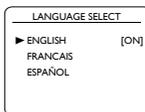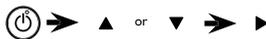
Turning on Unit for the First Time

VHS | VCR

Please note: most instructions in this manual refer to Remote Control use.

1 Be sure your TV's input is set to VIDEO. (Name may vary with TV manufacturer. See your TV manual for details.)

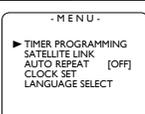**2** Select your on-screen language. Then press **[▶]** to continue.

⏻ ➤ ▲ or ▼ ➤ ▶

```
  LANGUAGE SELECT
▶ ENGLISH        [ON]
  FRANCAIS
  ESPAÑOL
```

3 When "CLOCK SET" menu appears, go to step 2 in "Clock Setting" on this page.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / --       ----

HOUR  MINUTE   AM/PM
 --  :  --       --
```
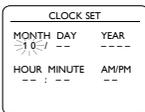
To Change the Selected On-screen Language

1 Press **[SETUP]** until the main menu appears.

SETUP

```
       - M E N U -
▶ TIMER PROGRAMMING
  SATELLITE LINK
  AUTO REPEAT    [OFF]
  CLOCK SET
  LANGUAGE SELECT
```

2 Select "LANGUAGE SELECT". Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
       - M E N U -
  TIMER PROGRAMMING
  SATELLITE LINK
  AUTO REPEAT    [OFF]
  CLOCK SET
▶ LANGUAGE SELECT
```
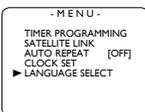
3 Select "ENGLISH", "FRANCAIS" or "ESPAÑOL". Then press **[CLEAR]**.

▲ or ▼ ➤ CLEAR

```
  LANGUAGE SELECT
▶ ENGLISH        [ON]
  FRANCAIS
  ESPAÑOL
```
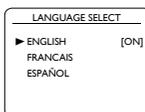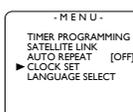
Note(s):
• If you accidentally select Spanish or French and need English: Press **[SETUP]** and choose "SELEC. IDIOMA" or "SELECTION LANGUE". Press **[▶]** and select "ENGLISH". Finally, press **[CLEAR]**.
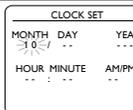
Clock Setting

VHS | VCR

1 Press **[SETUP]** and select "CLOCK SET". Then press **[▶]** to go to next step.

SETUP ➤ ▲ or ▼ ➤ ▶

```
       - M E N U -
  TIMER PROGRAMMING
  SATELLITE LINK
  AUTO REPEAT    [OFF]
▶ CLOCK SET
  LANGUAGE SELECT
```
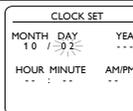
• If the clock is not set, "CLOCK SET" menu appears when you press **[SETUP]**. In this case, go to step 2.

2 Select the current month. Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / --       ----

HOUR  MINUTE   AM/PM
 --  :  --       --
```

3 Select the current day. Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / 02       ----

HOUR  MINUTE   AM/PM
 --  :  --       --
```

4 Select the current year. Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / 02  TUE  2012

HOUR  MINUTE   AM/PM
 --  :  --       --
```
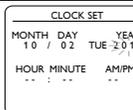
5 Select the current hour. Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / 02  TUE  2012

HOUR  MINUTE   AM/PM
 05  :  --       --
```

6 Select the current minute. Then press **[▶]** to go to next step.

▲ or ▼ ➤ ▶

```
      CLOCK SET
MONTH  DAY      YEAR
 10  / 02  TUE  2012

HOUR  MINUTE   AM/PM
 05  : 40        --
```

7 Select "AM" or "PM".

▲ or ▼
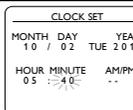
```
      CLOCK SET
MONTH  DAY      YEAR
 10  / 02  TUE  2012

HOUR  MINUTE   AM/PM
 05  : 40       PM  AM
                ▶ PM
```
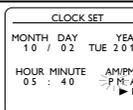
8 Press **[SETUP]** to exit "CLOCK SET" menu.

SETUP

Note(s):
• To go back, press **[◀]** during steps 2 to 7.
• Clock setting will be lost after a power failure or this Unit has been unplugged for more than 30 seconds.

Continued on next page.

Function Overview

Front Panel Indicator Lights

Lights up when the progressive scan system is activated.

Lights up when the inserted disc is being played back.
Blinks when an unplayable disc is inserted.

Lights up during a recording or one-touch timer recording (OTR). Blinks when a recording is paused.

Lights up when this Unit is in the DVD mode.

Lights up when the Unit is turned on.

Lights up when this Unit is in the VCR mode.
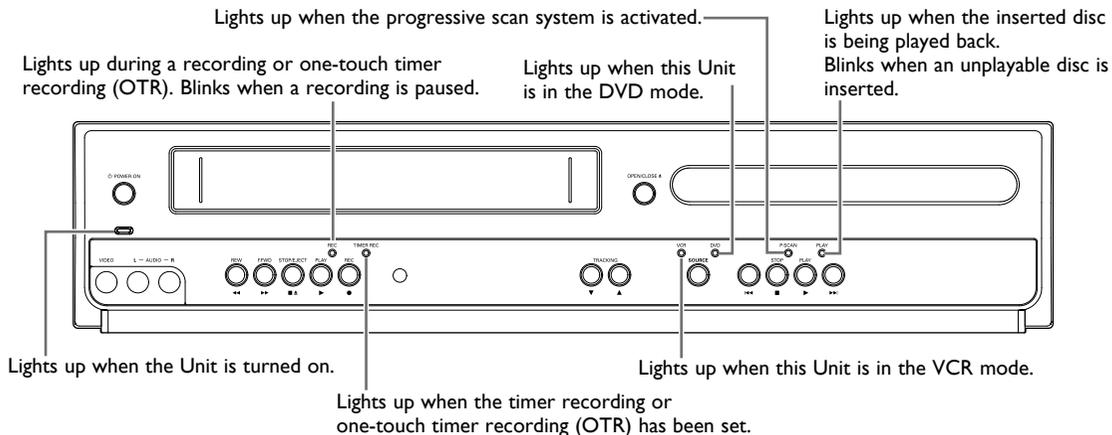
Lights up when the timer recording or one-touch timer recording (OTR) has been set.

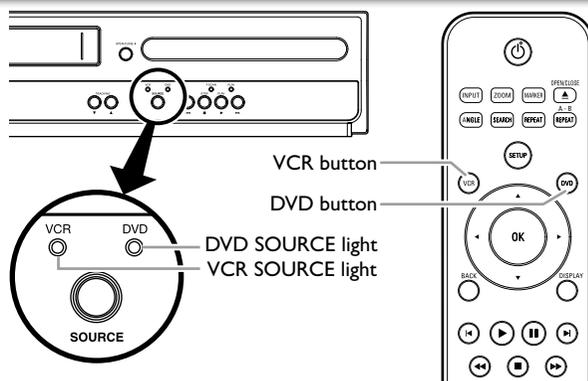## Selecting DVD or VCR Operation

You must first select either DVD or VCR operation.

VCR MODE
Press **[VCR]** on the Remote Control.
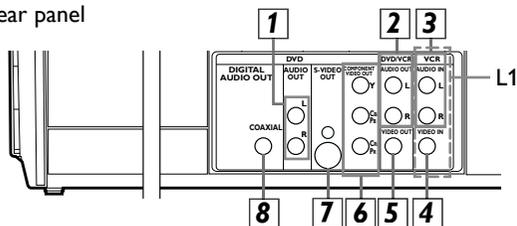(The VCR SOURCE light will illuminate.)

DVD MODE
Press **[DVD]** on the Remote Control.
(The DVD SOURCE light will illuminate.)

VCR button

DVD button

DVD SOURCE light
VCR SOURCE light

SOURCE

Front & Rear Terminals

rear panel

front panel

L1

L2

1: DVD AUDIO OUT* (analog) jacks
Connect audio cables from here to the audio input jack of your television or audio device.

2: DVD/VCR AUDIO OUT jacks
Connect audio cables from here to the audio input jack of your television or audio device. Standard connection for DVD/VCR use.

3: VCR AUDIO IN jacks
Connect a stereo audio cable from the audio output jacks of your camcorder, VCR, etc. to here. After making the connection, press **[INPUT]** on the Remote Control. Select "L1" to activate the rear AUDIO IN jacks or "L2" to activate the front jacks.

4: VCR VIDEO IN jack
Connect a video cable from the video output jack of your camcorder, VCR, etc. to this Unit. After making the connection, press **[INPUT]** on the Remote Control. Select "L1" to activate the rear VIDEO IN jack or "L2" to activate the front jack.
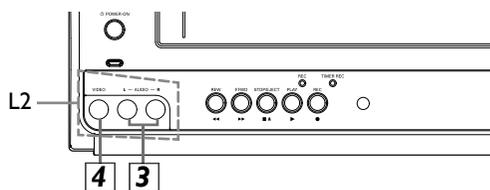
5: DVD/VCR VIDEO OUT jack
Connect a video cable from here to the VIDEO input jack of your television or audio device. Standard connection for DVD/VCR use.

6: COMPONENT VIDEO OUT* jacks
Connect a component video cable from here to the component video input jack on your television.

7: S-VIDEO OUT* jack
Connect an S-video cable from here to the S-video input jack on your television.

8: DIGITAL AUDIO OUT COAXIAL* jack
Connect a digital audio coaxial cable from here to the digital audio input jack on your digital audio receiver.

* For enhanced DVD viewing. DVD/VCR video and audio connections required to view cassette tapes.
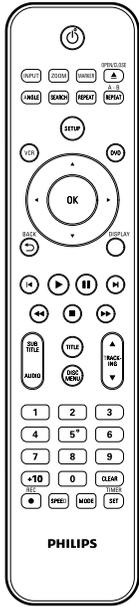
Note(s):
• Audio and video cables are included for both VCR and DVD viewing. You can enhance your DVD picture and sound quality with an S-video cable, a component video cable or a digital audio coaxial cable. **Please purchase the necessary cables at your local store.** (Refer to pages 10-11.)
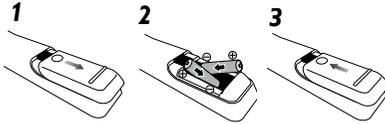
– 13 –

Remote Control

Installing the Batteries for the Remote Control

Install two AAA batteries (supplied) matching the polarity indicated inside the battery compartment of the Remote Control.

