Panasonic

DVD/VCR DECK
Operating Instructions
Model No. PV-D4734S

Connections and Initial Setup Procedures are on pages 12 to 17.

MULTI FORMAT PLAYBACK

- DD DIGITAL
- DTS
- JPEG
- DVD-RAM
- DVD-R
- CD-RW

*Ability to play back may depend on recording conditions.

As an ENERGY STAR Partner, Matsushita Electric Corporation of America has determined that this product or product model meets the ENERGY STAR guidelines for energy efficiency.

Please read these instructions carefully before attempting to connect, operate or adjust this product. Please save this manual.

For assistance, please call: 1-800-211-PANA (7262) or, contact us via the web at: http://www.panasonic.com/contactinfo

For Your Information

PV-D4734S P1-25 (040202).p65 1 2004/02/02, 13:13
Important Safeguards and Precautions

**WARNING**

TO REDUCE THE RISK OF ELECTRIC SHOCK, FIRE, INJURY TO PERSONS OR DAMAGE TO THIS PRODUCT, READ AND RETAIN ALL SAFETY AND OPERATING INSTRUCTIONS. HEED ALL WARNINGS IN THE MANUAL AND ON THE PRODUCT.

**INSTALLATION**

1 **POWER SOURCE CAUTION**
   Operate only from a power source indicated on the unit or in this manual. If necessary, have your Electric Utility Service Company or Video Products Dealer verify the power source in your home.

2 **POLARIZED OR GROUNDING PLUG**
   As a safety feature, this product comes with either a polarized power cord plug (one blade is wider than the other), or a three-wire grounding type plug.

   **POLARIZED PLUG CAUTION:**
   This plug will only fit into an outlet one way. If you cannot fully insert the plug, try reversing it. If it still will not fit, have an electrician install the proper wall outlet. Do not defeat the safety feature by tampering with the plug.

   **GROUNDING PLUG CAUTION:**
   This plug will only fit into a three-hole grounding outlet. If necessary, have an electrician install the proper outlet. Do not defeat the safety feature by tampering with the plug.

3 **POWER CORD**
   Make sure power cords are routed so that they are not likely to have anything rest on them, roll over them, or be in the way of walking traffic. If an extension cord is used, make sure it also has either a polarized or grounded plug and that the cords can be securely connected. Frayed cords, damaged plugs, and damaged or cracked wire insulation are hazardous and should be replaced by a qualified service technician. Overloaded outlets and extension cords are fire hazards and should be avoided.

4 **DO NOT BLOCK VENTILATION HOLES**
   Ventilation openings in the cabinet release heat generated during operation. If they are blocked, heat build-up inside the unit can cause failures that may result in a fire hazard or heat damage to cassettes or discs.

   For protection, follow these rules:
   a. Never cover ventilation slots or the unit while in use, or operate the unit when placed on a bed, sofa, rug, or other soft surface.
   b. Avoid built-in installation, such as a book case or rack, unless proper ventilation is provided.

5 **PLACEMENT: AVOID EXTREMELY HOT LOCATIONS OR SUDDEN TEMPERATURE CHANGES**
   Do not place the unit over or near heater or radiator, in direct sunlight, inside closed vehicles, in high temperature (over 104°F or 40°C), or in over 75% humidity. If the unit is suddenly moved from a cold place to a warm one, moisture may condense in the unit and on the tape causing damage. Never subject the unit to vibration, impact, or place it so that the surface is tilted as it may cause electrical shock, or other hazards.

6 **TO AVOID PERSONAL INJURY**
   a. Do not place unsecured equipment on a sloping surface.
   b. Do not place this unit or any support that is not firm, level, and adequately strong.
   c. The unit could fall causing serious injury to a child or adult and damage to the unit.
   d. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
   e. Carefully follow all operating instructions and use the manufacturer’s recommended accessories when operating this unit or connecting it to any other equipment.

**SERVICE**

1 **DO NOT SERVICE THIS PRODUCT YOURSELF**
   If, after carefully following the detailed operating instructions, this product does not operate properly, do not attempt to open or remove covers, or make any adjustments not described in the manual. Unplug the unit and contact a qualified service technician.

2 **IF REPLACEMENT PARTS ARE REQUIRED**
   Make sure the service technician uses only parts specified by the manufacturer, or those having the same safety characteristics as the original parts. The use of unauthorized substitutes may result in fire, electric shock, or other hazards.

3 **HAVE THE SERVICE TECHNICIAN PERFORM A SAFETY CHECK**
   After any service or repairs to the unit, request the service technician to conduct a thorough safety check as described in the manufacturer’s service literature to ensure the unit is in safe operating condition.
Safety Precautions/Mesures de sécurité

**WARNING**
To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

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

**AVERTISSEMENT:**
Afin de prévenir tout risque d’incendie ou de chocs électriques, ne pas exposer cet appareil à la pluie ou à une humidité excessive.

**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.

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

**CAUTION:**
UNIT IS A CLASS I LASER PRODUCT. HOWEVER THIS UNIT USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE UNIT CORRECTLY AS INSTRUCTED. WHEN THIS UNIT IS PLUGGED TO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS UNIT. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT ATTEMPT TO REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

**CAUTION:**
LASER RADIATION WHEN OPEN DO NOT STARE INTO BEAM.

**ATTENTION:**
RAYONNEMENT LASER EN CAS D’OUVERTURE. NE PAS REGARDER DANS LE FAISCEAU.

(FCC Note)
This equipment has been tested and found to comply with part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when operated in a residential environment. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver. If necessary, consult the dealer or an experienced radio/TV technician for help. The user may find the booklet, "Something About Interference" available from FCC local regional offices helpful.

**FCC Caution:**
To assure continued compliance, (example- use only shielded interface cables when connecting to other devices.) Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.

**Region Management Information:**
This DECK is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc. If the Region number described on the DVD disc does not correspond to the Region number of this DECK, this DECK cannot play this disc.

- The Region number for this DECK is “1”.
- The Player will play DVD-Video marked with labels containing “1” or “ALL”.

Example:
Before Using

Congratulations on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, it will bring you years of enjoyment. Please fill in the information below. The serial number is on the tag located on the back of your DECK.

- Date of Purchase
- Dealer Purchased From
- Dealer Address
- Dealer Phone No.
- Model No.       PV-D4734S
- Serial No.

Head Cleaning
Playing older or damaged tapes may eventually cause video heads to become clogged.

Video Head Clog Sensor
During playback, this screen appears if clogging is detected. To remove screen, press PLAY on the remote or DECK.

- Use “dry” type head cleaning cassette only. (Part No. NV-TCL30PT is recommended.)
- Follow cleaning tape instructions carefully. Excessive use of tape can shorten head life.
- If head clog symptoms persist, contact your nearest servicenter by visiting our Web Site (see p. 61).

Cleaning DECK
Use a soft cloth or dusting attachment of a vacuum cleaner to remove dust from the ventilation holes on the back sides and bottom of the cabinet. Plastic surfaces are easily scratched and can be marred by alcohol and various solvents. Avoid excessive use of oil-based furniture polishes since the materials used in the cabinet will accumulate more dust. We recommend using a non-abrasive, antistatic cleaner and polisher.

Features for a Quality Picture (VCR)

Digital Auto Picture
Automatically controls the video output signal for less noise depending on the tape condition.

Digital Auto Tracking
Continuously analyzes the signal and adjusts for optimum picture quality.

Manual Tracking Control
(to reduce picture noise)
Use during Playback and Slow Motion mode to reduce picture noise.
Press CH (TRACKING) ▲▼ on the remote control or on DECK until the picture clears up.
To return to Auto Tracking, press POWER off, then on again a few seconds later.

V-Lock Control (to reduce picture jitter)
In Still mode, CH (TRACKING) ▲▼ operate as a V-Lock control.

Loading the Batteries

1) Open cover.
2) Insert batteries as marked.
3) Close cover.

Battery replacement caution
- Do not mix old and new batteries.
- Do not mix alkaline with manganese batteries.

Accessories

- Remote Control    EUR7724KC0
- Batteries 2 “AA”  ———
- RF Coaxial Cable  LSJA0418

To order accessories, call toll free 1-800-332-5368.

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3) Close cover.

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- Do not mix old and new batteries.
- Do not mix alkaline with manganese batteries.

Record/Playback Time

Only use tapes with the mark in this DECK.

<table>
<thead>
<tr>
<th>Tape Speed Setting</th>
<th>Type of Video Cassette</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP (Standard Play)</td>
<td>T120 2 Hours  T160 40 Minutes  T180 3 Hours</td>
</tr>
<tr>
<td>SLP (Super Long Play)</td>
<td>T120 6 Hours  T160 8 Hours  T180 9 Hours</td>
</tr>
</tbody>
</table>

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
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DECK & Cassette Information

Prevent Accidental Tape Erasure

Break off the tab to prevent recording.

Record Tab
Screw driver

To record again
Cover the hole with cellophane tape.

DVD-RAM discs

DVD-RAM discs must meet the following conditions for this unit to be able to play them.

Type
• Non-cartridge discs
• Discs that can be removed from their cartridges (TYPE 2 and 4)

Capacity
• 12 cm (5") 9.4 GB (double-sided) and 4.7 GB (single-sided)
• 8 cm (3") 2.8 GB (double-sided)

• Remove TYPE 2 and 4 discs from their cartridges before use, then return them when you are finished.

Read the instructions for the disc carefully.

Some parts of the disc, for example where one program ends and another begins, may not play smoothly.

If disc is brought from a cold to a warm environment, moisture may form on the disc. Wipe away moisture with a soft, dry, lint-free cloth before using disc. (See above.)

Improper disc storage

Discs could be damaged if stored or left in areas:
• exposed to direct sunlight.
• that are humid or dusty.
• near heat (i.e. heater, radiator, etc.).

Disc Handling

Handling precautions
• Sticking a label on the disc may impair DVD-R playback.
• Do not attach sticker to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
• Only hold disc by edges as shown below. Fingerprints, dirt and scratches can cause skipping and distortion.
• Do not write on label side of disc.
• Never use record cleaning sprays, benzine, thinner, static electricity prevention liquids, or any other solvent.

Do not try to close disc tray when disc is not properly placed.

To clean disc surface

With a soft, damp (water only) cloth, gently wipe from the center hole to the outer edge as shown below. (Wiping in a circular pattern will scratch the surface.)
• DVD-RAM, DVD-R : Clean only with the DVD-RAM disc cleaner available. Never use cloths or cleaners for CDs etc.

If disc is brought from a cold to a warm environment, moisture may form on the disc. Wipe away moisture with a soft, dry, lint-free cloth before using disc. (See above.)

Improper disc storage

Discs could be damaged if stored or left in areas:
• exposed to direct sunlight.
• that are humid or dusty.
• near heat (i.e. heater, radiator, etc.).

Notes
• Do not use irregularly shaped discs (e.g. heart-shaped), as these can damage the unit.