1   **2**   **3**

Keep in mind the following when using the Remote Control:
- Make sure that there are no obstacles between the Remote Control and the infrared sensor window on the Unit.
- The maximum operable infrared signal ranges from the Remote Control are as follows.
  - **Line of sight**: approx. 23 feet (7m)
  - **Either side of center**:
        approx. 16 feet (5m) within   30°
  - **Above**: approx. 16 feet (5m) within   15°
  - **Below**: approx. 10 feet (3m) within   30°
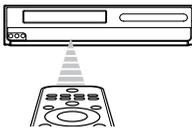
Note(s):
- Do not mix alkaline and manganese batteries.
- Do not mix old and new batteries.
- Always remove batteries from Remote Control if they are dead or if the Remote Control is not to be used for an extended period of time. This will prevent battery acid from leaking into the battery compartment.
- If you turn off this Unit, **[OPEN/CLOSE ▲]** on the Unit or Remote Control is not available.

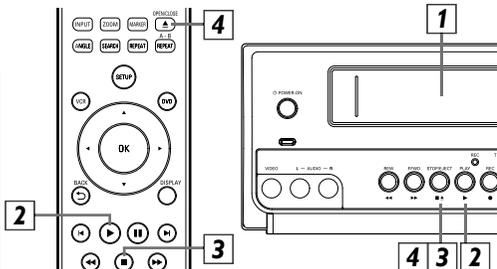| Button (Alphabetical order)	DVD mode — DVD	DVD mode — CD	VCR mode — VHS
1–9, -10, 0 (number buttons)	• To select chapter or title directly.	• To select track directly.	——
◀◀ ▶▶	• To search forward/backward through a disc. • To begin slow forward/reverse playback in the pause mode.	• To search forward/backward through a disc.	• To forward/backward a tape. • To begin slow forward playback in the pause mode.
A - B REPEAT	• To repeat between your chosen point A and B.	• To repeat between your chosen point A and B.	——
ANGLE	• To select camera angles on a disc.	——	——
AUDIO	• To select audio languages on a disc.	• To select "STEREO", "L-ch" or "R-ch".	• To select "HIFI" or "MONO" mode during playback. (Hi-Fi tapes only)
CLEAR	• To clear the markers. • To clear numbers entered incorrectly. • To cancel the point for A-B repeat.	• To clear the markers. • To remove status number in program input. • To clear numbers entered incorrectly. • To cancel the point for A-B repeat.	• To exit the VCR menu. • To reset the tape counter.
DISC MENU	• To call up the disc menu on a disc.	——	——
DISPLAY	• To display the current disc mode.	• To display the current disc mode.	• To display the current time, tape counter and L1 or L2.
DVD	• To select DVD output mode. • To activate DVD mode.	• To select the DVD output mode. • To activate DVD mode.	——
INPUT	——	——	• To select input "L1" or "L2".
MODE	• To set black level on/off.	• To arrange the playing order or play randomly.	——
OK (cursor)	• To move the cursor and determine its position.	• To move the cursor and determine its position.	• To select an item on the VCR menu. • To advance to the next VCR menu. • To go back one step during clock and timer programming.
OPEN/CLOSE ▲	• To open or close the disc tray.	• To open or close the disc tray.	• To eject the cassette tape from the cassette compartment.
❚❚ (pause)	• To pause disc playback. • To advance playback one frame at a time.	• To pause disc playback.	• To pause tape playback or recording. • To advance playback one frame at a time.
▶ (play)	• To begin disc playback.	• To begin disc playback.	• To begin tape playback.
�i◀ ▶i	• To skip chapters or titles.	• To skip tracks.	——
REC ●	——	——	• To start recording or one-touch timer recording (OTR).
REPEAT	• To play back a chapter or title repeatedly.	• To play back a track or disc repeatedly.	• To select the repeat mode on/off.
BACK	• To return to the previous operation in menu.	• To return to the previous operation in menu.	——
SEARCH	• To search chapter, title or time.	• To search track. • To search time.	• To call up the index or time search menu.
MARKER	• To set or search the markers.	• To set or search the markers.	
SETUP	• To call up the DVD setup menu.	• To call up the DVD setup menu.	• To call up the VCR menu.
SPEED	——	——	• To select the recording speed.
(power)	• To turn the Unit on or to turn the Unit into the standby mode. (To completely turn off the Unit, you must unplug the AC power cord.)	• To turn the Unit on or to turn the Unit into the standby mode. (To completely turn off the Unit, you must unplug the AC power cord.)	• To turn the Unit on or to turn the Unit into the standby mode. (To completely turn off the Unit, you must unplug the AC power cord.)
■ (stop)	• To stop playback.	• To stop playback.	• To stop playback or recording.
SUB TITLE	• To select subtitles on a disc.	——	——
TITLE	• To call up the top menu on a disc.		
TRACK-ING ▲▼	——	——	• To adjust the tracking manually during playback.
TIMER SET	——	——	• To put the VCR into standby mode for a timer recording.
VCR	——	——	• To select the VCR output mode. • To activate VCR mode.
ZOOM	• To magnify part of a picture. (2x/4x)	——	——

VCR FUNCTIONS

Playback

Before: Turn on the TV.

1 Insert a cassette tape into this Unit.	**2** To start playback ▶	
3 To stop playback ■	**4** To eject the cassette tape OPEN/CLOSE ▲	

When You Playback a Cassette Tape Recorded in Hi-Fi Stereo

Press **[AUDIO]** on the Remote Control, then select "HIFI" or "MONO".
• When playing back non Hi-Fi tapes, **[AUDIO]** on the Remote Control is not available.

Your selection \ Type of recorded tape	HIFI		MONO
	L-channel	R-channel	
Hi-Fi tapes recorded in Hi-Fi stereo	L	R	L+R

Other Operations

To cue or review the picture during playback (picture search)

Use **[▶▶]** or **[◀◀]** (**[F.FWD ▶▶]** or **[REW ◀◀]** on this Unit).
• Press it again and the Unit will search in super high speed (in only the SLP mode).

To freeze the picture on TV screen during playback (still mode)

Press **[❚❚ (PAUSE)]**. Each time you press the button, the picture will be forwarded one frame at a time.
• If the picture begins to vibrate vertically in the still mode, stabilize the picture by using **[TRACKING ▲ / ▼]**.
• If the picture is distorted or rolling vertically, adjust the vertical hold control on your TV if equipped.

To Reset the Cassette Tape Counter (counter reset)

Press **[DISPLAY]** to display the cassette tape counter on the TV. Press **[CLEAR]** to reset the counter to "0:00:00".

To play back in slow motion (slow mode)

Press **[❚❚ (PAUSE)]** during playback, then press **[▶▶]** (**[F.FWD ▶▶]** on this Unit).
• If you want to change the speed in slow mode, press **[▶▶]** or **[◀◀]** (**[F.FWD ▶▶]** or **[REW ◀◀]** on this Unit), slow speed will be faster or slower.
• If the noise bars appear on the TV screen, you can reduce it by using **[TRACKING ▲ / ▼]**.

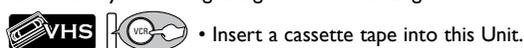### To rewind the cassette tape automatically (auto rewind)

When a cassette tape reaches its end during playback, fast-forward or recording (except timer recording and one-touch timer recording), the cassette tape will automatically rewind to the beginning. After rewinding finishes, the Unit will eject the cassette tape.

Note(s):
• To prevent damage to the cassette tape, still or slow mode will automatically stop after 5 minutes.
• To return to playback from the picture search, still or slow mode, press **[▶ (PLAY)]**.

Index Search

To search by index mark. The index mark will be made automatically at the beginning of each recording.

• Insert a cassette tape into this Unit.

1 Press **[SEARCH]** once.

INDEX SEARCH

2 To select index mark

INDEX SEARCH 0 3 —— 01 ~ 20

▲ or ▼

beginning of the contents / current program / end of the contents

Pro.1	Pro.2	Pro.3	Pro.4	Pro.5
02	01	01	02	03

index mark

3 To rewind ◀

To fast forward ▶

4 When index mark is reached, playback automatically begins.

PLAY ▶

Note(s):
• The time gap between index marks should be more than 1 minute for SP mode, 2 minutes for LP mode and 3 minutes for SLP mode.

Time Search

To search by length of time.

• Insert a cassette tape into this Unit.

1 Press **[SEARCH]** twice.

TIME SEARCH
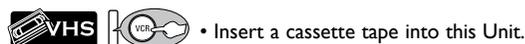
2 Select the desired length of time for fast forwarding or rewinding.

TIME SEARCH 2 : 5 0 —— 0:01~ 9:59

▲ or ▼

(1 minute~9 hours and 59 minutes)

3 To rewind ◀

To fast forward ▶

4 When selected length of time is reached, playback will start automatically.

PLAY ▶

Note for Index Search & Time Search:
• These functions are not available during recording.
• Press **[■ (STOP)]** to stop the search.
• If a cassette tape ends during a search, your search will be cancelled and the cassette tape will rewind to the beginning.

English

Auto Repeat

When "AUTO REPEAT" is set to "ON", the cassette tape will automatically rewind and start over when it reaches the end.
This will continue until auto repeat function is turned off.

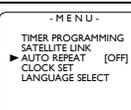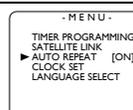**1** Press **[SETUP]** and choose "AUTO REPEAT".

(SETUP) ➡ ▲ or ▼

```
- M E N U -
TIMER PROGRAMMING
SATELLITE LINK
► AUTO REPEAT    [OFF]
CLOCK SET
LANGUAGE SELECT
```

2 Press **[▶]** to "AUTO REPEAT" to set "ON" or "OFF".

▶

Press **[SETUP]** to exit.

```
- M E N U -
TIMER PROGRAMMING
SATELLITE LINK
► AUTO REPEAT    [ON]
CLOCK SET
LANGUAGE SELECT
```

Note(s):
• The auto repeat function can also be set "ON" or "OFF" by pressing **[REPEAT]** on the Remote Control.
• To cancel auto repeat function, follow step 1 above. Then, press **[▶]** so that "OFF" appears beside "AUTO REPEAT". Press **[SETUP]** to exit.
• The auto repeat playback will start automatically if you select "AUTO REPEAT" to "ON" in the Stop mode.

Recording

This Unit has no tuner system so it cannot receive TV broadcasts without an External Tuner (Cable/Satellite or Converter Set-top Box) or such devices.

Note(s):
• You can also set to External Tuner. Refer to "Satellite Link" on page 18.

TV   this Unit   External Tuner
(Cable/Satellite or Converter Set-top Box)
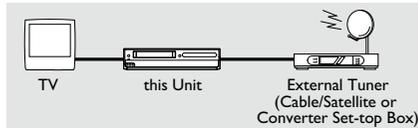
Recording & One-touch Timer Recording (OTR)

1 Insert a recordable cassette tape.

2 Press **[INPUT]** until "L1" or "L2" is displayed on the TV screen. Select "L1" to activate rear input jacks. Select "L2" to activate front input jacks.