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

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo

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Specifications

Power Source: 120 V AC, 60 Hz
Power Consumption:
- Power On: Approx. 28 watts
- Power Off: Approx. 0.85 watts
Video Signal: EIA Standard NTSC color
Video Recording System: 4 rotary heads helical scanning system
Audio Track:
- 1 track (Normal)
- 2 channel (Hi-Fi Audio Sound)

Tuner

Broadcast Channels:
- VHF 2 – 13, UHF 14 – 69
CABLE Channels:
- Midband A through I (14 – 22), Superband J through W (23 – 36)
- Hyperband AA – EEE (37 – 64), Lowband A-5 – A-1 (95 – 99)
- Special CABLE channel 5A (01), Ultraband 65 – 94, 100 – 125

Input/Output Terminal:
- Audio/Video Line Input/Output, RF Input/Output
- S-Video Output (DVD only), Component Video Output (DVD only)
- Audio Output 2 (L), (R)

Input Terminal:
- Audio/Video Line Input (Front)

Output Terminal:
- Video Output, Component Video Output (DVD only)

Operating Temperature:
- 5 °C – 40 °C (41 °F – 104 °F)

Operating Humidity:
- 10 % – 75 %

Weight:
- 3.85 kg (8.5 lbs)

Dimensions:
- 430 (W) x 95 (H) x 273 (D) mm
- 16-15/16” (W) x 3-3/4” (H) x 10-3/4” (D) inch

Discs Played

- (1) DVD-Video Disc
  - 5” (12 cm) single-sided single-layer
  - 5” (12 cm) single-sided double-layer
  - 5” (12 cm) double-sided double-layer (one layer per side)
  - 3” (8 cm) single-sided single-layer
  - 3” (8 cm) single-sided double-layer
  - 3” (8 cm) double-sided double-layer (one layer per side)

- DVD-RAM Disc
  - 5” (12 cm) 9.4 GB (double-sided) and 4.7 GB (single-sided)

- (2) Compact Disc
  - 5” (12 cm) disc
  - 3” (8 cm) disc

Digital Audio Output:
- Digital Optical Connector

Pickup:
- Wavelength: 655 nm (DVD), 790 nm (CD)
- Laser power: CLASS II

Weight:
- 3.85 kg (8.5 lbs)

Dimensions:
- 430 (W) x 95 (H) x 273 (D) mm
- 16-15/16” (W) x 3-3/4” (H) x 10-3/4” (D) inch

Initial Setup

Definition of Terms (DVD)

Angle:
- Some DVD discs feature scenes simultaneously shot from different angles. The ANGLE button can be used to view the scene from different angles. (ANGLE Indicator lights on DECK when a scene recorded at different angles is detected.)

Chapter Number:
- Titles are subdivided into numbered sections. You can quickly search for a favorite scene using these numbers.

DVD:
- A high-density optical disc on which high-quality pictures and sound have been digitally recorded. DVD incorporates video compression technology (MPEG II) and high-density recording technology which allow entire movies to be recorded with incredible playback quality.

Subtitle:
- Written dialogue which appears at the bottom of the screen.

Time Number:
- The elapsed play time from the start of a disc or title. Use to quickly find scenes. (May not work with some discs.)

Title Number:
- For DVD discs with two or more titles, the title is numbered as title 1, title 2, etc.

Track Number:
- Numbers assigned to tracks on CDs to allow specific tracks to be quickly located.

Note:
- Designs and specifications are subject to change without notice.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093, licensed for limited viewing uses only.

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

**Remote Control**

**EJECT button:** When this button is pressed in VCR mode, the tape is ejected. This button is inoperative if pressed during recording. If pressed in DVD mode, the disc tray opens or closes.

**POWER**

**NUMBER keys**

**ADD/DELETE / CLEAR**

**ACTION**

**SET**

**STOP**

**REWIND / SEARCH / SLOW-**

**FAST FORWARD / SEARCH / SLOW+**

**PAUSE / STILL**

**ANGLE**

**SUB TITLE**

**TITLE / DIRECT NAVIGATOR**

**INPUT**

**DISPLAY**

**RECORD**

**SPEED**

**CHANNEL ▲ / ▼ / TRACKING / V-LOCK / ≥10**

**VOLUME + / –**

**MENU / PLAY LIST**

**SELECT ▲▼▲▼**

**PLAY**

**DVD mode**

**PAUSE**

**ACTION**

**TAPE POSITION / STATUS**

**VOLUME ADJUST**

**AUDIO (SAP / Hi-Fi)**

**RETURN / SEARCH**

**COMMERCIAL SKIP / ZERO SEARCH**

**COUNTER RESET**

**PROGRAM**

**Virtual Surround Sound (V.S.S.) / ENTER**

**RETURN / SEARCH**

**COUNTER RESET**

**PROGRAM**
If the disc cannot be removed...
First, unplug DECK. Then, prepare a rigid wire (e.g. an extended paper clip) and, applying moderate force, insert it straight into the hole at the base of the tray. The tray will eject a little. Now, pull the tray all the way out and remove the disc.

Reset All Memory Functions
Returns to factory setting. Use if relocating DECK, or if Initial Setup needs to be redone.
• Make sure a tape is not inserted in the DECK.

1 Turn DECK Power on.
2 Press and hold both VCR PLAY and CHANNEL ▲ on the DECK for more than 5 seconds.
• The power shuts off.
3 Perform “Initial Setup (Ready to Play)” on page 16.
Location of Controls (continued)

The following table shows the status of the output jacks when in VCR or DVD mode.

<table>
<thead>
<tr>
<th></th>
<th>VCR Function</th>
<th>DVD Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output</td>
<td>YES</td>
<td>N/A</td>
</tr>
<tr>
<td>Audio Out 1</td>
<td>YES</td>
<td>N/A</td>
</tr>
<tr>
<td>Audio Out 2</td>
<td>YES</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Note**
- PROG functions on the remote are not available when using Component Video Output and S-VIDEO OUT. Please set TV to either RF INPUT or VIDEO INPUT, and then press PROG.

To enjoy PROGRESSIVE SCAN video:

1. Connect Component Video Output to the component video input terminals of a television. (See p. 13.)
2. When PROGRESSIVE OUT is set to “ON” in the DVD Main Menu (p. 55), a Progressive Scan signal is output from the Component Video Output Connector.

**Notes**
- The screen may shift off-center when using progressive output. Please adjust the screen position if this occurs. (Refer to your TV manual.)
- If the television is not progressive compatible, a progressive scan picture is not available. Connect the Video Output or S-Video Output connector (see p. 12, 13) and set PROGRESSIVE OUT to “OFF” in the DVD Main Menu. (See p. 55.)
Displays (On Screen & Multi Function)

On Screen Displays (VCR)

Function & Channel Displays
When a function button is pressed, e.g. PLAY, or you change channels, a 5-second display appears.

VCR Status & Clock Displays
To display or remove screen shown at right, ➜ press DISPLAY.

Blank Tape/ No Video Signal Indications
Whenever a blank section of a tape comes up in Play mode, or when the selected channel has no broadcast signal with Weak Signal Display Feature (p. 33) set to OFF, the TV screen will turn solid blue.

Multi Function Display

VCR mode Indicator
Lights up when DECK is in VCR mode.

Tape Indicator
Lights up when a tape is inserted.

HI-FI Indicator
Lights up when Hi-Fi audio is present in Play mode.

ANGLE Indicator
Lights up when a scene recorded at different angles is detected. (See p. 37.)
(DVD only)

Clock/ Status/ Channel/ Speed Display
Displays current time. Briefly displays DECK status when you press a function button, channel number or "L1" or "L2" when you select channel or line input, and recording speed when you press SPEED.

Initial Setup (Connection)

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Connections

**Basic Connections**

- If your TV has AUDIO and VIDEO IN terminals, connect them to DECK for higher quality picture and sound.
- You can enjoy stereo sound even if your TV is not stereo by connecting a stereo amplifier to DECK.
- Connect DECK and TV with an RF Coaxial Cable (supplied) or an AV Cable (not supplied) as shown in the figure below.

**Connections Diagram**

To connect a DSS Receiver to DECK and TV, or DECK to TV, or Cable Box to DECK and TV:

1. Disconnect antenna or cable from TV and connect to DECK.
2. Connect DECK to TV with RF Coaxial Cable.

**CAUTION**

When using "Nut type" RF coaxial cables, tighten with fingers only. Overtightening may damage terminals.

**Note to CABLE system installer**

This reminder is provided to call the CABLE system installer’s attention to Article 820-40 of the NEC in USA (and to the Canadian Electrical Code in Canada) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.
You Cannot
You Can

record and view both scrambled and unscrambled channels if additional equipment is added.

This connection requires: two converter boxes, an A/B switch, and a 2-way splitter.

You Can
• view any (including scrambled) channel.
• use Remote Control to select channels without using Multi-brand control feature.

You Cannot
• record scrambled channels.

Connections For DVD Only (enjoying higher picture quality)

1. Connect AUDIO OUT2 (L, R) to the AUDIO IN (L, R) of the TV. (audio input for COMPONENT or S-VIDEO mode).
2. If your TV has COMPONENT VIDEO INPUT, connect to COMPONENT VIDEO OUT. If your TV does not have COMPONENT VIDEO INPUT but has S-VIDEO INPUT, connect to S-VIDEO OUT.
3. When in DVD mode, set your TV to either COMPONENT VIDEO IN or S-VIDEO IN.

Notes
• You can watch DVDs through the S-VIDEO or COMPONENT VIDEO, VHF/UHF OUT TO TV, and VIDEO OUT connections to your TV. The VCR and TUNER pictures are available only from the VIDEO OUT and VHF/UHF OUT TO TV connections to your TV.
• PROG functions on the remote are not available when using S-VIDEO OUT and COMPONENT Video Output. Please set TV to either RF INPUT or VIDEO INPUT, and then press PROG.
• TV must have capability to accept and display a progressive scan signal to use PROGRESSIVE mode. Consult your TV operating instructions.
Connections (continued)

Audio Connections

☑ Ready Checklist
☐ Turn down the volume, then turn DECK, as well as other equipment to be connected, off before proceeding with connection.
☐ Do not block ventilation holes of any of the equipment and arrange them so that air can circulate freely.
☐ Read through the instructions before connecting other equipment.
☐ Ensure that you observe the color coding when connecting audio and video cables.

Connecting Amplifier (2ch stereo system)

![Diagram of Audio Connections](image)

Enjoying digital audio output from the digital audio output connector

<table>
<thead>
<tr>
<th>Disc</th>
<th>Sound recording format</th>
<th>Optical digital audio output from connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD-Video</td>
<td>Dolby Digital</td>
<td>Dolby Digital bitstream (1 - 5.1 ch) or PCM (48 kHz sampling/16 bit only)*1</td>
</tr>
<tr>
<td></td>
<td>Linear PCM (48/96 kHz 16/20/24 bit)</td>
<td>Linear PCM (2 ch) (48 kHz sampling/16 bit only)*2</td>
</tr>
<tr>
<td></td>
<td>DTS</td>
<td>Bitstream or PCM (48 kHz sampling/16 bit only)*1</td>
</tr>
<tr>
<td>DVD-RAM</td>
<td>Dolby Digital</td>
<td>Dolby Digital bitstream (1 - 5.1 ch) or PCM (48 kHz sampling/16 bit only)</td>
</tr>
<tr>
<td></td>
<td>Linear PCM (48 kHz/16 bit)</td>
<td>Linear PCM (2 ch)</td>
</tr>
<tr>
<td>CD</td>
<td>Linear PCM</td>
<td>Linear PCM (44.1 kHz sampling)</td>
</tr>
<tr>
<td>MP3</td>
<td>MP3</td>
<td>Linear PCM (It depends on the MP3 file)</td>
</tr>
</tbody>
</table>

*1 The type of audio output from the connector can be selected by the Settings for DVD Operation. (See p. 53.)

*2 When “LPCM(DVD)” is set to OFF in the DVD Main Menu, only 48 kHz sampling/16 bit is output. When set to ON, sampling of sound quality greater than 48 kHz/16 bit is reduced to 48 kHz/16 bit. (See page 53.)

For your reference:
- Dolby Digital is a digital sound compression technique developed by the Dolby Laboratories Licensing Corporation. Supporting 5.1-channel surround sound, as well as stereo (2-channel) sound, this technique enables a large quantity of sound data to be efficiently recorded on a disc.
- Linear PCM is a signal recording format used in CDs. While CDs are recorded in 44.1 kHz/16 bit, DVDs are recorded in 48 kHz/16 bit up to 96 kHz/24 bit.
- If you have a Dolby Pro Logic Surround decoder, you will obtain the full benefit of Pro Logic from the same DVD movies that provide full 5.1 channel Dolby Digital soundtracks, as well as from titles with the Dolby Surround mark. For information on Panasonic or Technics Dolby Pro Logic Surround Sound Decoders please contact your local dealer.


Manufactured under license from Dolby Laboratories.
“Dolby,” “Pro Logic,” and the double-D symbol are trademarks of Dolby Laboratories.
When DVDs recorded in Dolby Digital or DTS are played, Dolby Digital bitstream or DTS bitstream is output from the DECK OPTICAL digital audio output connector. When DECK is connected to a Dolby Digital decoder or DTS decoder, you can enjoy theater-quality audio in your home. [An optical digital audio cable (optional) is required when an optional Dolby Digital decoder or DTS decoder is used.]

Notes on connecting an optical digital audio cable (optional)
- Firmly connect the cable to the connector.

Caution for optical digital audio output connector:
- When connecting an amplifier (with an Optical Digital Input Connector) which does not contain the Dolby Digital or DTS decoder, be sure to select “PCM” at “Dolby Digital” and “PCM” at “dts” of the Settings for DVD Operation “Audio Output” (see p. 53). Otherwise, any attempt to play DVDs may cause such a high level of noise that it may be harmful to your ears and damage your speakers.
- When a Dolby Digital/DTS decoder is connected, please select “Bitstream” at “dts” or “Dolby Digital” of the Settings for DVD Operation “Audio Output”. If “PCM” is selected, there will be stereo sound. (See p. 53.)
- CDs can be played as usual.

Note:
- Some DTS decoders which do not support DVD-DTS interface may not work properly with DECK.
Initial Setup for Basic Connections (Ready to Play)

Before doing Initial Setup

1. Turn TV on.

2. See connections ③ RF Coaxial Cable Connection and ⑤ AV Cable Connection on page 12.
   <RF Coaxial Cable Connection>
   Set TV to channel 3.
   <AV Cable Connection>
   Set TV to VIDEO.

3. [DECK → TV]
   - Go to “Initial Setup (Ready to Play).” (See below.)
   [Cable Box ➔ DECK ➔ TV], [DSS ➔ DECK ➔ TV]
   - Turn on Cable Box and set it to your Public Broadcasting Station (PBS) channel in your time zone.
   - If you use a DSS Receiver, it must be turned off.

Initial Setup (Ready to Play)

1. Press VCR on remote for VCR mode.

2. Plug DECK Power Cord into AC wall outlet. DECK comes on and auto channel and clock set starts.
   - If screen below does not appear, check DECK - TV connection and, if TV is tuned to channel 3, try switching it to channel 4.
   - To change VCR’s output channel, please see “VCR’s Output Channel” on page 19.

   Plug VCR Power plug into an AC wall outlet.

Notes
- Function buttons are void during Initial Setup.
- To eject a tape during Auto Set, press EJECT on remote or STOP/EJECT twice on DECK.
  Then make settings manually. (See p. 18.)
- If Auto Clock Set takes more than 30 minutes, press STOP and perform settings manually. (See p. 18.)

Continued on next page...
Important: If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

3 Settings are made automatically. When complete, this screen appears.

If “AUTO CLOCK SET IS INCOMPLETE” appears, manually set clock (below).

Manual Clock Set

If Auto Clock Set was incomplete.

1 Press ACTION* on remote to display CLOCK screen.

2 Press ▲▼ to select the month and SET to set. In the same manner, select and set the date, year, time, and DST (Daylight Saving Time).

3 Press ACTION to start clock and exit.
Reset Language, Channels, Clock, VCR’s Output

1

Press ACTION* to display MENU.

- PROGRAM functions are not available when using COMPONENT Video Output and S-VIDEO OUT. Please set TV to either RF INPUT or VIDEO INPUT, and then press PROGRAM.

2

Language
1) Press ▲▼ to select language item.

- For Spanish
- For French
- For English

2) Press SET repeatedly to change language item as shown below.

3) Press ACTION to exit.

Channels
1) Press ▲▼ to select “SET UP CHANNEL,” and press SET.

2) Press ▲▼ to select “ANTENNA,” then press SET to set your antenna system (“TV” or “CABLE.”)

3) Press ▲▼ to select “AUTO SET,” then press SET.
   - If you use a Cable Box, set it to the PBS channel in your time zone.

Clock
1) Press ▲▼ to select “SET CLOCK,” and press SET.

2) Press ▲▼ to select “MANUAL,” and press SET. (For Auto Clock Set, select “AUTO CLOCK SET.”)

3) Press ▲▼ and ◄ to select, then set the date, time, and DST (Daylight Saving Time).

4) Press ACTION to start Clock and exit this mode.

---

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
**Time Zone Adjust**

(Only when Auto Clock is set.)

1) Press \(\uparrow\downarrow\) to select "SET CLOCK," and press SET.

2) Press \(\uparrow\downarrow\) to select "TIME ZONE ADJUST," and press SET to subtract or add hour(s) as necessary.

3) Press ACTION.

   - "TIME ZONE ADJUST" returns to "0" if clock is set manually.

**VCR’s Output Channel**

1) Press \(\uparrow\downarrow\) to select "VCR’S OUTPUT CH.,” and press SET.

2) Press SET.

   - IF YOU PRESS ACTION KEY, VCR’S OUTPUT CH. Switches to CH 4.

3) Press ACTION.

   - PLEASE TUNE YOUR TV TO CH 4.

   - After 3 seconds

   - "TIME ZONE ADJUST" returns to "0" if clock is set manually.

*Important:* If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

---

**Add or Delete a Channel**

To add channel:
Select channel with NUMBER keys and press ADD/DLT.

To delete channel:
Select channel with CH \(\uparrow\downarrow\) or NUMBER keys and press ADD/DLT.

**DST (Daylight Saving Time)**

DECK auto adjusts clock for DST. (p. 17.)

- Spring (First Sunday in April)
  - DST:ON ➔ Sets clock ahead one hour.

- Autumn (Last Sunday in October)
  - DST:ON ➔ Turns clock back one hour.

- If your area does not observe Daylight Saving Time, select DST:OFF.

- Keep these time changes in mind when programming DECK for timer recordings.
Playback/ Record on a Tape

Ready Checklist
- All connections are made. (pp. 12 ~ 15)
- TV and DECK are plugged in.
- TV is on and tuned to CH 3, 4, or VIDEO.
- Remote is in VCR mode. (Press VCR.)

Playback a Tape

1 Insert a tape.
   - DECK power comes on. If Auto VCR/TV (see p. 32) is set to "OFF," press VCR/TV on the remote for VCR mode.

2 Press PLAY* to play a tape.
   - If tape has no rec. tab (p. 6), auto play begins.

Special Features During Play

■ Forward/Reverse Scene Search
   ➔ Press FF/SLOW+ or REW/SLOW-.
   ➔ Press PLAY to release.
   After search has begun, each additional press of FF or REW changes speed.

Notes
- Picture interruption may occur with some TVs.
- FF and REW search speed may vary depending on current tape position.
- After 10 minutes in search mode, VCR returns to Play mode to protect the tape and the video heads.

■ Still (Freeze) Picture
   ➔ Press PAUSE/STILL.
   ➔ Press PLAY to release.

■ Frame by Frame Picture
   ➔ Press PAUSE/STILL in Still mode.
   ➔ Press PLAY to release.

■ Slow Motion Picture
   ➔ Press FF/SLOW+ (increase speed) or REW/SLOW- (decrease speed) in Still mode.
   ➔ Press PLAY to release.

Notes
- These features work best in SP or SLP mode.
- The sound will be muted.
- To reduce picture noise, see "Manual Tracking Control" on page 4.
- After 3 minutes in Still or Slow mode, VCR stops to protect the tape and the video heads.

3 Press STOP to stop a tape.

Rapid Rewind/FF
   ➔ Press REW/SLOW- or FF/SLOW+ in Stop mode to rewind or fast forward a tape.
   ➔ Rewinds a T-120 tape in approx. 1 minute.

   ➔ Press EJECT on remote, or STOP/EJECT on DECK to eject a tape.

Press STOP/EJECT to stop and/or eject a tape.
“Important: If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

**Record on a Tape**

1. Insert a tape with a record tab (p. 6).
   - DECK power comes on. If Auto VCR/TV (see p. 32) is set to “OFF,” press VCR/TV on the remote for VCR mode.

2. Press CH ▲▼, or NUMBER keys to select the channel.
   - If channel number is over 100, first press 100 key then the other 2 digits.
   - For “LINE” input, see p. 35.

3. Press SPEED to select the record speed (p. 4).
   - SP = Standard Play
   - SLP = Super Long Play
   - Speed appears on-screen and on Multi Function Display.

4. Press REC to start recording.
   - (The VCR REC indicator lights up on Multi Function Display).
   - To edit out unwanted scenes, press PAUSE/STILL to pause, and again to resume recording.
   - You cannot view another channel during recording.

5. Press STOP to stop recording.

- **One Touch Recording** (recording in progress),
  - press REC repeatedly to set the recording length (30 min. - 4 hours) (see right).
  - DECK shuts off after the preset record length.

- **Record one station, watch another,**
  - press VCR/TV on the remote (change to TV mode),
  - select channels at TV (recording continues).

- **Select Channels at DECK** (In Stop or Rec. Pause mode)
  - press VCR/TV on the remote (change to TV mode),
  - select channels at DECK.

- **Play a disc while recording a tape.**
  - insert a disc during recording,
  - press DVD, and then press PLAY.

**Notes**

- It is not possible to record from DVD/ CD to VHS tape using DECK.
- Watching one channel and recording another is not possible when using Cable Box or DSS Receiver.
- After 5 minutes in Pause mode, DECK stops to protect a tape and video heads.

This video recorder, equipped with HQ (High Quality) system, is compatible with existing VHS equipment. Only use tapes with the "HQ" mark. Only tapes tested and inspected for use in 2, 4, 6, and 8 hour machines are recommended.

**Note**

Remove loose or peeling labels from tapes to prevent tape jam.
Basic DVD Operation

Ready Checklist

- All connections are made. (pp. 12 – 15)
- DECK is plugged in.
- If DECK is connected to an audio amplifier, turn the stereo system’s power on.

1. Press POWER* on the remote or DECK.

2. Press DVD to select DVD mode.

- If a disc is already inserted, go to step 4.
- (Depending on the disc, playback may start automatically.)

3. Press OPEN/CLOSE, and then place a disc into the disc tray.

- Hold disc by its edges only (p. 6) with printed side up and use guides to place into tray.
- Use 3” (8 cm) or 5” (12 cm) disc.
- DVD-RAM ➡ see p. 42

4. Press PLAY to start playing.

- Disc tray closes automatically.

- You may also close tray by pressing OPEN/CLOSE.
- Data reading time differs with each disc.

<Example1>

If an interactive DVD* is used and TITLE MENU appears, go to step 5.

5. Press TITLE or MENU, or RETURN.

<Example2>

Press ▲▼ or NUMBER keys (see below) to select title, and press SET or PLAY to start playing.

- Pressing SET or PLAY is not necessary when using NUMBER keys.

Using NUMBER keys starts play automatically. The number of available titles varies with each disc.

<Example> 2 digit number

Press SKIP+ or SKIP- to go to next or previous menu screen.

- SKIP function not available with all discs.
- Please refer to disc jacket for operation information.

6. Press STOP to stop playing.

7. Press OPEN/CLOSE to eject the disc.

* Interactive DVD...
- May include multiple camera angles, stories, etc.

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo

Operation using DECK buttons

1. Press POWER.

2. Press DVD to select DVD mode.

- If a disc is already inserted, go to step 4.
- (Depending on the disc, playback may start automatically.)

3. Press OPEN/CLOSE, and then place a disc into the disc tray.

- Hold disc by its edges only (p. 6) with printed side up and use guides to place into tray.
- Use 3” (8 cm) or 5” (12 cm) disc.
- DVD-RAM ➡ see p. 42

<Example1>

If an interactive DVD* is used and TITLE MENU appears, go to step 5.

5. Press TITLE or MENU, or RETURN.

<Example2>

Press ▲▼ or NUMBER keys (see below) to select title, and press SET or PLAY to start playing.

- Pressing SET or PLAY is not necessary when using NUMBER keys.

Using NUMBER keys starts play automatically. The number of available titles varies with each disc.

<Example> 2 digit number

Press SKIP+ or SKIP- to go to next or previous menu screen.

- SKIP function not available with all discs.
- Please refer to disc jacket for operation information.

To return to menu (play stops)
Press TITLE, MENU, or RETURN.

6. Press STOP to stop playing.

7. Press OPEN/CLOSE to eject the disc.

* Interactive DVD...
- May include multiple camera angles, stories, etc.
Please read the disc jacket for operation information.

- If a single sided disc is placed in upside down, "THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC" is displayed. Remove disc and press DECK POWER off when not in use.
- Disc continues to rotate with menu displayed even after play is done. Press STOP to clear menu display when finished with menu.