(INPUT)

See note on the right.

3 Press **[SPEED]** to select the desired tape speed.

(SPEED)

SP

Tape speed	Recording / playback time		
Type of tape	T60	T120	T160
SP mode	1hour	2hours	2-2/3hours
SLP mode	3hours	6hours	8hours

4 Press **[REC ●]** until desired recording time is selected.

REC
(●)

REC

REC ➡ OTR (0:30) ➡ OTR (1:00).....
(normal recording)

⬅ OTR (8:00) ⬅ OTR (7:30) ⬅

5 Press **[■ (STOP)]** to stop recording.

(■)

6 Press **[OPEN/CLOSE ▲]** to eject the recorded cassette tape.

OPEN/CLOSE
(▲)

You **CANNOT** dub a DVD to a video cassette tape.
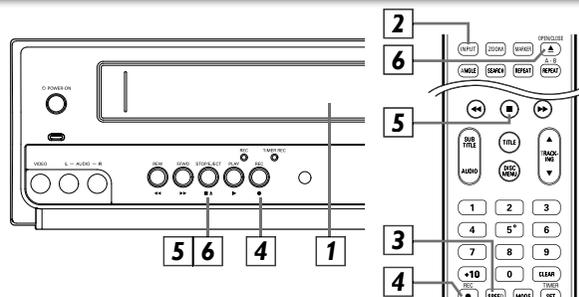
To stop recording temporarily (pause mode)

Press **[❚❚ (PAUSE)]**.
• During the recording in pause mode, 5 ❚ marks appear on the TV screen. Each ❚ mark represents 1 minute.
• Press it again to resume recording.
• Pause mode will be automatically cancelled after 5 minutes to prevent damage to the cassette tape and the video heads.

Note(s):
• Do not change the External Tuner's (Cable/Satellite or Converter Set-top Box) channel while you are recording. You CANNOT watch one channel while recording another channel at the same time.
• Connect your External Tuner (Cable/Satellite or Converter Set-top Box) to the L1 (rear panel) jacks on this Unit. Connect camcorders and other such devices to the L2 (front panel) jacks. Refer to page 11, 13.

Accidental Erasure Prevention
To prevent accidental recording, remove erasure prevention tab on the cassette tape. To record on it later, cover the hole with adhesive tape.

erasure prevention tab

Timer Recording

• Insert a recordable cassette tape.
• Make sure to turn on the External Tuner (Cable/Satellite or Converter Set-top Box).

1 Press **[SETUP]**. Select "TIMER PROGRAMMING".

(SETUP) ➡ ▶

```
- M E N U -
► TIMER PROGRAMMING
SATELLITE LINK
AUTO REPEAT    [OFF]
CLOCK SET
LANGUAGE SELECT
```

➡

```
TIMER PROGRAMMING
PROG            12345678
DATE
START   TIME
END     TIME
L1/L2
REC SPEED
```
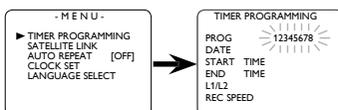
Available program number flashes.

2 Select an empty program number. Then press **[▶]** to go to next step.

▲ or ▼ ➡ ▶

```
PROGRAM NUMBER  1
DATE          --/--
START  TIME  --:-- --
END    TIME  --:-- --
L1/L2          --
REC   SPEED  --
```

Continued on next page.

– 16 –
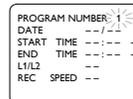
3 Select "ONCE", "DAILY" (Mon-Fri) or "WEEKLY". Then press **[▶]** to go to next step.

▲ or ▼ ➡ ▶

```
PROGRAM NUMBER 1
► ONCE
   DAILY
   WEEKLY
```

4 Select the desired date. Then press **[▶]** to go to next step.

▲ or ▼
↓ ▶
▲ or ▼ ➡ ▶
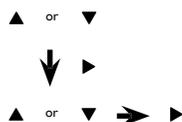
```
ONE TIME PROGRAM
PROGRAM NUMBER  1
DATE         1 0 / 0 2 TUE
START   TIME  – – : – –   – –
END     TIME  – – : – –   – –
L1/L2
REC   SPEED  – –
```

• You can program the Unit to record up to 8 programs, for up to a year in advance.

5 Select the desired starting time **(hour)**. Then press **[▶]** to go to next step.

▲ or ▼
↓ ▶
▲ or ▼ ➡ ▶
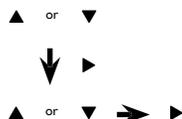
```
ONE TIME PROGRAM
PROGRAM NUMBER  1
DATE         1 0 / 0 2 TUE
START   TIME  0 7 : 3 0  – –
END     TIME  – – : – –   – –
L1/L2          – –
REC   SPEED  – –
```

6 Select "AM" or "PM". Then press **[▶]** to go to next step.

▲ or ▼ ➡ ▶

```
ONE TIME PROGRAM
PROGRAM NUMBER  1
DATE         1 0 / 0 2 TUE
START   TIME  0 7 : 3 0  PM
END     TIME  – – : – –   – –
L1/L2          – –
REC   SPEED  – –
                    AM
              ► PM
```

7 Repeat the procedure in steps 5 and 6 to set the ending time.

▶

8 Select "L1" or "L2". Then press **[▶]** to go to next step.

▲ or ▼ ➡ ▶

```
ONE TIME PROGRAM
PROGRAM NUMBER  1
DATE         1 0 / 0 2 TUE
START   TIME  0 7 : 3 0  PM
END     TIME  0 8 : 3 0  PM
L1/L2          L1
REC   SPEED
```

9 Select recording speed. Then press **[CLEAR]**.

▲ or ▼ ➡ CLEAR

```
ONE TIME PROGRAM
PROGRAM NUMBER  1
DATE         1 0 / 0 2 TUE
START   TIME  0 7 : 3 0  PM
END     TIME  0 8 : 3 0  PM
L1/L2          L1
REC   SPEED  SP
            ► SP
              SLP
```

• To set another program after step 9, press **[▶]**. Then continue with step 2.

10 Press **[TIMER SET]** to set the timer standby mode.

TIMER
SET

• TIMER REC indicator on this Unit lights up and the Unit goes to the DVD mode.

Note(s):
• To go back one step, press **[◀]** during steps 3 to 9.
• Select "L1" to activate rear input jacks. Select "L2" to activate front input jacks.

To check, correct or cancel a timer program

1) Press **[TIMER SET]**, then **[VCR]** on the Remote Control.
2) Press **[SETUP]** to call up the main menu.
3) Select "TIMER PROGRAMMING" by using **[▲/▼]**, then press **[▶]**.
4) Select the program number which you want to check by using **[▲/▼]**. The details of the program you selected will appear on the TV screen.
   • Go to the digit you want to change by using **[◀/▶]**. Then, enter correct numbers by using **[▲/▼]**.
   • You may cancel the entire program by pressing **[◀]** while the program number blinks.
5) Press **[CLEAR]** to exit.
6) Press **[TIMER SET]** to return to the timer standby mode.

To cancel a timer recording in progress

Press **[STOP/EJECT ■ ▲]** on the Unit.

Notes for Timer Recording & One-touch Timer Recording (OTR)

• If a cassette tape is not in the Unit or does not have the erasure prevention tab, TIMER REC indicator on this Unit blinks and timer recording cannot be performed. Please insert a recordable cassette tape.
• When timer recordings are set, TIMER REC indicator on this Unit lights up. To use the VCR as usual, until the time for the recording, press **[TIMER SET]** so that TIMER REC indicator light turns off.

After a one-touch timer recording or a timer recording has been set, this Unit operates as described below:

• If a cassette tape runs out before a one-touch timer recording or a timer recording is finished, the Unit ejects the cassette tape. Press **[TIMER SET]** on the Remote Control or **[STOP/EJECT ■ ▲]** on the Unit, then press **[VCR]** to activate the VCR function again.
• Once the Unit turns to the timer standby mode, no VCR functions are available until **[TIMER SET]** is pressed.
• To cancel the timer standby mode, press **[TIMER SET]** on the Remote Control or **[STOP/EJECT ■ ▲]** on the Unit, then press **[VCR]** to activate the VCR function again.

When an one-touch timer recording or a timer recording is completed...

• TIMER REC indicator on this Unit flashes if there are no more timer recordings on standby.
• The Unit goes to the DVD mode and all the VCR functions will be unavailable. All the DVD functions are available during one-touch timer recording, timer standby mode and timer recording.
• Press **[STOP/EJECT ■ ▲]** on this Unit or **[TIMER SET]** on the Remote Control to use the VCR when the Unit is turned off.
• Press **[SOURCE]** on this Unit or **[VCR]** on the Remote Control to use the VCR when the Unit is turned on. In case timer recording is in standby mode, press **[STOP/EJECT ■ ▲]** on this Unit or **[TIMER SET]** on the Remote Control and then press **[SOURCE]** on this Unit or **[VCR]** on the Remote Control.

If you want to use the DVD player during a timer recording or while TIMER REC indicator on this Unit is on or blinking.

• Press **[⏻]** to turn on the Unit. Press **[DVD]** on the Remote Control to choose DVD mode, then continue with the other DVD features as described in this manual.

Note for timer recording:
• If there is a power failure or the Unit is unplugged for more than 30 seconds, clock time setting and ALL timer programs will be lost. When power is restored or Unit is plugged in again the clock and timer programs will need to be set up again.

Continued on next page.

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EN

Satellite Link

You can set the Unit to start recording whenever it detects a video signal from the External Tuner (Cable/Satellite or Converter Set-top Box).

Preparing for the Satellite Link Timer Recording:

Preparation on the tuner

- Satellite link accepts only the connection from L1 (rear) with the External Tuner (Cable/Satellite or Converter Set-top Box). (The connection from L2 cannot read any signals from the External Tuner.)
- The External Tuner (Cable/Satellite or Converter Set-top Box) should be equipped with some kind of timer function. Using timer function for the tuner, set it to output audio/video signals when it comes to the time you want to start recording and to stop an output of audio/video signals when it comes to the time you want to finish the recording. Refer to the External Tuner's manual on how to set the timer.
- Make sure to turn off the External Tuner when you finish setting it up.

Preparation on this Unit

L1 — External Tuner (Cable/Satellite or Converter Set-top Box)

RCA audio/video cables
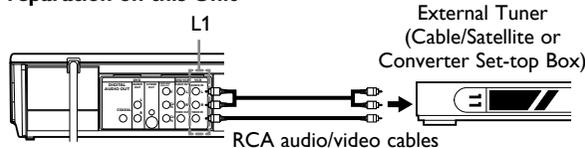
Note(s):
- Please purchase the necessary cables at your local store. (Refer to page 11.)

1 Press **[SPEED]** to select the desired tape speed.

Tape speed	Recording / playback time		
Type of tape	T60	T120	T160
SP mode	1hour	2hours	2-2/3hours
SLP mode	3hours	6hours	8hours

2 In Stop mode, press **[SETUP]**.

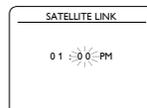**3** Select "SATELLITE LINK".
Then press **[▶]** to go to next step.

▲ or ▼ ➜ ▶

```
- M E N U -
TIMER PROGRAMMING
▶ SATELLITE LINK
AUTO REPEAT    [OFF]
CLOCK SET
LANGUAGE SELECT
```
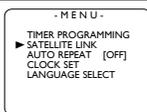
4 Set the desired start hour.
Then press **[▶]** to go to next step.
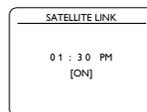
▲ or ▼ ➜ ▶

```
SATELLITE LINK

12 : 00 AM
```

- The hour can be selected from 1-12 with AM or PM.
- When the External Tuner (Cable/Satellite or Converter Set-top Box) signal is stopped, recording will be stopped.

5 Set the desired start minutes.
If you wish to go back to the left, press **[◀]**.

▲ or ▼

```
SATELLITE LINK

01 : 00 PM
```

6 Press **[▶]** to set satellite link standby mode.

▶

```
SATELLITE LINK

01 : 30 PM
[ON]
```

- TIMER REC indicator on this Unit lights up and the Unit goes to the DVD mode. If you do not use DVD function, turn off the Unit.
- Satellite Unit must be turned on for VCR satellite link to start. If an External Tuner (Cable/Satellite or Converter Set-top Box) is not set to output signals, satellite link will remain in standby mode.

To cancel the satellite link function in standby mode:
Press **[TIMER SET]** on the Remote Control or **[STOP/EJECT ■ ▲]** on this Unit.

To cancel the satellite link function while the satellite link recording is in progress:
Press **[STOP/EJECT ■ ▲]** on this Unit.

Note(s):
- If you have not set the clock, "CLOCK SET" menu will appear at step 2. Refer to "Clock Setting" on page 12.
- You cannot set the ending time for the satellite link timer recording on this Unit.
- Recording picture will be distorted if the copy protection signal is being detected during satellite link timer recording.
- When a regular timer recording and the satellite link timer recording are overlapped, those recordings are recorded as illustrated below.

| e.g.) In case the satellite link timer recording is overlapped on the existing timer recording.	e.g.) In case the timer recording is programmed in the middle of the satellite link timer recording	e.g.) In case the timer recording is overlapped on the existing satellite link timer recording.
timer recording	timer recording	timer recording
satellite link	satellite link	satellite link
recording result	recording result	recording result

Copying a Cassette Tape

Warning: Unauthorized recordings of copyrighted cassette tapes may be an infringement of copyright laws.

1) Insert a pre-recorded cassette tape into another external device for playback.
2) Insert a recordable cassette tape into this Unit for recording.
3) Press **[SPEED]** on the Remote Control to select recording speed (SP or SLP).
4) Press **[INPUT]** on the Remote Control to select L1 or L2. Choose L1 if device is connected to rear input jacks or L2 if connected to the front input jacks. Refer to "Front & Rear Terminals" on page 13 for more details.
5) Press **[REC]** on the Unit.
6) Press "PLAY" button on the external device.
7) To stop recording, press **[STOP/EJECT ■ ▲]** on this Unit, then stop playback of the external device.

output jacks of external device

L1 — rear of the Unit

RCA audio/video cables
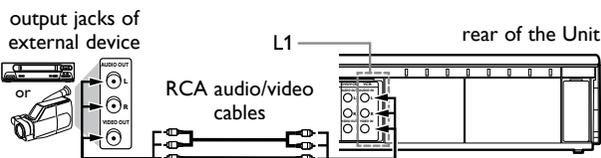
You can use a video disc player, Cable/Satellite Set-top Box or other audio/video component with audio/video output jacks.
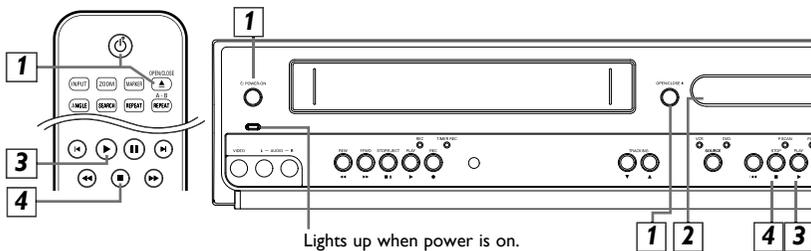
Note(s):
- For best results during dubbing, use buttons on this Unit whenever possible. The Remote Control might affect another device's operation.
- Always use video-quality shielded cables with RCA-type connectors. Standard audio cables are not recommended.
- L2 input jacks are on the front of this Unit.
- Please purchase the necessary cables at your local store. (Refer to page 11.)

DVD FUNCTIONS

Playback

Before:
Turn on the TV, amplifier and any other components which are connected to this Unit. Make sure the TV and audio receiver (not supplied) are set to the correct channel.

Lights up when power is on.

1 ⏻ → ⏏ OPEN/CLOSE	**2** Insert a disc with Label Facing Up.
3 To start playback ▶	**4** To stop playback ■

Note(s):
• "⊠" may appear at the top-right on the TV screen when the operation is prohibited by the disc or this Unit.
• Some DVD may be played from title 2 or 3 due to specific programs.
• During the playback of a 2-layered disc, pictures may stop for a moment. This happens while the 1st layer is being switched to the 2nd layer. This is not a malfunction.
• You can change the on-screen language for DVD function in "OSD LANGUAGE" menu. Refer to page 24.

Disc Menu
Some discs contain menus which allow you to customize DVD playback. Use **[▲ / ▼ / ◄ / ►]** to select an item, then press **[OK]** (or **[► (PLAY)]**).

Calling Up a Menu Screen during Playback
• Press **[DISC MENU]** to call up the disc menu.
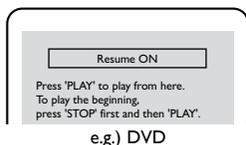• Press **[TITLE]** to call up the title menu.

Note(s):
• Menu operations may vary depending on the disc. Refer to the manual accompanying the disc for details.

Resume Playback
Press **[■ (STOP)]** during playback. Resume message will appear on the TV screen.
Press **[► (PLAY)]**, playback will resume from the point at which playback was stopped.

> Resume ON
> Press 'PLAY' to play from here. To play the beginning, press 'STOP' first and then 'PLAY'.
> e.g.) DVD

Note(s):
• To cancel resume, press **[■ (STOP)]** one more time in the Stop mode.
• The resume playback information stays on even when the power is turned off, as long as the disc stays in the Unit.

Pause and Step-by-Step Playback
Press **[❚❚ (PAUSE)]** during playback.
To continue playback, press **[► (PLAY)]**.

The disc goes forward by one frame each time **[❚❚ (PAUSE)]** is pressed in the pause mode.
To continue playback, press **[► (PLAY)]**.

Note(s):
• For DVD, set "STILL MODE" to "FIELD" in "DISPLAY" menu if pictures in the pause mode are blurred. Refer to pages 24-25.

To use [PREV |◄◄], [NEXT ►►|] on this Unit
Press once to skip chapters, tracks or titles to a desired point.

Fast Forward / Reverse Search
Press **[►►]** or **[◄◄]** repeatedly during playback to select the required forward or reverse speed.

To use [PREV |◄◄], [NEXT ►►|] on this Unit
Pressing and holding **[PREV |◄◄]** or **[NEXT ►►|]** on this Unit will also change forward or reverse playback speed.
To continue playback, press **[► (PLAY)]**.

Note(s):
• For DVD, fast forward or reverse search speed is different depending on the disc. Approximate speed is 1(2x), 2(8x), 3(20x), 4(50x), 5(100x).
• For audio CD approximate speed is 1(2x), 2(8x), 3(30x).

Slow Forward / Reverse Search
Press **[►►]** or **[◄◄]** repeatedly in the pause mode to select the required forward or reverse speed.

To use [PREV |◄◄], [NEXT ►►|] on this Unit
Pressing and holding **[PREV |◄◄]** or **[NEXT ►►|]** on this Unit in the pause mode will also change forward or reverse playback speed.
To continue playback, press **[► (PLAY)]**.

Note(s):
• Slow forward or reverse speed is different depending on the disc. Approximate speed is 1(1/16x), 2(1/8x), 3(1/2x).
• Set "STILL MODE" to "FIELD" in "DISPLAY" menu if pictures in the slow playback mode are blurred. Refer to pages 24-25.

Zoom
1) Press **[ZOOM]** during playback.
2) Press **[ZOOM]** repeatedly to select the required zoom factor: 2x, 4x or off.

3) Press **[▲ / ▼ / ◄ / ►]** to slide the zoomed picture across the TV screen.
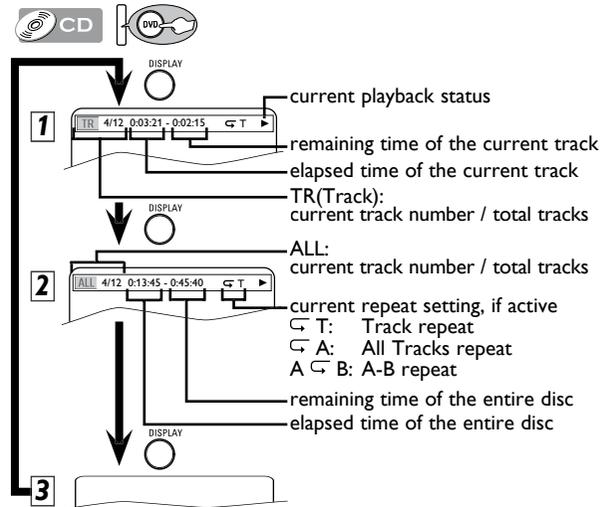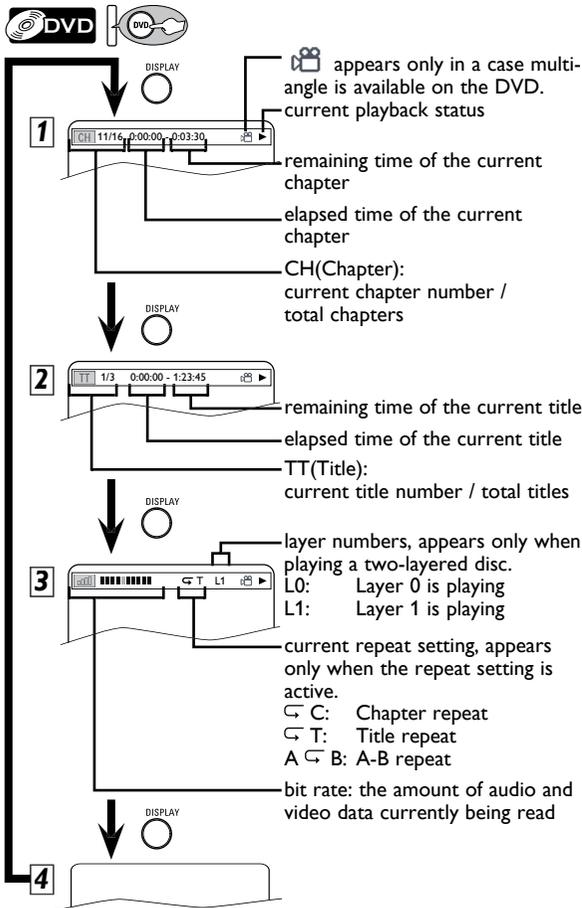4) To exit zoom mode, press **[ZOOM]** to select OFF.