**Forward/Reverse Scene Search**

Press **FF/SLOW+** or **REW/SLOW-** during play.
- Search speed, slow at first, increases with each additional press of the button up to 5 levels.

**Forward/Reverse Chapter/Track Skip**

Press **SKIP+** or **SKIP-** during play. Each press skips a chapter (DVD), track (CD) or Program/Play List/Marker (DVD-RAM).

**DVD and CD**
- Pressing **SKIP-** once midway through a chapter/track returns to the start of that chapter/track. Each additional press skips back one chapter/track.

**V.S.S. (Virtual Surround Sound)**

Enjoy a surround-like effect if you are using two front speakers only. The effect is broadened and sound seems to come from virtual speakers on either side if the disc has surround signals recorded on it.

**Resume Function**

DECK memorizes the point where STOP is pressed (STOP  ► is displayed on screen).
- Press **PLAY** to resume play from this point.
- Pressing STOP again or opening the tray cancels RESUME, however, RESUME is not canceled when power is turned off and on.
- RESUME works only with discs for which elapsed play time is displayed during play.
- When a DVD-RAM still picture is played back, the counter will not be displayed, however RESUME will function.

**Important:** If a remote control button does not work when pressed, press the DVD button on the remote and try the button again.

---

**Still Picture or Pause**

Press **PAUSE/STILL** during play.
- DVD : DECK will enter still picture mode.
- CD : DECK will enter pause mode.

**Frame by Frame Picture (DVD)**

Press **PAUSE/STILL** in still mode.
- Each press advances picture one frame.
- Hold button down for consecutive frame advance.
- Whether pictures are advanced by "FRAME" or "FIELD" is selected automatically. (See p. 54.)

**Slow Motion Picture (DVD)**

Press **FF/SLOW+** or **REW/SLOW-** in still mode.
- Slow motion speed, slow at first, is increased with each additional press of the button up to 5 levels.

**Auto-Power Off Function**

Power turns off after DECK has been in Stop mode (DVD) for about 5 minutes.
- When  appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.

---

*Notes*
- Surround sound effect is available in DVD mode only.
- Turn off the surround effects on the other equipment.
- V.S.S. will not work, or will have less effect, with some discs.
- Sound will only come from the two front speakers if V.S.S. is on.

---

*Note*
- Surround sound effect is available in DVD mode only.
- Turn off the surround effects on the other equipment.
- V.S.S. will not work, or will have less effect, with some discs.
- Sound will only come from the two front speakers if V.S.S. is on.

---

**Forward/Reverse Chapter/Track Skip**

Press **SKIP+** or **SKIP-** during play. Each press skips a chapter (DVD), track (CD) or Program/Play List/Marker (DVD-RAM).

---

**DVD-RAM**

Pressing **SKIP-** once midway through a program/play list returns to the start of that program/play list. Each additional press skips back one program/play list.

---

**Basic Operation**
Timer Recording

☑ Ready Checklist
☐ All connections are made. (pp. 12 – 15)
☐ TV and DECK are plugged in.
☐ Clock set correctly. (p. 18)
☐ Tape has record tab intact. (p. 6)
☐ Remote is in VCR mode. (Press VCR.)
☐ Sufficient tape remaining for recording time.

1 Press PROG* to display Program.

2

3 Press PROG to end programming.

Example

Today

14... 31  1...12

SELECT ▲▼ Selection Order

DAILY  ▲▼  WEEKLY  (SU)  WEEKLY  (MO)

3) Set remaining items, press SET to set START/STOP times, CH (channel) or LINE input (p. 35), and tape speed (SP, SLP). Then press ▲▼ to select.

Press PROG to enter more programs.

To Enter More Programs, press ▲▼ to select and press SET to set an unused program number, and then repeat step 2.

Or

Press PROG to exit.

- The “Timer” Indicator lights up on DECK.
- You can set Timer Recording with the power on or off.
- “TIMER REC WILL START SOON” appears on-screen for 2 minutes before Timer Recording starts. If DECK is in DVD mode, no message appears, but the VCR REC Indicator, the VCR mode indicator and “REC” will flash on Multi function Display.

For assistance, please call: 1-800-211-PANA (7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
Review, Replace or Clear Program Contents:
(Recording is not in progress)

1. Press PROG to display Program List.

2. Press \(\uparrow\downarrow\) to select number.

3. To Replace program...
   Repeat Step 2 (p. 24) to set new programs.

   or

   To Clear program...
   Press ADD/DLT.

4. Press PROG to end the programming.

Notes
- If you are using a Cable Box, the VCR’s channel for Timer Recording must be set to the Cable Box input channel and Cable Box must be manually set to the desired channel. Cable Box power must be left on.
- 2 minutes before Timer Recording is performed, “PLEASE PREPARE FOR TIMER REC” appears and Timer Indicator flashes. Be sure a cassette with record tab is loaded and DECK is in Stop mode.
- If a power interruption occurs while programming the timer, the timer program(s) may be canceled. If “TIMER PROGRAMS WERE LOST DUE TO POWER INTERRUPTION” appears on-screen, please re-enter the timer programs.
- If the start time for Timer Recording comes up during recording and playing back, Timer Recording will not be performed.

---

Important notes when using DSS Receiver
- When recording programs via DSS Receiver, DSS Receiver must be left on.
- When recording programs via an antenna or cable, DSS Receiver must be turned off.

*Important: If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.*
MTS Broadcast/ VHS Hi-Fi Stereo System

Connection
Make the Audio/Video Connection as shown on pp. 12 – 15.
• You can use TV connected to a Stereo amplifier and speakers instead of Stereo TV.

Receivable Broadcast Types
The following are possible audio broadcast types and on-screen displays.
The signal being received is indicated with a “ disap mark while the selected audio mode is indicated with an arrow.
To display the broadcast signal being received,
▸ press DISPLAY*.

MTS Stereo and SAP broadcast
Multi-channel Television Sound Stereo (main language) and Secondary Audio Program (sub language) broadcasts are being received simultaneously.
Select STEREO or SAP audio mode.

MTS Stereo broadcast
Multi-channel Television Sound Stereo broadcast. Select STEREO audio mode.
• If stereo broadcast is weak and display flickers, select MONO audio mode for possible better results.

SAP broadcast
Secondary Audio Program (sub language) broadcast. Select SAP audio mode for the sub language.

MONO broadcast
Normal monaural sound broadcast.

STOP  12:00AM  CH  02  MONO
STereo  SAP

STOP  12:00AM  CH  02  SAP
STereo  MONO

STOP  12:00AM  CH  02  MONO
STereo  SAP

STOP  12:00AM  CH  02  SAP
STereo  MONO

Equipped with dbx®-TV Noise Reduction for true MTS reproduction. dbx®-TV Noise Reduction is required for good stereo separation and audio fidelity. dbx® is a registered trademark, and is licensed by dbx Technology Licensing.
Audio Mode for Recording

1 Press AUDIO (SAP/Hi-Fi) to display audio mode.
   (Display disappears after 5 seconds.)

2 Press AUDIO (SAP/Hi-Fi) repeatedly to select desired mode.
   • Refer to “Receivable Broadcast Types” on p. 26.
   • Arrow indicates selection.

3 Make a recording.
   See p. 21.

Audio Mode for Playback

1 Start playback.
   See p. 20.

2 Press AUDIO (SAP/Hi-Fi) to display audio mode.

3 Press AUDIO (SAP/Hi-Fi) repeatedly to select desired mode.
   • Select “HIFI (L/R)” or “HIFI (L)” or “HIFI (R)” to listen to stereo recordings in stereo sound.
     Select “NORMAL” for monaural sound.
   • Display disappears after 5 seconds.

Notes

• Only tapes recorded in Hi-Fi stereo will playback with true stereo sound.
  Standard stereo tapes will playback in monaural sound.
• To listen to Hi-Fi stereo playback, the DECK AUDIO (L/R) jacks must be connected to
  a stereo TV or an external stereo amplifier and speakers. (See pp. 12, 14.)
• If tracking is adjusted during playback, Hi-Fi audio may revert to normal audio.
• Hi-Fi and normal audio playback volume level may differ.

Important: If a remote control button does not work when pressed,
press the VCR button on the remote and try the button again.
## Multi-Brand Control Feature

### Multi-Brand Control Setup

The Remote Control can be set to control some TVs.

1. Find your TV Brand Code Number on the following page.

2. Set up for TV control,
   - hold down TV button,
   - enter code with NUMBER keys.

3. Confirm code entry,
   - press POWER to turn selected unit on or off.
   
   * See table below for controllable functions in each mode.

### Notes

- Repeat setup after remote battery replacement.
- Remote will not control every TV made by the manufacturer listed. If you get no response, your particular unit cannot be controlled.
- There are NO additional codes for the products listed. If your product is not listed, then the remote is not compatible with that product.

### Using Multi-Brand Control

After remote is set up, you can select VCR, DVD, or TV for the desired function.

Press VCR, DVD, or TV on the remote.

(Table below shows available remote buttons for each mode.)

<table>
<thead>
<tr>
<th>Mode</th>
<th>DVD/ VCR</th>
<th>TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD VCR</td>
<td>All</td>
<td>VOL +/-</td>
</tr>
<tr>
<td>TV</td>
<td>EJECT/OPEN/CLOSE*, DISPLAY, PLAY, STOP, FF/SLOW+,REW/SLOW-, VCR/ TV, PAUSE/STILL, SKIP, AUDIO, CM/ZERO, SPEED, REC, TAPE POSITION, PAGE, COUNTER RESET</td>
<td>POWER, INPUT, NUMBER keys, ENTER, CH ▲▼*, VOL +/-</td>
</tr>
</tbody>
</table>

* Bold: VCR Function

**Bold Italic: VCR and DVD Functions

Italic: DVD Function

Normal: TV

### Notes

- Not all functions listed may be controllable.
- In TV mode, it may be necessary to press ENTER after pressing NUMBER keys for channel selection.
Some manufacturers use several codes for one brand. If the first code entered fails, try the next one listed.

Important Notes

- Some manufacturers use several codes for one brand.
- If the first code entered fails, try the next one listed.
- Some TVs require you to turn on the power manually.

### TV Brand Code Numbers

<table>
<thead>
<tr>
<th>Brand</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panasonic</td>
<td>01, 02</td>
</tr>
<tr>
<td>Quasar</td>
<td>01, 02</td>
</tr>
<tr>
<td>RCA</td>
<td>03</td>
</tr>
<tr>
<td>GE</td>
<td>03</td>
</tr>
<tr>
<td>Zenith</td>
<td>04</td>
</tr>
<tr>
<td>Magnavox</td>
<td>05</td>
</tr>
<tr>
<td>Sylvania</td>
<td>05</td>
</tr>
<tr>
<td>Sharp</td>
<td>06, 07</td>
</tr>
<tr>
<td>Sony</td>
<td>08</td>
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<td>Toshiba</td>
<td>09</td>
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<tr>
<td>Mitsubishi</td>
<td>13</td>
</tr>
<tr>
<td>Samsung</td>
<td>14</td>
</tr>
<tr>
<td>Gold Star</td>
<td>15, 16, 17</td>
</tr>
</tbody>
</table>

![Remote Control Diagram](image-url)
Tape Operation

Search System
For each recording, an invisible index mark is placed on the tape. A program index and information are also included for timer recordings. These marks are used to access or scan recordings.

Index Search

1. Press CM/ZERO in Play mode.

2. Press SEARCH* to display SEARCH in Stop or Play mode, and then press NUMBER keys to select recording number.
   - To calculate number, see below.
   - Press FF/SLOW+ or REW/SLOW- on the remote to start search.

   Play begins at search end.
   To search forward or back 1 index, press FF/SLOW+ or REW/SLOW- on the remote while screen left is displayed (10 sec.).
   - To cancel, press PLAY or STOP.

   To Calculate Index Number
   Example 1:
   To go to rec. 2 from rec. 4, enter 3 and press REW.
   1 2 3 4 5 6 7

   Example 2:
   To go to rec. 6 from rec. 2, enter 4 and press FF.
   1 2 3 4 5 6 7

   NOTE: ↓ indicates start points of each recording.