Note(s):
• Zoom function does not work while the disc menu is displayed.
• 4x zoom is not available on some discs.
• The picture may be distorted when you press **[❚❚ (PAUSE)]** or **[◄◄]** repeatedly in the zoom mode.
• In the zoom mode, it automatically changes ⊡ x2 (x4) to the zoomed position guide.

On-Screen Display

You can check the information about the current disc by pressing **[DISPLAY]** on the Remote Control.

DVD

DISPLAY

1   CH 11/16 0:00:00 - 0:03:30

- appears only in a case multi-angle is available on the DVD.
- current playback status
- remaining time of the current chapter
- elapsed time of the current chapter
- CH(Chapter):
  current chapter number / total chapters

DISPLAY

2   TT 1/3 0:00:00 - 1:23:45

- remaining time of the current title
- elapsed time of the current title
- TT(Title):
  current title number / total titles

DISPLAY

3   ▪▪▪▪▪▪▪▪ G T L1

- layer numbers, appears only when playing a two-layered disc.
  L0:   Layer 0 is playing
  L1:   Layer 1 is playing
- current repeat setting, appears only when the repeat setting is active.
  G C: Chapter repeat
  G T: Title repeat
  A G B: A-B repeat
- bit rate: the amount of audio and video data currently being read

DISPLAY

4

CD

DISPLAY

1   TR 4/12 0:03:21 - 0:02:15 G T

- current playback status
- remaining time of the current track
- elapsed time of the current track
- TR(Track):
  current track number / total tracks

DISPLAY

2   ALL 4/12 0:13:45 - 0:45:40 G T

- ALL:
  current track number / total tracks
- current repeat setting, if active
  G T: Track repeat
  G A: All Tracks repeat
  A G B: A-B repeat
- remaining time of the entire disc
- elapsed time of the entire disc

DISPLAY

3

Note(s):

• When you are playing a disc in program or random mode,
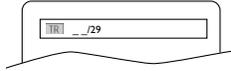 TR PROGRAM (or RANDOM) will be displayed instead of 2.

– 20 –

Search Functions

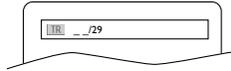Search function does not work during programmed or random playback.

Using Track Search

CD **DVD**

1 Press **[SEARCH]**.

TR _ _/29

2 Select track number by using **[the Number buttons]** within 30 seconds.

TR _ _/29

- For the disc with less than 10 tracks, press the track number directly.
- For discs with more than 10 but less than 99 tracks, to play back single-digit track, press **[0]** first, then the track number (e.g., for track 3, press **[0], [3]**). To play back a double-digit track, press the track number.

Using [|◀ (Previous)] or [▶| (Next)]

1 Press **[|◀ (Previous)]** or **[▶| (Next)]** during playback.

Current Track (TR)

TR 1 | TR 2 | TR 3 | TR 4
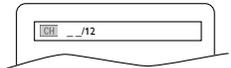|◀ (Previous)　　　▶| (Next)

Note(s):
- **[+10]** can also bring the track search display, except for the disc with less than 10 tracks. For such a disc, track search can be performed by just pressing the track number.
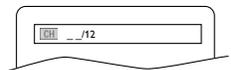- For audio CD, track search is not available for programmed and random playback.

Using Title / Chapter Search

DVD

1 Press **[SEARCH]** once for the chapter search.
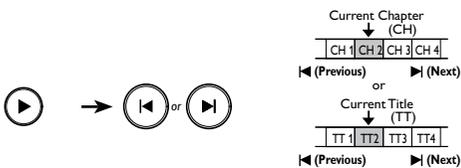Press **[SEARCH]** twice for the title search.

CH _ _/12

2 Select title/chapter number by using **[the Number buttons]** within 30 seconds.

CH _ _/12

Using [|◀ (Previous)] or [▶| (Next)]

1 Press **[|◀ (Previous)]** or **[▶| (Next)]** during playback.

Current Chapter (CH)

CH 1 | CH 2 | CH 3 | CH 4
|◀ (Previous)　　　▶| (Next)

or

Current Title (TT)

TT 1 | TT2 | TT3 | TT4
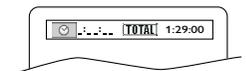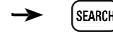|◀ (Previous)　　　▶| (Next)

(If the disc has no chapters)

Note(s):
- Depending on the disc being played back, this function can also be performed by directly entering the desired chapter number with **[the Number buttons]**. Refer to the manual accompanying the disc.
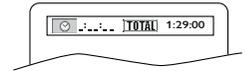
Using Time Search

DVD **CD** **DVD**

1 Press **[SEARCH]** repeatedly until the time search display appears.

⊘ _ :_ _:_ _ TOTAL 1:29:00

2 Select a desired disc time by using **[the Number buttons]** within 30 seconds.

⊘ _ :_ _:_ _ TOTAL 1:29:00

Note(s):
- When there is no need to enter a number, "0" appears automatically. For example, "0: 0_: _ _" appears in the time search display if the total time of the title or track is less than 10 minutes.
- Press **[CLEAR]** to erase the incorrect input at step 2.
- For audio CD, time search is not available for programmed and random playback.
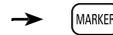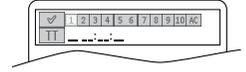
Marker Setting

DVD **CD** **DVD**

This function allows you to assign a specific point on a disc to be called back later.

To set a marker

1 Press **[MARKER]**.

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT _ _:_ _:_ _

2 Select a marker.

◀ or ▶

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT _ _:_ _:_ _

3 Press **[OK]**.

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT 1 0:12:01
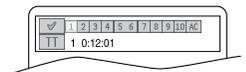
To return to the marker later

1 Press **[MARKER]**.

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT 1 0:12:01

2 Select the marker.

◀ or ▶

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT 1 0:12:01
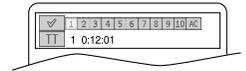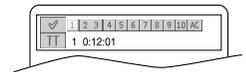
3 Press **[OK]** at the desired marker.

✓ 1 2 3 4 5 6 7 8 9 10 AC
TT 1 0:12:01
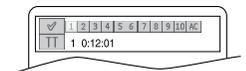
To exit the marker screen

1 Press **[BACK ⮌]**.

Note(s):
- The marker display will disappear in about 30 seconds when there is no output.
- To clear a marker, select the marker to be cleared at step 2 in the section "To set a marker" or "To return to the marker later" and then press **[CLEAR]**.
- Opening the disc tray or turning off the power will erase all markers.
- Selecting "AC" at step 2 in the section "To set a marker" or "To return to the marker later" will also erase all markers.

Repeat / Random / Programmed Playback

Repeat Playback

DVD **CD** [DVD]

Repeat function is available only during playback.

1 Press **[REPEAT]** during playback.

▶ → REPEAT

CHAPTER

e.g.) DVD

Each time you press **[REPEAT],** repeat function changes as example below.

DVD
- **OFF** (repeat **off**)
- **CHAPTER** (**current chapter** repeat)
- **TITLE** (**current title** repeat)

CD
- **OFF** (repeat **off**)
- **TRACK** (**current track** repeat)
- **ALL** (**entire disc** repeat)

Note(s):
- Repeat setting (except "ALL") will be cleared when moving to another title, chapter or track.
- This function is not available with some discs or during repeat A-B playback.

Repeat A-B Playback

DVD **CD** [DVD]

Repeat function is available only during playback.

1 Press **[A-B REPEAT]** at your desired starting point (A).
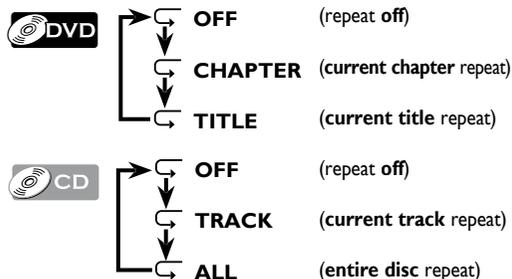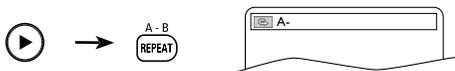
▶ → A - B REPEAT

A-

2 Press **[A-B REPEAT]** at your desired ending point (B).

A - B REPEAT

A-B

- Point B should be in the same title or track as point A.

Note(s):
- To exit the sequence, press **[A-B REPEAT]** until "OFF" appears.
- To cancel point A, press **[CLEAR]** at step **1.**
- This function is not available in the other repeat modes.

Random Playback

CD [DVD]

This function shuffles the playing order of tracks instead of playing the tracks back in sequence.

1 Press **[MODE]** twice.

■ → MODE

RANDOM
CD-DA   TOTAL 0:45:55
RANDOM PROGRAM
– no indication –
PLAY

2 Press **[▶ (PLAY)]** to start random playback.

▶

▶

Note(s):
- To repeat the current track in the random mode, press **[REPEAT]** repeatedly until "↻ TRACK" appears during playback.
- To repeat the entire random selections, press **[REPEAT]** repeatedly until "↻ ALL" appears during playback.
- During random playback, you cannot go back to the previous track.

Programmed Playback

CD [DVD]

You may determine the order in which tracks will play back.

1 Press **[MODE]** once.

■ → MODE

PROGRAM
CD-DA   TOTAL 0:00:00
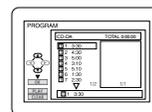
2 Using **[▲ / ▼]** to select desired track. Press **[OK]**.

▲ *or* ▼ → OK
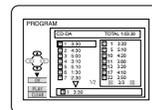
- Up to 99 tracks can be programmed.
- If eight or more tracks were in a program, use **[|◀ (Previous)]** or **[▶| (Next)]** to see all the tracks.

3 Press **[▶ (PLAY)]** to start programmed playback.

▶

▶

Note(s):
- Press **[CLEAR]** at step 2 to erase the most recently entered track.
- To erase all programmed tracks at once, select "ALL CLEAR" and press **[OK]** at step 2.
- While a program is being played back, **[■ (STOP)]** works as follows;
  - Press **[■ (STOP)]** and **[▶ (PLAY)]** next, so that the programmed playback restarts. (CD playback restarts from the current point.)
  - Press **[■ (STOP)]** twice and **[▶ (PLAY)]** next, so that playback restarts from the first track in the original order. However, your programmed playback can be restarted when you follow the above steps. (Your programs are still stored until either the disc tray is open or power is turned off.)
- To repeat the current track in the program, press **[REPEAT]** repeatedly until "↻ TRACK" appears during playback.
- To repeat the entire program, press **[REPEAT]** repeatedly until "↻ ALL" appears during playback.

Special Settings

Subtitle Language

This Unit allows you to select a subtitle Language **(if available)** during DVD playback.

1 Press **[SUBTITLE]** during playback.

⏵ → SUB TITLE   1.ENG/6

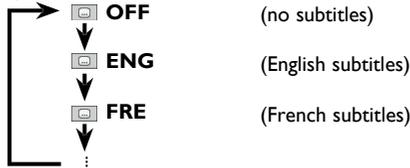Each time you press **[SUBTITLE]**, subtitle Language changes as example below.

- ⬜ **OFF** (no subtitles)
- ⬜ **ENG** (English subtitles)
- ⬜ **FRE** (French subtitles)

To cancel subtitle

1 Press **[SUBTITLE]** during playback.

⏵ → SUB TITLE   1.ENG/6

2 Press **[◄ / ►]** to set subtitle to "OFF".

◄ or ►   ⬜ OFF

Note(s):
- If your Language is not shown after pressing **[SUBTITLE]** several times, the disc may not have that Language. However, some discs have the subtitle Language setting on the disc menu. (Operation varies depending on the discs, so refer to the manual along with the disc.)
- When "NOT AVAILABLE" appears on the TV screen, it means no subtitle is recorded on the scene.
- If you choose a Language that has a 3-letter language code, the code will be displayed every time you change the subtitle language setting. If you choose any other Languages, '---' will be displayed instead. Refer to page 28.
- Some discs will only allow you to change the subtitle from the disc menu. Refer to the manual accompanying the discs for details.

Audio Language

This Unit allows you to select an audio Language **(if multiple Languages are available)** during DVD playback.

1 Press **[AUDIO]** to change audio Language.

⏵ → AUDIO   1.ENG Dolby D 3/2.1ch 48k/3

Each time you press **[AUDIO]**, the audio Language changes as example below.

- ⬜ **ENG** (English audio)
- ⬜ **SPA** (Spanish audio)
- ⬜ **FRE** (French audio)

Note(s):
- If your Language is not shown after pressing **[AUDIO]** several times, the disc may not have that Language. However, some discs allow audio Language setting on the disc menu. (Operation varies depending on the disc, so refer to the manual along with the disc.)
- When "NOT AVAILABLE" appears on the TV screen, it means audio Language is not available.
- Some discs will only allow you to change the audio setting from the disc menu. Refer to the manual accompanying the discs for details.

Camera Angles

Some DVD may contain scenes which have been shot simultaneously from various angles. You can change the camera angle if the "ANGLE ICON" appears on the TV screen.
If the "ANGLE ICON" is set to "OFF" in "OTHERS" menu, it will not appear. Refer to pages 24-26.

1 Press **[ANGLE]** during playback.

⏵ → ANGLE   1 / 8

Each time you press **[ANGLE]** camera angle changes.

Black Level Setting

Adjust the black level to make the dark areas of the TV picture brighter.

1 Press **[MODE]** during playback.

⏵ → MODE   ON

2 Press **[OK]** to adjust the black level.   OK   OFF
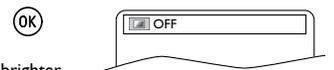
ON: makes the dark areas brighter.
OFF: shows the original picture as recorded.

3 Press **[BACK ↩]** to exit.   BACK

Stereo Sound Mode

This Unit allows you to select a sound mode during CD playback.

1 Press **[AUDIO]** during CD playback.

⏵ → AUDIO   STEREO

Each time you press **[AUDIO]**, sound mode changes as example below.

- ⬜ **STEREO** (right and left channels are active)
- ⬜ **L-ch** (left channel is active)
- ⬜ **R-ch** (right channel is active)

DVD Setting

QUICK Menu

You can select "OSD LANGUAGE", "TV ASPECT", "PROG. SCAN" or "DOLBY DIGITAL" from "QUICK" menu quickly.

1 Press **[SETUP]** in the Stop mode.

⬛ → SETUP

SETUP menu
Confirm that "QUICK" is selected.

SETUP
QUICK
CUSTOM
INITIALIZE

2 Select the desired item.

▲ or ▼

SETUP   QUICK

OSD LANGUAGE   ENGLISH → P24 **A** Step 5
TV ASPECT   4:3 LETTER BOX
PROG. SCAN   OFF → P25 **B** Step 5
DOLBY DIGITAL   BITSTREAM → P25 **C** Step 5

OK

• Refer to the sections "LANGUAGE", "TV ASPECT", "PROG. SCAN" or "DOLBY DIGITAL" section on page 24 or 25.

CUSTOM Menu

You can change the Settings of the Unit.
• **QUICK** on pages 24-25 indicates DVD setting menus also accessible from "QUICK" menu.

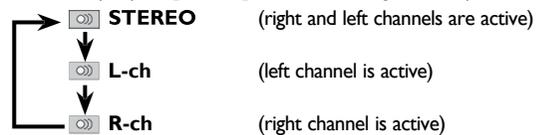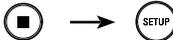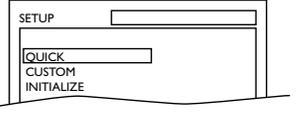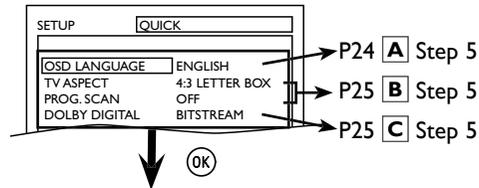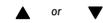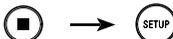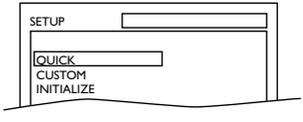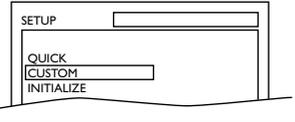**1** Press **[SETUP]** in the Stop mode.
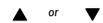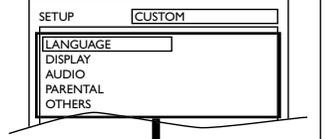
⬛ → SETUP

SETUP menu

SETUP
QUICK
CUSTOM
INITIALIZE

2 Select "CUSTOM".

▲ or ▼

SETUP
QUICK
CUSTOM
INITIALIZE

OK

3 Select the desired item.

▲ or ▼ → OK

SETUP   CUSTOM
LANGUAGE
DISPLAY
AUDIO
PARENTAL
OTHERS

LANGUAGE menu

SETUP   LANGUAGE
AUDIO   ORIGINAL
SUBTITLE   OFF
DISC MENU   ENGLISH
OSD LANGUAGE   ENGLISH

page 24 **A**

DISPLAY menu

SETUP   DISPLAY
TV ASPECT   4:3 LETTER BOX
STILL MODE   AUTO
PROG. SCAN   OFF

page 25 **B**

AUDIO menu

SETUP   AUDIO
DRC   ON
DOWN SAMPLING   ON
DOLBY DIGITAL   BITSTREAM

page 25 **C**

PARENTAL menu

SETUP   PARENTAL
PASSWORD
Please enter a 4-digit password.
☐ ☐ ☐ ☐

page 26 **D**

OTHERS menu

SETUP   OTHERS
ANGLE ICON   ON
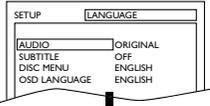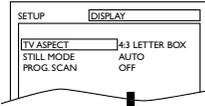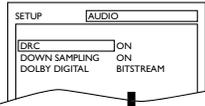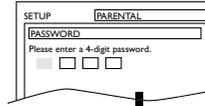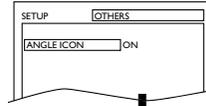
page 26 **E**

A   LANGUAGE Setting

Follow steps **1** to **3** in the "CUSTOM Menu" section above.

4 Select the desired item.
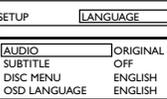
▲ or ▼

LANGUAGE menu

SETUP   LANGUAGE
AUDIO   ORIGINAL
SUBTITLE   OFF
DISC MENU   ENGLISH
OSD LANGUAGE   ENGLISH

Note(s):

• In "QUICK" menu, "OSD LANGUAGE", "TV ASPECT", "PROG. SCAN" or "DOLBY DIGITAL" are available. "QUICK" menu consists of the setting menu frequently used and they are accompanied with **QUICK**. You can make all settings in "CUSTOM" menu.

5 Select the desired Language.

▲ or ▼

OK

AUDIO: *1 *2
(Default: ORIGINAL)
Sets the audio Language.

AUDIO
ORIGINAL
ENGLISH
FRENCH

SUBTITLE: *1 *2
(Default: OFF)
Sets the subtitle Language.

SUBTITLE
OFF
ENGLISH
FRENCH

DISC MENU: *1
(Default: ENGLISH)
Sets the Language for DVD menu.

DISC MENU
ENGLISH
FRENCH
SPANISH

OSD LANGUAGE:
QUICK
(Default: ENGLISH)
Sets the Language for the on-screen display.

OSD LANGUAGE
ENGLISH
FRANÇAIS
ESPAÑOL

6 To exit the menu

SETUP

Note(s):

*1
• Language options are not available with some discs.
• If "OTHER" is selected on "AUDIO", "SUBTITLE" or "DISC MENU" screen, press 4-digit number to enter the code for the desired Language. Refer to the "Language Code List" on page 28.
• Only the Languages supported by the disc can be selected.

*2
• "LANGUAGE" setting for "AUDIO" and "SUBTITLE" are not available with some discs. Then use **[AUDIO]** and **[SUBTITLE]**. Refer to page 23.

B DISPLAY Setting

You can change the display functions. Follow steps 1 to 3 in the "CUSTOM Menu" section on page 24.

4 Select the desired item.

▲ or ▼

DISPLAY menu

SETUP   DISPLAY

TV ASPECT   4:3 LETTER BOX
STILL MODE   AUTO
PROG. SCAN   OFF

5

TV ASPECT: QUICK
(Default: 4:3 LETTER BOX)
See note on the right.