   Note
   - If Index Search is started very close to an index mark, that index mark may not be counted in the search.

Zero Search
To quickly return to a specified tape location.

1. Press DISPLAY during play to display Counter.

2. Press COUNTER RESET on remote at desired position to reset to “00:00:00”.

3. Continue to record, playback etc.

4. Press STOP.

5. Press CM/ZERO in Stop mode to start Zero Search.

   • DECK will go into FF or REW mode and stop at the last point the Counter was set to 0:00:00.

Commercial Skip
DECK fast forwards (skips) over 1, 2, or 3 minutes of recorded tape as desired.

1. Press CM/ZERO in Play mode.
   - The skip time can be changed by pressing CM/ZERO repeatedly as shown by the figure below.

   • No indication appears on-screen.

For assistance, please call 1-800-211-PANA(7262) or contact us via the web at: http://www.panasonic.com/contactinfo
**Important:** If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

### Tape Select
Select your tape length so the tape position and amount of tape remaining are properly displayed. (See “Tape Position Display” section right.)

1. **Press ACTION** to display MENU.
2. **Press ▲▼ to select “SET UP VCR,” and press SET.**
3. **Press ▲▼ to select “TAPE SELECT,” and press SET to set “T-120,” “T-160” or “T-180.”**
   - Select “T-120” for tapes 120 minutes or less, “T-160” if 140 or 160 minutes, and “T-180” if 180 minutes.
4. **Press ACTION** to return to normal screen.

### Repeat Play
Set to playback a recording over and over.

1. **Press ACTION** to display MENU.
2. **Press ▲▼ to select “SET UP VCR,” and press SET.**
3. **Press ▲▼ to select “REPEAT PLAY,” and press SET to set “ON” or “OFF.”**
   - Play repeats at tape end or if unrecorded portion over 30 sec. is detected.
4. **Press ACTION** to return to normal screen.

**Note**
- For repeat play in DVD mode, see page 47.

### Tape Position Display
To find out the present tape position and amount of tape remaining.

Tape position is displayed incorrectly in the following cases:
- If VHS-C type cassettes, tapes under 30 minutes, tapes over 180 minutes, or incompatible tapes are used.
- If the correct tape length is not selected. (See “Tape Select” section right.)

1. **Press TAPE POSITION** to detect current tape position.
2. **Press TAPE POSITION** (or wait 5 seconds) to return to normal screen.

#### Auto Operation Functions

- **Auto Play**
  Insert a tape → Power comes on, → Play starts if there is no record tab (see p. 6).
- **Auto Rewind**
  Play → Fast Forward → Tape end → Rewind → Stop
- **Play Auto Eject**
  (Repeat Play must be off)
  Play → Tape end → Rewind → Stop → Tape ejects if some programs are set.
Special VCR Features

VCR/TV Selection Feature

The VCR/TV selection can be set to auto or manual.

1. Press ACTION* to display MENU.

2. Press ▲▼ to select “SET UP VCR,” and press SET.

3. Press ▲▼ to select “AUTO VCR/TV,” and press SET to set “ON” or “OFF.”
   - OFF (Manual): You select “VCR” or “TV” mode using the VCR/TV button on the remote.
   - ON (Auto): “VCR” mode is automatically set when VCR is turned on, or in Play mode.

4. Press ACTION to return to normal screen.

Note
   - For more on VCR/TV selection, see “Record one station, watch another” and “Select channels at DECK” sections (see p. 21).

VCR Lock Feature

When set to ON, all operations except for timer record and tape eject are prohibited. Useful for households with small children.

To turn on, hold down REC on DECK in Stop mode with no tape inserted for 7 seconds. (Please ignore “NO CASSETTE” warning.)

To turn off, repeat above.

- VCR Lock cancels in 24 hours.

Note
   - DVD functions will work even when VCR Lock is set to ON.

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
Important: If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

**Weak Signal Display Feature**

When "ON," picture is displayed regardless of signal strength.

1. Press ACTION to display MENU.

2. Press ▲▼ to select "SET UP CHANNEL," and press SET.

3. Press ▲▼ to select "WEAK SIGNAL DISPLAY," and press SET to set "ON" or "OFF."

- **ON:** Picture is displayed regardless of signal condition, and may not always be clearly visible.
- **OFF:** Screen turns solid blue when signal is weak or non-existent.
- Selecting ON has no effect on connected equipment with blue back feature.

4. Press ACTION to return to normal screen.

**Auto Shut-Off Feature**

The power shuts off at a preset time.

1. Press ACTION to display MENU.

2. Press ▲▼ to select "SET UP VCR," and press SET.

3. Press ▲▼ to select "AUTO SHUT-OFF."

Press SET repeatedly to change shut-off time as shown below:

- OFF
- 2 Hours
- 4 Hours
- 6 Hours

4. Press ACTION to return to normal screen.

**Note**

- The shut-off countdown will not function during Play or Record.
Special VCR Features (continued)

Remote Warning Feature
If Multi-brand feature is used (p. 28), and this feature is set to on, a warning appears whenever an invalid key is pressed in TV mode.

1 Press ACTION* to display MENU.

2 Press ▲▼ to select “SET UP VCR,” and press SET.

3 Press ▲▼ to select “REMOTE WARNING,” and press SET to set “ON” or “OFF.”
   - If “OFF,” remote warning will not appear when invalid key is pressed.

4 Press ACTION to return to normal screen.

Multi Function Display (Front Display) ON/OFF Feature
Multi Function Display (Front Display) can be set to ON/OFF.

1 Press ACTION to display MENU.

2 Press ▲▼ to select “SET UP VCR,” and press SET.

3 Press ▲▼ to select “FRONT DISPLAY,” and press SET to set “ON” or “OFF.”
   - ON: When set to “ON,” Multi Function Display is displayed.
     OFF: When set to “OFF,” Multi Function Display is not displayed.
     If a Timer Program is set, Multi Function Display is displayed.

4 Press ACTION to return to normal screen.

*Important: If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.
Operation

Copying Your Tapes (Dubbing)

1. Insert a pre-recorded tape.

2. Insert a blank tape with record tab. Press REC, then STILL/PAUSE immediately to enter REC/PAUSE mode.

3. Press INPUT to set DECK Input mode to LINE for Video Input. (See "Selecting the Input Mode" below.)


5. Press STOP to stop dubbing.

To Monitor Dubbing on TV

1. Turn TV on and tune to the Recording VCR channel (CH 3 or CH 4).
2. If Auto VCR/TV (see p. 32) is set to "OFF," press VCR/TV on the remote for VCR mode.

Connection

Playing (Source) VCR
Recording (Editing) DECK

To Monitor Dubbing on TV

1. Turn TV on and tune to the Recording VCR channel (CH 3 or CH 4).
2. If Auto VCR/TV (see p. 32) is set to “OFF,” press VCR/TV on the remote for VCR mode.

Connection

VCR/ Camcorder (Hi-Fi) → DVD/VCR DECK → TV

1. Connect VIDEO OUT terminal on Playing VCR to VIDEO IN terminal on DECK. To monitor the dubbing, also connect TV as shown.
2. Connect “L” and “R" AUDIO OUT terminals on Playing VCR to “L“ and "R" AUDIO IN terminals on DECK.

Caution:
Unauthorized exchanging and/or copying of copyrighted recordings may be copyright infringement. Please note that some tapes cannot be dubbed on DECK. Also, it is not possible to dub DVD/CD to VHS tapes using DECK. When appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.
Disc Operation

Subtitle Language (DVD only)
You can select a different subtitle language (if offered) from the one set at the Settings for DVD Operation. (See p. 52.)

1. Press SUB TITLE in Play mode to display the subtitle selection on-screen.
   - Display disappears after 5 seconds.
   - When no subtitles are offered, "-" will be displayed instead of the language number.

2. Press SUB TITLE, ▲▼, or NUMBER keys to select a desired language.
   - Subtitle language being played back (see chart, right).

Notes
- If after several presses of the button the language does not change, language selection is not offered on the disc.
- When disc is removed, subtitles revert to initial setting language. If the initial language is not recorded on the disc, the disc's priority language will appear.
- With DVD-RAM, the subtitle can only be set to ON/OFF. The subtitle language cannot be selected.
- Subtitles may not change to the selected language immediately.

Audio Soundtrack Language (DVD only)
You can change the audio soundtrack language, selected at the Settings for DVD Operation, to a different language if available. (See p. 52.)
(This operation works only with discs on which multiple audio soundtrack languages are recorded.)

1. Press AUDIO in Play mode to display the audio selection on-screen.
   - Display disappears after 5 seconds.
   - Information of the audio stream currently being played back is displayed. (See page 53.)

2. Press AUDIO, ▲▼, or NUMBER keys to select desired language.
   - Audio soundtrack language being played back (see chart, above right).

Notes
- If, after several presses of the AUDIO button the language does not change, language selection is not offered on the disc.
- When disc is removed, language reverts to initial setting. If this language is not recorded on the disc, the language recorded will be heard.
- With DVD-RAM, Audio Soundtrack Language cannot be set. Audio stream and Audio mode (LR/L/R) setting can be made. Audio stream operation method is the same as Audio Soundtrack Language. Press ➤ to move the cursor to Audio mode, then press AUDIO or ▲▼ to select LR/L/R.

[Subtitle language]
[Audio sound track language]

Audio attribute 1 type, sampling frequency, bit No. of the disc (see p. 53.)

<table>
<thead>
<tr>
<th>LPCM</th>
<th>96 kHz or 48 kHz</th>
<th>16 bit</th>
<th>Linear PCM disc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolby Digital</td>
<td>1 ch - 5.1 ch</td>
<td>20 bit</td>
<td>Dolby Digital disc</td>
</tr>
<tr>
<td>DTS</td>
<td>1 ch - 5.1 ch</td>
<td>24 bit</td>
<td>DTS disc</td>
</tr>
</tbody>
</table>

Notes
- Change the No. by pressing ▲▼, and press SET.

Subtitle language (DVD only)
You can select a different subtitle language (if offered) than the one set at the Settings for DVD Operation. (See p. 52.)

[Subtitle language]
[Audio sound track language]
When 🟣 appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.

**Multiple Angle Viewing (DVD only)**

DVDs may contain scenes shot from multiple camera angles allowing the same scene to be viewed at different angles. You can view these angles, if available, using the ANGLE button.

1. **Press ANGLE** in Play mode to display the angle selection on-screen.
   - Display disappears after 5 seconds.

2. **Press ANGLE** repeatedly or ▲▼ to select the desired angle.

   Number of angle being played back.

**Vocal Selection for Karaoke Discs (DVD only)**

1. **Press AUDIO** in Play mode to display the audio screen.

2. **Press ▶️ to select VOCAL and press AUDIO or ▲▼ to select as shown below.**

   - DVD Karaoke (1 vocal)   VOCAL ON     VOCAL OFF
   - DVD Karaoke (2 vocals) VOCAL V1    VOCAL V2    VOCAL V1+V2    VOCAL OFF

**Picture Zoom (DVD only)**

You can enlarge specific portions of a picture and select the zoom ratio using the ZOOM button during DVD playback.

Press ZOOM repeatedly to change display as follows.
- You can enlarge the center portion of the image to one of 2 magnifications.

   ![Zoom Magnifications](image)

- Use the ▲▼ buttons to move the position up, down, left and right.
Disc Operation (continued)

Title Menu (DVD only)

Some DVDs have more than one title, e.g. movies. If the disc offers a title menu, you can select the desired title number. (Operation may vary according to the disc.)

1. Press TITLE* in Play mode to display the title screen.

2. Press ▲▼▲▼ or NUMBER keys to select a title, and press SET or PLAY to start playing.

   * "Pressing SET or PLAY" is not necessary when using NUMBER keys.

DVD Menu (DVD only)

DVDs may offer a special menu. This menu may include guides to unique contents, audio/subtitle languages, etc. Although contents and operation may vary, the following steps show basic procedure for using the menu.

1. Press MENU in Play mode to display DVD MENU.

2. Press ▲▼▲▼ or NUMBER keys to select an item, and press SET or PLAY to perform.

   * Pressing SET or PLAY is not necessary when using NUMBER keys.