TV ASPECT   4:3 LETTER BOX
STILL MODE   AUTO
PROG. SCAN   OFF

TV ASPECT
4:3 LETTER BOX
4:3 PAN & SCAN
16:9 WIDE

Select the desired setting.
▲ or ▼

OK

STILL MODE:
(Default: AUTO)
See note on the right.

TV ASPECT   4:3 LETTER BOX
STILL MODE   AUTO
PROG. SCAN   OFF

STILL MODE
AUTO
FIELD
FRAME

Select the desired setting.
▲ or ▼

OK

PROGRESSIVE SCAN: QUICK
(Default: OFF)
See note on the left.

TV ASPECT   4:3 LETTER BOX
STILL MODE   AUTO
PROG. SCAN   OFF

4:3 LETTER BOX
AUTO
ON

SETUP

If there is no picture or you do not press any buttons for 15 seconds, "PROG. SCAN" will switch to "OFF" and it will exit "SETUP" menu.

Before proceeding...
1. Make sure your TV has progressive scan.
2. Connect with component video cable.
NOTE: If there is no picture or picture is distorted after selecting 'YES', wait above 15 seconds for auto recovery.
Activate Progressive?   NO
                         YES
SELECT: ▲ / ▼   SET:OK

Select "Yes".
▲ or ▼

OK

Confirm again to use progressive scan.
If Picture is good, Select 'YES'.
                         NO
                         YES
SELECT: ▲ / ▼   SET:OK

Select "Yes".
▲ or ▼

6 To exit "TV ASPECT" or "STILL MODE" menu

SETUP

To complete "PROG. SCAN" setting

OK

Note(s):
PROGRESSIVE SCAN:
- You can set "PROG. SCAN" to "OFF" in "DISPLAY" menu or press and hold **[▶ (PLAY)]** on this Unit on the DVD side for more than 5 seconds during playback until the P-SCAN indicator on this Unit turns off.
- When "PROG. SCAN" is "ON", video signals from the Unit's VIDEO OUT and S-VIDEO OUT jacks will be distorted or not be output at all.

Note(s):
- In "QUICK" menu, "OSD LANGUAGE", "TV ASPECT", "PROG. SCAN" or "DOLBY DIGITAL" are available. "QUICK" menu consists of the setting menu frequently used and they are accompanied with QUICK. You can make all settings in "CUSTOM" menu.
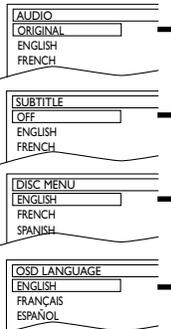
Note(s):
TV ASPECT:
- Select "4:3 LETTER BOX", so that black bars may appear on the top and bottom of the TV screen.
- Select "4:3 PAN & SCAN" for a full height picture with both sides adjusted.
- Select "16:9 WIDE" if a wide-screen TV is connected to this Unit.

STILL MODE:
- Select "AUTO" usually.
- If you select "AUTO", it automatically selects the best resolution setting ("FRAME" or "FIELD") based on the data characteristics of the pictures. (default)
- If you select "FIELD", the picture in the still mode will be stabilized.
- If you select "FRAME", the picture in the still mode will be highly defined.
- An individual picture on the TV screen is called a "frame", which consists of two separate images called "field".
- Some pictures may be blurred if you select "AUTO" in the still mode due to their data characteristics.

C AUDIO Setting

Choose the appropriate audio setting for your device. It is only affected during the playback of DVD discs. Follow steps 1 to 3 in the "CUSTOM Menu" section on page 24.

4 Select the desired item.

▲ or ▼

AUDIO menu

SETUP   AUDIO

DRC   ON
DOWN SAMPLING   ON
DOLBY DIGITAL   BITSTREAM

5

DRC (Dynamic Range Control):
(Default: ON)
Set to "ON" to compress the range between soft and loud sounds.

DRC   ON
DOWN SAMPLING   ON
DOLBY DIGITAL   BITSTREAM

OFF
ON
BITSTREAM

OK

DOWN SAMPLING:
(Default: ON)
Set to "ON" when outputting in 48kHz.
Set to "OFF" when outputting the original sound.

DRC   ON
DOWN SAMPLING   ON
DOLBY DIGITAL   BITSTREAM

ON
OFF
BITSTREAM

OK

DOLBY DIGITAL: QUICK
(Default: BITSTREAM)
Set to "BITSTREAM" when the Unit is connected to a Dolby Digital decoder.
- BITSTREAM: outputs Dolby Digital signals.
- PCM: converts the Dolby Digital into PCM (2 channel).

DRC   ON
DOWN SAMPLING   ON
DOLBY DIGITAL   BITSTREAM

ON
ON
PCM

OK

6 To exit the menu

SETUP

Note(s):
DRC:
- This function is available only on the discs which are recorded in the Dolby Digital format.

DOWN SAMPLING:
- When playing back a 96kHz disc with the copyright protection, the sound will be down sampled at 48kHz even if the "DOWN SAMPLING" is set to "OFF".
- **This function is only available when the disc digital output was recorded at 96kHz.**

Note(s):
- In "QUICK" menu, "OSD LANGUAGE", "TV ASPECT", "PROG. SCAN" or "DOLBY DIGITAL" are available. "QUICK" menu consists of the setting menu frequently used and they are accompanied with QUICK. You can make all settings in "CUSTOM" menu.

D PARENTAL Setting

This function prevents Unit from playing material inappropriate for children.

Parental Levels

Parental level allows you to set the rating levels on your DVD software. Playback will stop if the ratings exceed the levels you set. Follow steps 1 to 3 in the "CUSTOM Menu" section on page 24.

4 Enter your desired 4-digit password (expect for 4737).

1	2	3
4	5*	6
7	8	9
	0	

PARENTAL menu

SETUP   PARENTAL
PASSWORD
Please enter a 4-digit password.
☐ ☐ ☐ ☐

············· or ···············

If you have set a password already, enter the current 4-digit password.

SETUP   PARENTAL
PASSWORD
Enter current password.
☐ ☐ ☐ ☐

(OK)

5 Select "PARENTAL LEVEL".

▲ or ▼

PARENTAL LEVEL ALL
PASSWORD CHANGE

(OK)

6 Select the desired level.

▲ or ▼

PARENTAL LEVEL
ALL
8 [ADULT]
7 [NC-17]
6 [R]

(OK)

7 To exit the menu

(SETUP)

CONTROL LEVELS
- ALL: all parental locks are cancelled.
- Level 8:   DVD software of any grades (adult/general/children) can be played back.
- Levels 7 to 2: only DVD software intended for general use and children can be played back.
- Level 1:   only DVD software intended for children can be played back, with those intended for adult and general use prohibited.

TIPS FOR LEVELS
- 8 [ADULT]:   DVD software of any grades (adult/general/children) can be played back.
- 7 [NC-17]:   no one under 17 admitted
- 6 [R]: restricted; under 17 requires accompanying parent or adult guardian
- 5 [PGR]:   parental guidance recommended
- 4 [PG13]:   unsuitable for children under 13
- 3 [PG]:   parental guidance suggested
- 2 [G]:   general audience
- 1 [KID SAFE]:   suitable for children

Note(s):
- Some DVD-video may not respond to "PARENTAL" setting. Make sure this function works with your DVD-video.
- The resume information will be cleared if you change the parental level when the resume information is on.

To Change the Password for Parental Controls

You can change your password for parental controls. Follow steps 1 to 3 in the "CUSTOM Menu" section on page 24.

4 Enter current 4-digit password.

1	2	3
4	5*	6
7	8	9
	0	

PARENTAL menu

SETUP   PARENTAL
PASSWORD
Enter current password.
☐ ☐ ☐ ☐

5 Select "PASSWORD CHANGE".

▲ or ▼

PARENTAL LEVEL ALL
PASSWORD CHANGE

(OK)

6 Enter your new 4-digit password (except for 4737).

1	2	3
4	5*	6
7	8	9
	0	

SETUP   PARENTAL
PASSWORD
Please enter a 4-digit password.
☐ ☐ ☐ ☐

(OK)

7 To exit the menu

(SETUP)

Note(s):
- Record the password in case you forget it.
- If you forget the password, press **[4], [7], [3], [7]** at step 4, then enter your new password. Password will be cleared and parental levels will be set to "ALL".

E OTHERS Setting

You can change the other functions. Follow steps 1 to 3 in the "CUSTOM Menu" section on page 24.

4 Select the desired item.

▲ or ▼

OTHERS menu

SETUP   OTHERS
ANGLE ICON   ON

5
ANGLE ICON:
(Default: ON)
Set to "ON" to display 📹 when multiple camera angles are available during DVD playback.
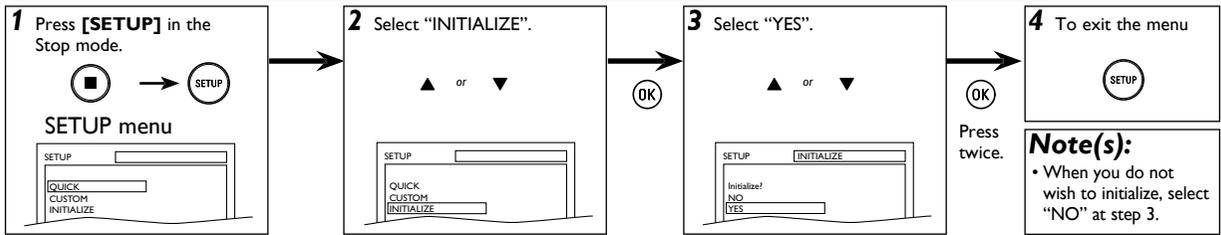
ANGLE ICON   ON ◄───────► OFF

(OK)

6 To exit the menu

(SETUP)

Reset to the Default Setting (Except for PARENTAL Setting)

1 Press **[SETUP]** in the Stop mode.

■ → SETUP

SETUP menu

SETUP
QUICK
CUSTOM
INITIALIZE

2 Select "INITIALIZE".

▲ or ▼

(OK)

SETUP
QUICK
CUSTOM
INITIALIZE

3 Select "YES".

▲ or ▼

(OK)

Press twice.

SETUP   INITIALIZE
Initialize?
NO
YES

4 To exit the menu

SETUP

Note(s):
• When you do not wish to initialize, select "NO" at step 3.