Repeat step 2 if there is more than one menu.
**Program Play (CD only)**

You can program specific tracks and order of play.

1. Press **ACTION** to display DVD MAIN MENU.

2. Press **▲▼** to select “PLAY MODE,” and press **SET** to display.

3. Press **▲▼** to select “PROGRAM PLAY,” and press **SET** to display.

4. Press **▲▼▼** to select a track number (Track numbers on disc are displayed.), and press **SET**.

   - Repeat step 4 to select another track.
   - The selected track is added on the right side.

5. Press **▲▼▼** to select “START,” and press **SET** to start play of programs in the sequence selected.

   - To cancel, press **STOP** during play, then press **CLEAR**.

**Notes**

- Up to 15 tracks can be programmed.
- “<” or “>” (depending on disc) indicates additional PROGRAM PLAY screen.
- Press **▲▼▼** for next or previous screen.
- To clear the last program one by one
  - Press **▲▼▼** to move to “CLEAR LAST” and press **SET**. (Pressing CLEAR on remote control also clears last program.)
- To clear all programs
  - Press **▲▼▼** to move to “CLEAR ALL” and press **SET**. (Programs are also cleared when the power is turned off or the disc is removed.)

**Ready Checklist**

- DECK is in DVD mode, press DVD.
- CD is inserted.

**Program Repeat Play (CD only)**

1. Do operation steps 1 through 5 at left on this page.

2. Press **DISPLAY** to display Disc Information screen.

3. Press **DISPLAY** to display DECK Information screen.

4. Press **SET** to enter Select mode. Cursor move to “OFF.”

5. Press **▲▼** to select “DISC.”

6. Press **SET** to set mode. Cursor moves to “REPEAT.”

To cancel, select “REPEAT : OFF” in step 5, then press **SET**.

---

*Important: if a remote control button does not work when pressed, press the DVD button on the remote and try the button again.*
Disc Operation (continued)

Random Play (CD only)
Tracks are played in a random order.

1  Press ACTION* to display DVD MAIN MENU.

2

Press ▲▼ to select “PLAY MODE,” and press SET to display.

Press ▲▼ to select “RANDOM PLAY,” and press SET to begin random play.
• To cancel, press STOP during play, then press CLEAR.

Ready Checklist
☐ DECK is in DVD mode, press DVD.
Setting the VOLUME ADJUST (DVD only)

Some DVDs are recorded in lower than average volume levels. For these DVDs, this DECK can be set so that the average volume is increased automatically.

Press VOL. ADJ repeatedly to change “OFF” ↔ “ON.”

- “OFF” or “ON” lights up on Multi Function Display (about 3 seconds) when VOL. ADJ is pressed.

<table>
<thead>
<tr>
<th>Some DVD [Low volume level]</th>
<th>VOLUME ADJUST “OFF”</th>
<th>VOLUME ADJUST “ON”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume is at the original level.</td>
<td>Volume level is increased when played back.</td>
<td></td>
</tr>
</tbody>
</table>

- “ON” is set .... When a DVD is played back, the average volume is increased.
- “OFF” is set .... The volume level recorded on the disc is played back just as it is.

Notes

- While settings can be made with all discs, they may have no effect with some discs. Please set as you prefer.
- When audio equipment is connected, setting the Sound Output level to “OFF” is recommended.
- If the sound becomes abnormal while playing a disc, set the Sound Output level to “OFF.”
**DVD-ROM Operation (DVD-ROM only)**

You can enjoy playing your personally recorded/edited DVD-ROM discs on this DECK.

**Note**
- This DECK was designed for playback only. DVD-ROM recording is not possible.

### Play a DVD-ROM

1. **Do steps 1 ~ 3 on page 22.**
   - Play begins from the first program title recorded on the DVD-ROM.

2. **Press D.NAVI** or **PLAY LIST** to display Direct Navigator or Play List menu for easy title or scene selection.
   - See below for "Direct Navigator" or next page for "Play List information".

3. **Press STOP** to stop playing.

4. **Press OPEN/CLOSE** to eject the disc.

### Direct Navigator

If the DVD-ROM features Direct Navigator, a list of recorded titles is displayed. Simply select a title number and start playback. (Operation can vary with disc used.)

1. **Press D.NAVI** in Play/Stop mode to display the Direct Navigator menu.

2. **Press ◀▶** to select a page and press ▲▼ to select a title (Program No.). Then, press SET or PLAY to start playing.
   - "Pressing SET or PLAY" is not necessary when using NUMBER keys.
   - Using NUMBER keys starts playing automatically.
   - The number of available titles varies with each disc.
   - Example:
     - 1 digit number: 1 ➔ 1
     - 2 digit number: 12 ➔ 10 ➔ 1 ➔ 2

3. **Press D.NAVI** to clear Direct navigator menu.

---

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
Play List

If the DVD-RAM features a Play List, your preselected list of favorite scenes is displayed for easy access. (Operation can vary according to how you edited the DVD-RAM.)

1. Press PLAY LIST in Play/Stop mode to display the Play List menu.

2. Press ◀ or ▶ to select a page and press ▲ or ▼ to select a title (Play List No.). Then, press SET or PLAY to start playing.
   • “Pressing SET or PLAY” is not necessary when using NUMBER keys.
   • Using NUMBER keys starts playing automatically.
   • The number of available titles varies with each disc.

   **Example:**
   - 1 digit number: 1
   - 2 digit number: 12
   - ≥10

3. Press PLAY LIST to clear Play List menu.

Notes

- Titles of Direct Navigator and Play List cannot be changed using this DECK.
- With Direct Navigator, up to 99 programs can be displayed. With Play List, up to 99 titles (999 scenes) can be displayed.
- While DVD MAIN MENU is displayed, Direct Navigator and Play List display will not appear even if TITLE or MENU is pressed.
- When Ω appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.
**DVD Operation using On-Screen Displays**

When DISPLAY is pressed, On-Screen Displays show disc information (title/chapter/track number, elapsed playing time) and DECK information (repeat play, play mode).

1. **Press DISPLAY** in Play or Stop mode to display “On-Screen Displays.”
   - Each press of DISPLAY changes the on-screen display as follows. (Refer to pp. 44 – 48.)

   ![On-Screen Displays Diagram]

   - Selected Disc information (See pp. 45, 46.)
   - Selected DECK information (See pp. 47, 48.)
   - Normal Screen

   **Note**
   - DISPLAY button does not function while main menu of DVD, title menu of DVD, Direct Navigator or Play List is displayed.

2. **Press ▲▼ (or ◀▶) to select an item, and press SET.**

3. **Press ▲▼ or NUMBER keys to select the setting, and press SET.**

   **Example of DVD-Video**

   ![DVD-Video Example]

   - When numbers are displayed (e.g. title number), NUMBER keys are also available.
   - If the number entered is not on the disc, the entry will have no effect. Re-enter the correct number.
   - For more details, refer to the disc operation information.

   **Example of DVD-RAM**

   ![DVD-RAM Example]

   - To return to normal screen, press DISPLAY repeatedly.

   **Note**
   - When ⊗ appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.
Detailed Descriptions of each On-Screen Display

- Important: if a remote control button does not work when pressed, press the DVD button on the remote and try the button again.

■ Disc information screen (for DVD-Video)

1. **TITLE No.**
   - Go directly to a preset title number.
   - Select “TITLE”, and press SET.
   - Change the No. by pressing ▲▼ or NUMBER keys, and press SET.

2. **CHAPTER No.**
   - Go directly to a preset chapter number.
   - Select “CHAPTER”, and press SET.
   - Change the No. by pressing ▲▼ or NUMBER keys, and press SET.
   - This function does not work with some discs.

3. **Disc currently being played**
   - The type of disc currently inserted is displayed.

4. **Elapsed playing time**
   - The screen may be changed by selecting the elapsed time.
   - Select the elapsed playing time ("xx:xx:xx"), and press SET.
   - Change the elapsed time by pressing NUMBER keys.
   - Enter time starting with seconds.
   - If the time entered is not on the disc, the entry will have no effect.
   - Re-enter the correct time.
   - e.g., press 0 → 1 → 2 → 3 → 4 → 5 → SET for "01 : 23 : 45".
   - press 3 → 0 → SET for "00 : 00 : 30".
   - This function does not work with some discs.

■ Disc information screen (for CD)

A. **TRACK No.**
   - Go directly to a preset track number.
   - Select “TRACK”, and press SET.
   - Change the No. by pressing ▲▼ or NUMBER keys, and press SET.

B. **Disc currently being played**
   - The type of disc currently inserted is displayed.

C. **Elapsed playing time**
DVD Operation using On-Screen Displays (continued)

1. **Direct Navigation (PROGRAM) or PLAY LIST No.**
   - Go directly to a preset title number.
     - Select "PROGRAM" or "PLAY LIST", and press **SET**.
     - Change the No. by pressing **▲▼** or **NUMBER keys**, and press **SET**.

2. **Disc currently being played**
   - The type of disc currently inserted is displayed.

3. **Elapsed playing time**
   - The screen may be changed by selecting the elapsed time.
     - Select the elapsed playing time ("xx:xx:xx"), and press **SET**.
     - Change the elapsed time by pressing **NUMBER keys**.
     - Enter time starting with seconds.
     - If the time entered is not on the disc, the entry will have no effect.
     - Re-enter the correct time.
     - e.g., press 0 ➔ 1 ➔ 2 ➔ 3 ➔ 4 ➔ 5 ➔ **SET** for "01 : 23 : 45".
     - press 3 ➔ 0 ➔ **SET** for "00 : 00 : 30".
     - This function does not work with some discs.

**Note**
- When ◯ appears on the screen while a button is being operated, it means that the corresponding operation is prohibited by DECK or the disc.
2. Repeat Play mode (see p. 48)
   Repeat play mode can be selected.
   • Select “REPEAT”, and press SET.
   • Change the desired mode during play by pressing ▲▼, and press SET.

---

3. Play mode [CD only] (See p. 39, 40.)
   When Play mode is set (p. 39, 40), the mode name is displayed.

   | PROGRAM PLAY | program play |
   | RANDOM PLAY  | random play  |

   ▶ Note ◀
   • For repeat play in VCR mode, see p. 31.
DVD Operation using On-Screen Displays (continued)

For your reference

Repeat Play mode example (see p. 47)

- **CHAPTER/TITLE REPEAT PLAY (DVD-Video)**

- **TRACK/DISC REPEAT PLAY (CD)**

- **PROGRAM/DISC REPEAT PLAY (DVD-RAM [PROGRAM])**

- **PLAY LIST/ALL PLAY LIST REPEAT PLAY (DVD-RAM [PLAY LIST])**

**Note**

- For repeat play in VCR mode, see p. 31.

- Important: If a remote control button does not work when pressed, press the DVD button on the remote and try the button again.

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
MP3/JPEG Playback Operation

This unit can play MP3/JPEG format CD-R or CD-RW recorded for personal use on a PC, etc. Some discs may not play due to the condition of the recording.

1. Press POWER* on the remote or DECK.
2. Press OPEN/CLOSE, then place an MP3/JPEG disc into the disc tray. Press OPEN/CLOSE to close.
3. MP3/JPEG MENU is displayed. Playback starts automatically (except JPEG files).
   • CD directory is displayed.

Function Status

   | Folder area | File area |
   | (Current folder appears green.) | (Selected file/folder is highlighted. Titles are displayed up to 11 characters.) |
   | ROOT | VA | TECHNO | POPS | JAZZ |
   | END_WALTZ | DD_CUB | NOCTURNE | NORN |

<Example> (Diagram left shows CD directory structure as displayed in example OSD above.)

Notes
   • Only File (not Folder) area operation is possible.
   • Files are displayed in the following order: (1...0,1....9,A,B......Z).

4. Select file (During STOP mode)
   1) Press ▲ to select an MP3 file (♫).
      • MP3 Playback (see p. 50)
   2) Press ▲ to select a JPEG file (◉).
   3) Press SKIP+ or SKIP- (next) or SKIP- (previous) to skip a file/folder page (7 files) in the File area.
   • Select folder (During STOP mode)
      1) Press ▲ to select a folder (◉).
      2) Press SET to display files/folders contained in the folder.
   • Select parent folder (During STOP mode)
      1) Press ▲ to select a folder (◉).
      2) Press SET to make changes to the previous directory display.