INFORMATION

Troubleshooting

If this Unit does not perform properly when operated as instructed in this manual. Refer to the following:

	Problem	Corrective action
DVD / VCR	No power.	• Make sure the power plug is connected to an AC outlet. • Make sure the power is turned on.
	This Unit does not respond to the Remote Control.	• Check if the power plug is connected to an AC outlet. • Check the batteries in the Remote Control. • Aim the Remote Control directly at the infrared sensor window. If necessary, remove all the obstacles between the sensor and the Remote Control. • You have to be within 23 feet (7m) of this Unit. • Check if a cassette tape is in this Unit. • Tune your radio to an empty AM station so that you hear a lot of static. Turn up the volume, then if you hear some signal sound from the radio in response to your pressing buttons on the Remote Control, the Remote Control is working. • Press and hold any button on the Remote Control toward a Digital or Cell Phone Camera. The Remote Control is working when a blinking infrared light is on the Display. Note some Cell Phone Cameras have an IR filter.
	Poor picture or noise.	• Interference signal may be received. Change the position and direction of the Unit.
VCR	Cannot record a TV program.	• This Unit does not have a Tuner to receive TV broadcasting. • You must connect this Unit to a TV through a Cable/Satellite Set-top Box or similar DTV to analog TV converter devices to record TV programs. Refer to "Recording & One-touch Timer Recording (OTR)" on page 16 and "Satellite Link" on page 18.
	Timer recording is not working.	• Make sure the timer program is set correctly. Refer to page 16. • Make sure TIMER REC indicator on this Unit lights up. If not, press **[TIMER SET]**. • Make sure the VCR clock is set correctly. Refer to page 12. • Make sure the Cable/Satellite Set-top Box or DTV to Analog TV Converter is turned On and is sending a signal to "L1" or "L2" input jacks at the time the Timer recording is active. Refer to page 16.
	Cannot go into record mode.	• Make sure the cassette tape has a Record tab. If needed, cover the hole with adhesive tape. • Activate this Unit in VCR mode. Press **[VCR]** on the Remote Control so that the VCR SOURCE light will illuminate.
	Playback picture is partially noisy.	• Adjust tracking control for a better picture by pressing **[TRACKING ▼ / ▲]**.
	Cannot view a picture but the audio is OK.	• Head cleaning may be necessary. Refer to page 5. • Make sure the VCR is not in the VCR Menu mode.
	None or poor playback picture.	• Adjust tracking control for a better picture by pressing **[TRACKING ▼ / ▲]**. • Connect the video cable firmly.
	Video or color fades in and out when making a copy of a cassette tape.	• You cannot copy a copyrighted cassette tape.
	Cannot remove the cassette tape.	• Check if this Unit is in the VCR mode. If not, press **[VCR]** on the Remote Control to switch the mode.
DVD	No picture.	• Connect the video cable firmly. • Insert a correct video disc that can be played back on this Unit. • Press **[DVD]** on the Remote Control. Check if the DVD SOURCE light will illuminate. Then try other DVD features. • Set "PROG. SCAN" correctly in "DISPLAY" menu. Turn it on only if your TV has progressive scan and you are using the component video connections between the Unit and the TV. Disable progressive scan for all other connections. Refer to page 10.
	Disc cannot be played back.	• Insert the disc. • Clean the disc. • Place the disc correctly with the label side up. • Cancel the parental lock or change the control levels. • Handle a disc with special care so that it does not have fingerprints, scratches or dusts on its surface.
	No sound.	• Connect the audio cables firmly. • Turn on the power of the audio component. • Correct the audio output settings. • Correct the input settings on the audio component.
	No DTS audio is output.	• This Unit does not support DTS audio. -This is not a malfunction.
	Distorted picture.	• Connect this Unit directly to the TV. • There are some cases where pictures may be slightly distorted and those are not a sign of a malfunction. • Although pictures may stop for a moment, this is not a malfunction. Refer to page 19. • Check if the progressive mode is set correctly according to your TV. Refer to pages 24-25.
	Audio or subtitle language does not match the setting.	• The selected language is not available for audio or subtitles on the DVD. -This is not a malfunction.
	The camera angle cannot be changed.	• The DVD does not contain sequences recorded from different camera angles. -This is not a malfunction.
	Audio or subtitle Language cannot be changed.	• The DVD does not contain audio source or subtitles in the selected Language. -This is not a malfunction.
	"✕" appears on the TV screen, prohibiting an operation.	• That operation is prohibited by this Unit or the disc. -This is not a malfunction.

• Some functions are not available in specific modes, but this is not a malfunction. Read the description in this manual for details on correct operations.
• Playback from a desired track and random playback are not available during programmed playback.
• Some functions are prohibited on some discs.

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Specifications

Video heads :	4-heads	Dimensions :	W: 17 3/16" (435 mm)
Output signal format :	NTSC color		H: 3 3/4" (94 mm)
Power source :	120 V AC +/- 10 %, 60 Hz +/- 0.5 %		D: 9 3/16" (233 mm)
Power consumption :	16 W (standby : 0.5 W)	Weight :	Approx 5.63 lbs (2.55 kg)
Operating temperature :	41°F (5°C) to 104°F (40°C)		

• Designs and specifications are subject to change without notice.
• If there is a discrepancy between language translations, the default language understanding will be in English.

Language Code List

Language	Code	Language	Code	Language	Code	Language	Code
A-B		French [FRE]	5264	Macedonian	5957	Siswat	6565
Abkhazian	4748	Frisian	5271	Malagasy	5953	Slovak [SLO]	6557
Afar	4747	Galician	5358	Malay	5965	Slovenian	6558
Afrikaans	4752	Georgian	5747	Malayalam	5958	Somali	6561
Albanian	6563	German [GER]	5051	Maltese	5966	Spanish [SPA]	5165
Amharic	4759	Greek [GRE]	5158	Maori	5955	Sundanese	6567
Arabic	4764	Greenlandic	5758	Marathi	5964	Swahili	6569
Armenian	5471	Guarani	5360	Moldavian	5961	Swedish [SWE]	6568
Assamese	4765	Gujarati	5367	Mongolian	5960	**T**	
Aymara	4771	Hausa	5447	Nauru	6047	Tagalog	6658
Azerbaijani	4772	Hebrew	5569	Nepali	6051	Tajik	6653
Bashkir	4847	Hindi	5455	Norwegian [NOR]	6061	Tamil	6647
Basque	5167	Hungarian [HUN]	5467	**O-R**		Tatar	6666
Bengali;Bangla	4860	**I-K**		Occitan	6149	Telugu	6651
Bhutani	5072	Icelandic [ICE]	5565	Oriya	6164	Thai	6654
Bihari	4854	Indonesian	5560	Oromo(Afan)	6159	Tibetan	4861
Bislama	4855	Interlingua	5547	Panjabi	6247	Tigrinya	6655
Breton	4864	Interlingue	5551	Pashto;Pushto	6265	Tonga	6661
Bulgarian [BUL]	4853	Inupiak	5557	Persian	5247	Tsonga	6665
Burmese	5971	Irish [IRI]	5347	Polish [POL]	6258	Turkish [TUR]	6664
Byelorussian	4851	Italian [ITA]	5566	Portuguese [POR]	6266	Turkmen	6657
C-E		Japanese [JPN]	5647	Quechua	6367	Twi	6669
Cambodian	5759	Javanese	5669	Rhaeto-Romance	6459	**U-Z**	
Catalan	4947	Kannada	5760	Romanian [RUM]	6461	Ukrainian	6757
Chinese [CHI]	7254	Kashmiri	5765	Russian [RUS]	6467	Urdu	6764
Corsican	4961	Kazakh	5757	**S**		Uzbek	6772
Croatian	5464	Kinyarwanda	6469	Samoan	6559	Vietnamese	6855
Czech [CZE]	4965	Kirghiz	5771	Sangho	6553	Volapuk	6861
Danish [DAN]	5047	Kirundi	6460	Sanskrit	6547	Welsh	4971
Dutch [DUT]	6058	Korean [KOR]	5761	Scots Gaelic	5350	Wolof	6961
English [ENG]	5160	Kurdish	5767	Serbian	6564	Xhosa	7054
Esperanto	5161	**L-N**		Serbo-Croatian	6554	Yiddish	5655
Estonian	5166	Laothian	5861	Sesotho	6566	Yoruba	7161
F-H		Latin	5847	Setswana	6660	Zulu	7267
Faroese	5261	Latvian;Lettish	5868	Shona	6560		
Fiji	5256	Lingala	5860	Sindhi	6550		
Finnish [FIN]	5255	Lithuanian	5866	Singhalese	6555		

If you choose a Language that has a 3-letter language code, the code will be displayed every time you change the audio or subtitle language setting on page 23. If you choose any other languages, '---' will be displayed instead. (3-letter language code is written in bracket.)

Ninety (90) day Limited Warranty

WARRANTY COVERAGE:
This warranty obligation is limited to the terms set forth below.

WHO IS COVERED:
This product is warranted to the original purchaser or the person receiving the product as a gift against defects in materials and workmanship as based on the date of original purchase ("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof.

WHAT IS COVERED:
This warranty covers new products if a defect in material or workmanship occurs and a valid claim is received within the Warranty Period. At its option, the company will either (1) repair the product at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in current inventory, or (3) refund the original purchase price of the product.
The Company warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes the company's property. When a refund is given, your product becomes the company's property.
Note: Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty.

Replacement product can only be sent if all warranty requirements are met. Failure to follow all requirements can result in delay.

WHAT IS NOT COVERED - EXCLUSIONS AND LIMITATIONS:
This Limited Warranty applies only to the new products that can be identified by the trademark, trade name, or logo affixed to it. This Limited Warranty does not apply to any non-Philips hardware product or any software, even if packaged or sold with the product. Non-Philips manufacturers, suppliers, or publishers may provide a separate warranty for their own products packaged with the bundled product.

The Company is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the product, or any non-Philips product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

This warranty does not apply (a) to damage caused by accident, abuse, misuse, neglect, misapplication, or non-Philips product, (b) to damage caused by service performed by anyone other than an Authorized Service Location, (c) to a product or a part that has been modified without written permission, or (d) if any serial number has been removed or defaced, or (e) product, accessories or consumables sold "AS IS" without warranty of any kind by including refurbished Philips product sold "AS IS" by some retailers.

This Limited Warranty does not cover:
• Shipping charges to return defective product.
• Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna/signal source systems outside of the product.
• Product repair and/or part replacement because of improper installation or maintenance, connections to improper voltage supply, power line surge, lightning damage, retained images or screen markings resulting from viewing fixed stationary content for extended periods, product cosmetic appearance items due to normal wear and tear, unauthorized repair or other cause not within the control of the company.
• Damage or claims for products not being available for use, or for lost data or lost software.
• Damage from mishandled shipments or transit accidents when returning product.
• A product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
• A product used for commercial or institutional purposes (including but not limited to rental purposes).
• Product lost in shipment and no signature verification receipt can be provided.
• Failure to operate per Owner's Manual.

TO OBTAIN ASSISTANCE IN THE U.S.A., CANADA, PUERTO RICO, OR U.S. VIRGIN ISLANDS...
Contact Customer Care Center at:
1-866-310-0744

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