5. Press ACTION to return the DVD MAIN MENU. (← Press ACTION again to return to the MP3/JPEG MENU.)

MP3 Playback

Do steps 1~3 at left.

a. Press ▲ to select an MP3 file (♫).
   (During STOP mode)

b. Press SET or PLAY to start playback.

Forward/Reverse Search
   Press FF/SLOW+ or REW/SLOW- during play.
   • Search speed, slow at first, increases with each additional press of the button up to 5 levels.

Forward/Reverse Track Skip
   Press SKIP+ or SKIP- during play.
   Each press skips a track.
   • If pressed within first 3 seconds of playback, skips to the previous track. If over 3 seconds, returns to top of track. (SKIP- only.)
   • Put DECK in Stop mode before performing folder/file selection (see step 4.)

Pause
   Press PAUSE during play.
   Press PLAY to release.

c. Press STOP to stop play.

D Press OPEN/CLOSE to eject the disc.
   The MP3/JPEG MENU is closed automatically.

Note
   • Copyright protected files and files containing errors cannot be played back. The DECK skips to the next file.

Select PLAY MODE [MP3 Playback]
   (During STOP mode)
   Press ◄ to select the desired PLAY MODE (see below).

[PLAY MODE]

NORMAL:
   All MP3 files are selected and played back one time only.

SINGLE REPEAT:
   The selected MP3 file is played back repeatedly.

FOLDER REPEAT:
   The MP3 files contained in the selected folder are played back repeatedly. However, folders below the selected folder are not played back.

DISC REPEAT:
   All MP3 files are played back repeatedly.
MP3/JPEG Playback Operation (continued)

JPEG Playback
You can play back JPEG images.
Displayable Image Size: 32x32~7680x7680 pixels

Note

- All JPEG format may not be played back.

Do steps 1~3 on page 49.

1 Press ▲▼ to select a JPEG file (⑤).

2 Press SET or PLAY.
Selected JPEG file is displayed.
[JPEG Playback Screen]

- Returned on the MP3/JPEG MENU

  ➤ Press STOP. (See p. 49)
- Next/Previous Search

  ➤ Press SKIP+ | or SKIP- | (below)
- Start Slide-show ➤ Press FF/SLOW+ or REW/SLOW-. (below)
- Enlarging an image ➤ Press ZOOM. (P. 51)
- Rotating an image ➤ Press ANGLE. (P. 51)

3 Press STOP to return to the MP3/JPEG MENU.

JPEG Slide-show
(During JPEG Playback.)
JPEG files are displayed automatically (about every 3 seconds) as a slide-show.

1 Press FF/SLOW+ or REW/SLOW-.

<Example>
Image changes every 3 seconds.

- Cancel slide show

  ➤ Press STOP to return the MP3/JPEG MENU. (See p. 49)
- Still picture

  ➤ Press STILL (only SLIDE).
  ➤ Press PLAY to release.
- Forward/Reverse File Skip

  ➤ Press SKIP+ | or SKIP- | (below)
  Each press skips a file.

2 Press ACTION to return to the DVD MAIN MENU.

Select PLAY MODE [JPEG Slide-show]
(During STOP mode)
Press ▲▼ to select the desired PLAY MODE
(See below).

[PLAY MODE]

NORMAL:
All JPEG files are selected and played back one time only.

SINGLE REPEAT:
The selected JPEG file is played back repeatedly.

FOLDER REPEAT:
The JPEG files contained in the selected folder are played back repeatedly. However, folders below the selected folder are not played back.

DISC REPEAT:
All JPEG files are played back repeatedly.

<Example>
Operation can be done when files are in order, such as in the diagram below.

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at http://www.panasonic.com/contactinfo
JPEG Zoom

(During JPEG Playback.)
You can enlarge specific portions of a JPEG picture and select the zoom ratio using the ZOOM button on the remote during JPEG Playback screen.

Set Zoom size.
Press ZOOM repeatedly to change display as follows.
- Press STOP to return the MP3/JPEG MENU.
- You can enlarge the center portion of the image to one of 2 magnifications.
- Operation can be done during Rotation (below).

Operation can be done during Zoom (above).

You can enlarge the center portion of the image to one of 2 magnifications.

Use the ▲, ▼, ◄, and ► buttons to move the position up, down, left and right.
(Position cannot be changed on X1.0 ORIGINAL images.)

JPEG Rotation

(During JPEG Playback.)
You can rotate a JPEG picture using the ANGLE button on the remote during JPEG Playback screen. (The JPEG picture will be rotated 90° clockwise.)

Set Rotation.
Press ANGLE repeatedly to change display as below.
- Press STOP to return the MP3/JPEG MENU.
- Operation can be done during Zoom (above).
- The vertical/horizontal ratio of rotated JPEG images may vary when they are displayed.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.
Settings for DVD Operation

1. Press ACTION* to display DVD MAIN MENU.

2. Press ▲▼ to select an item, and press SET.

   DISC LANGUAGES (See below)
   All languages offered on the disc can be set. If a language not offered is set, the original disc language will be selected.

   AUDIO OUTPUT (See p. 53)
   You can set the audio output that comes from the digital audio output terminal.

   STILL MODE (See p. 54)
   To select “FIELD” (Field still) or “FRAME” (Frame still) to prevent jitter or make small text or fine patterns clearly visible in a still picture.
   When “AUTO” is set, “FIELD” or “FRAME” is selected automatically.

   TV MODE (See p. 54)
   To select whether the video material for a widescreen will be played back in the Pan & Scan style, Letterbox style or 16 : 9 style.

   Disc Languages (DVD only)
   To select and set the language of the audio soundtrack, subtitles, or title/DVD menus for all discs to be played.

3. Press ▲▼ to select “DISC LANGUAGES,” and press SET to display screen.

4. Press ▲▼ to select an item, and press SET repeatedly for desired language. (Please refer right.)

5. Press ACTION to redisplay DVD MAIN MENU and go to step 2 to setup another item.
   Or, press ACTION twice to exit.

Once initial settings are done, they remain in memory (even after power is turned off) until changed. This means DECK will operate under the same conditions (especially DVDs) each time.

Checklist
To enter OTHER code number, Press NUMBER keys (Please refer to language codes on p. 56).

1) If the selected language is not offered, the original disc language is selected.
Audio Output (DVD only)

Select the digital output to be output from the optical digital audio output connector of DECK.

1. Press ACTION to display DVD MAIN MENU.

2. Press ▲▼ to select “AUDIO OUTPUT,” and press SET to display screen.

3. Press ▲▼ to select an item, and press SET repeatedly for output. (See below.)

4. Press ACTION to redisplay DVD MAIN MENU and go to step 2 to setup another item. Or, press ACTION twice to exit.

---

### Ready Checklist

- DECK is in DVD mode, press DVD.

<table>
<thead>
<tr>
<th>Type of amplifier to be connected</th>
<th>Recommended setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>No amplifier is connected</td>
<td>PCM</td>
</tr>
<tr>
<td>AV amplifier (with digital audio input connector) without Dolby Digital/ DTS decoder</td>
<td>PCM<em>1 PCM</em>1</td>
</tr>
<tr>
<td>AV amplifier including Dolby Digital decoder</td>
<td>PCM Bitstream</td>
</tr>
<tr>
<td>AV amplifier including Dolby Digital/ DTS decoder</td>
<td>PCM Bitstream Bitstream*2</td>
</tr>
</tbody>
</table>

- Make settings according to amplifier connected to optical audio output as shown in above table.

  *1 When connecting an amplifier (with an optical digital input connector) which does not contain the Dolby Digital or DTS decoder, be sure to select “PCM”. If “Bitstream” is selected, starting DVD play may cause such a high level of noise as to be harmful to your ears and damage the speakers.

  *2 When a dts decoder is connected, please select “Bitstream” in “dts.” If “PCM” is selected, there will be stereo sound. When a Dolby Digital decoder is connected, please select “Bitstream” in “Dolby Digital.” If “PCM” is selected, there will be stereo sound.

---

**Important:** If a remote control button does not work when pressed, press the DVD button on the remote and try the button again.
Settings for DVD Operation (continued)

Still Mode (DVD only)
Set to reduce jitter in a displayed still picture or a motion picture.

1 **Press ACTION**
   to display DVD MAIN MENU.

2 **Press ▲▼**
   to select “STILL MODE,”
   and
   **press SET** repeatedly
   for mode. (See below.)

AUTO: "FIELD" (Field still) or "FRAME" (Frame still) is automatically selected during the still mode.
(Factory preset)
FIELD: "FIELD" (Field still) is always selected.
   This setting will reduce jitter when compared with "AUTO" on some discs.
FRAME: "FRAME" (Frame still) is always selected.
   Some texts and fine patterns will be seen clearly
   when compared with "AUTO" on some discs.

3 **Press ACTION**
   to exit this mode.

TV Mode (DVD only)
Set the screen display style for wide-screen video material playback.

1 **Press ACTION**
   to display DVD MAIN MENU.

2 **Press ▲▼**
   to select “TV MODE,”
   and
   **press SET** repeatedly
   for mode. (See below.)

4:3 Pan & Scan (Factory preset):
   Wide-screen video data is played in Pan & Scan style (left and right of screen is trimmed.)
   • Video data not formatted in Pan & Scan will play
     in letterbox style.

4:3 Letterbox:
   Wide-screen video data is played in Letterbox style (top and bottom of screen has black margin).

16:9:
   Set “16:9” when using Wide-screen TV.

3 **Press ACTION**
   to exit this mode.

Example

- Pan & Scan (Factory preset)
- Letterbox
Important: If a remote control button does not work when pressed, press the DVD button on the remote and try the button again.

**PROGRESSIVE OUT**

Sets the Component Video Output Connector (p. 10, 13) to output the Progressive scan signal.

1. Press **ACTION** to display DVD MAIN MENU.

2. Press **▲▼** to select “PROGRESSIVE OUT,” and press **SET** repeatedly for mode. (See below.)

   - **OFF:** Progressive scan signal is not output.
   - **ON:** Progressive scan signal is output from the Component Video Output Connector.

3. Press **ACTION** to exit this mode.

**Notes**

- If the television is not progressive compatible, a progressive scan picture is not available. Connect the Video Output or S-Video Output connector (see p. 12, 13) and set PROGRESSIVE OUT to “OFF”.
- **CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED TO SET PROGRESSIVE OUT TO “OFF”. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p DVD/VCR DECK, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.
## Language Code List

Enter the appropriate code number for the initial settings "AUDIO", "SUBTITLE" and/or "MENUS" (see p. 52).

<table>
<thead>
<tr>
<th>Code</th>
<th>Language</th>
<th>Code</th>
<th>Language</th>
<th>Code</th>
<th>Language</th>
<th>Code</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>6565</td>
<td>Afar</td>
<td>7079</td>
<td>Faroese</td>
<td>7678</td>
<td>Lingala</td>
<td>8375</td>
<td>Slovak</td>
</tr>
<tr>
<td>6566</td>
<td>Abkhazian</td>
<td>7082</td>
<td>French</td>
<td>7679</td>
<td>Laothian</td>
<td>8376</td>
<td>Slovenian</td>
</tr>
<tr>
<td>6570</td>
<td>Afrikaans</td>
<td>7089</td>
<td>Frisian</td>
<td>7684</td>
<td>Lithuanian</td>
<td>8377</td>
<td>Samoan</td>
</tr>
<tr>
<td>6577</td>
<td>Amharic</td>
<td>7165</td>
<td>Irish</td>
<td>7686</td>
<td>Latvian, Lettish</td>
<td>8378</td>
<td>Shona</td>
</tr>
<tr>
<td>6582</td>
<td>Arabic</td>
<td>7168</td>
<td>Scots Gaelic</td>
<td>7771</td>
<td>Malagasy</td>
<td>8379</td>
<td>Somali</td>
</tr>
<tr>
<td>6583</td>
<td>Assamese</td>
<td>7176</td>
<td>Galician</td>
<td>7773</td>
<td>Maori</td>
<td>8381</td>
<td>Albanian</td>
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<td>6588</td>
<td>Aymara</td>
<td>7178</td>
<td>Guarani</td>
<td>7775</td>
<td>Macedonian</td>
<td>8382</td>
<td>Serbian</td>
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<td>Swedish</td>
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<td>Moldavian</td>
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<td>7282</td>
<td>Croatian</td>
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<td>Marathi</td>
<td>8465</td>
<td>Tamil</td>
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<td>7285</td>
<td>Hungarian</td>
<td>7783</td>
<td>Malay</td>
<td>8469</td>
<td>Telugu</td>
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<tr>
<td>6678</td>
<td>Bengali; Bangla</td>
<td>7289</td>
<td>Armenian</td>
<td>7784</td>
<td>Maltese</td>
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<td>Tajik</td>
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<td>Japanese</td>
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<td>Oriya</td>
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<td>Rhaeto-Romance</td>
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<td>Russian</td>
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<td>Sanskrit</td>
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<td>Xhosa</td>
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<td>7589</td>
<td>Kirghiz</td>
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<tr>
<td>7074</td>
<td>Fiji</td>
<td>7665</td>
<td>Latin</td>
<td>8373</td>
<td>Singhalese</td>
<td>9085</td>
<td>Zulu</td>
</tr>
</tbody>
</table>

For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
Warning and Instruction Displays

These displays will alert you to a missed operation or provide further instructions.

<table>
<thead>
<tr>
<th>OSD</th>
<th>Caution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLEASE SET CLOCK BY PRESSING ACTION KEY</td>
<td>If you attempt to set or review a Timer Recording and the Clock is not set...</td>
<td>24</td>
</tr>
<tr>
<td>PLEASE PREPARE FOR TIMER REC</td>
<td>If the DECK is not in Stop mode, or cassette is not inserted, or cassette has no record tab, or tape is at its end 2 minutes before a Timer Recording is about to begin...</td>
<td>24</td>
</tr>
<tr>
<td>CHECK CASSETTE RECORD TAB</td>
<td>If you press REC on the remote control or DECK, and a cassette is inserted with no record tab...</td>
<td>6</td>
</tr>
<tr>
<td>NO CASSETTE</td>
<td>If you press PLAY, FF, REW, or REC on the remote control or DECK without a cassette inserted...</td>
<td>20</td>
</tr>
<tr>
<td>TO CANCEL TIMER REC HOLD DOWN STOP KEY</td>
<td>If you press STOP or POWER during a Timer Recording,... (visible in VCR mode only)</td>
<td>25</td>
</tr>
<tr>
<td>FOR APPROX 3 SEC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIDEO HEADS MAY NEED CLEANING</td>
<td>If head cleaning becomes necessary while playing back a tape...</td>
<td>4</td>
</tr>
<tr>
<td>PLEASE INSERT HEAD CLEANING CASSETTE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR REFER TO MANUAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>END : PLAY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR LOCK ACTIVATED</td>
<td>If you press a function button other than STOP/EJECT or POWER while DECK is in VCR Lock mode...</td>
<td>32</td>
</tr>
<tr>
<td>REMOTE CONTROL IS SET TO TV MODE</td>
<td>If you press an invalid key on the remote while in TV mode...</td>
<td>28</td>
</tr>
<tr>
<td>USE VCR : VCR KEY</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>USE DVD : DVD KEY</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>PLEASE CHECK THE DISC,</td>
<td>If you press PLAY, and DECK reads data from a stained or scratched disc in DVD mode.</td>
<td>6</td>
</tr>
<tr>
<td>AND FOR STAINS OR SCRATCHES ON DISC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THIS DISC MAY NOT BE PLAYED IN YOUR</td>
<td>Playback of a disc with different region number was attempted. Only discs marked region &quot;1&quot;, &quot;ALL&quot;, or those that include &quot;1&quot; are playable on this DECK.</td>
<td>3</td>
</tr>
<tr>
<td>REGION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THIS TYPE OF DISC CANNOT BE PLAYED,</td>
<td>An unusable disc is inserted in the unit, or the disc is not installed with label side up.</td>
<td>6</td>
</tr>
<tr>
<td>PLEASE INSERT A DIFFERENT DISC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANNOT PLAY THIS FILE</td>
<td>This file format cannot be played. (Appears during MP3/JPEG file playback)</td>
<td>49</td>
</tr>
</tbody>
</table>
Before Requesting Service

Check the following points if you are having trouble with your DECK.

<table>
<thead>
<tr>
<th>Power</th>
<th>Solution</th>
</tr>
</thead>
</table>
| No power... | • Completely insert Power Plug into an AC outlet.  
  • Press POWER button on.  
  • Make sure power source is active. |
| Power turns itself off... | • Auto power-off (shutoff) occurs after about 5 min. in DVD mode with no operation, or if there is no broadcast signal in TV or Playback mode.  
  Turn the power back on. (pp. 23, 33) |

<table>
<thead>
<tr>
<th>Recording &amp; Playback</th>
<th>Solution</th>
</tr>
</thead>
</table>
| TV program cannot be recorded... | • Check connections between DECK, external antenna, and TV.  
  • Check channel selections.  
  • Make sure your antenna system (CABLE or TV) is correctly set. (Channels [p. 18])  
  • Make sure cassette record tab is intact. (p. 6) |
| Timer recording cannot be performed... | • Confirm that clock is set to current time and date.  
  • Make sure Cable/DSS box (if used) is left on and tuned to channel to be recorded.  
  • Set recording start/stop times correctly. (p. 24)  
  • Timer recording may not be performed or continued if a power interruption occurs before or during a Timer Recording, even after power is restored. |
| There is no playback picture, or the playback picture is noisy or contains streaks... | • Select channel 3 or 4 on TV to match VCR output channel (3 or 4) (p. 16) or select LINE.  
  • Set VCR/TV selector to “VCR.”  
  • Adjust TRACKING control in either direction. (p. 4)  
  • Try Head Cleaning. (p. 4) |
| During special effects playback picture may contain some vertical jitter when using a TV with an Automatic Vertical Hold Control... | • Set TV’s Vertical Hold Control to MANUAL, then adjust. |
| DECK cannot be controlled... | • Make sure DECK power is on.  
  • Check Remote batteries.  
  • Make sure VCR LOCK is set to off. (p. 32)  
  • Make sure Remote is in proper mode. (p. 28)  
  • Make sure Timer Recording is not in progress. |

<table>
<thead>
<tr>
<th>Remote Control</th>
<th>Solution</th>
</tr>
</thead>
</table>
| DECK cannot be remote controlled... | • Make sure DECK power is on.  
  • Make sure Remote is in VCR mode.  
  • Aim Remote Control directly at remote sensor on DECK. (p.9)  
  • Avoid any object blocking signal path.  
  • Check Remote batteries. (p. 4)  
  • Exposing DECK remote sensor to direct fluorescent or outdoor light may cause signal interference. |
| PROG buttons do not respond... | • PROG functions are not available in COMPONENT Video Output and S-VIDEO OUT. Set TV to either RF IN or VIDEO IN. (p. 10)  
  • Check Remote batteries. (p. 4)  
  • Press VCR or DVD button for DVD/VCR mode. (p. 28) |
### DVD/CD

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play fails to start even when PLAY is pressed...</td>
<td>• This DECK cannot play discs other than DVDs and CDs.</td>
</tr>
<tr>
<td></td>
<td>• The disc may be dirty and require cleaning.</td>
</tr>
<tr>
<td>Picture is distorted during rapid advance or rapid reverse...</td>
<td>• The picture will be somewhat distorted at times: this is normal.</td>
</tr>
<tr>
<td>No Forward/Reverse Scene Search play...</td>
<td>• Some discs may have sections which prohibit Forward/Reverse Scene Search. (p. 23)</td>
</tr>
<tr>
<td>Audio soundtrack and/or subtitle language is not the one selected at the initial settings...</td>
<td>• If the audio soundtrack and/or subtitle language selected at DVD initial settings does not exist on the disc, it will not be accessible.</td>
</tr>
<tr>
<td>No subtitles...</td>
<td>• Subtitles appear only when available on disc.</td>
</tr>
<tr>
<td></td>
<td>• “OFF” is selected at the changing subtitle language. Select “ON” at the “Subtitle Languages” section (p. 36) to display the subtitles.</td>
</tr>
<tr>
<td>Alternative audio soundtrack (or subtitle) language cannot be selected...</td>
<td>• Alternative language cannot be selected with discs which do not contain more than one language.</td>
</tr>
<tr>
<td></td>
<td>• For some discs, alternative language cannot be selected with the AUDIO or SUB TITLE button. Try selecting it from the DVD MAIN MENU if available.</td>
</tr>
<tr>
<td>Angle cannot be changed...</td>
<td>• This function is dependent on software availability. Even if disc has multiple angles, they may be recorded for specific scenes only (ANGLE indicator on DECK lights up). (p. 37)</td>
</tr>
</tbody>
</table>

### Miscellaneous

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs cannot be viewed on TV...</td>
<td>• Make sure TV is tuned to VCR's output channel (3 or 4).</td>
</tr>
<tr>
<td></td>
<td>• Check connections between DECK, external antenna, and TV.</td>
</tr>
<tr>
<td></td>
<td>• Set VCR/TV selector to “TV.” (p. 21)</td>
</tr>
<tr>
<td></td>
<td>• Make sure proper signal source is selected.</td>
</tr>
<tr>
<td></td>
<td>• If the television is not progressive compatible, a progressive scan picture is not available. Connect the Video Output or S-Video Output connector (pp. 12, 13) and set PROGRESSIVE OUT to “OFF” in the DVD Main Menu. (p. 55)</td>
</tr>
<tr>
<td>Video cassette cannot be inserted...</td>
<td>• Insert the cassette with window side up; record tab facing you.</td>
</tr>
<tr>
<td>Video cassette ejects when a recording is started or the power is turned off for timer recording...</td>
<td>• Make sure cassette record tab is intact. (p. 6)</td>
</tr>
<tr>
<td>In Stop mode, the motor (CYLINDER) continues to rotate...</td>
<td>• To enable Quick play mechanism, the cylinder will rotate for about 3 minutes. This reduces response time from Stop to Play mode.</td>
</tr>
<tr>
<td>The disc cannot be removed..</td>
<td>• First, unplug DECK. Then, prepare a rigid wire (e.g. an extended paper clip) and, applying moderate force, insert it straight into the hole at the base of the tray. The tray will eject a little. Now, pull the tray all the way out and remove the disc. (p. 9)</td>
</tr>
</tbody>
</table>

If you cannot resolve the problem, please call the Customer Call Center for product assistance at 1-800-211-PANA (7262). To locate an authorized servicenter, please call toll free 1-800-211-PANA (7262). or, contact us via the web at: http://www.panasonic.com/contactinfo
Limited Warranty

PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF MATSUSHITA ELECTRIC
CORPORATION OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF MATSUSHITA
ELECTRIC OF PUERTO RICO, INC.,
AVE. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic DVD/VCR Deck Limited Warranty

Limited Warranty Coverage
If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("Limited Warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

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Mail-In Service
For assistance in the continental U.S.A. in obtaining repairs please ship the product to:
Panasonic Services Company
Customer Servicenter
Suite B
4900 George McVay Drive
McAllen, TX 78503

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

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For assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo
THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER “LIMITED WARRANTY
COVERAGE”. THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL
DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH
OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove
or re-install an installed unit if applicable, travel to and from the servicer, loss of or damage to media or
images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)
ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY,
ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.
Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on
how long an implied Limited Warranty lasts, so the exclusions may not apply to you.
This Limited Warranty gives you specific legal rights and you may also have other rights which vary from
state to state. If a problem with this product develops during or after the Limited Warranty period, you may
contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the
warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR
RESPONSIBILITY.

Customer Services Directory

Obtain Product Information and Operating Assistance; locate your nearest Dealer or
Servicenter; purchase Parts and Accessories; or make Customer Service and
Literature requests by visiting our Web Site at:

http://www.panasonic.com/support

or, contact us via the web at:

http://www.panasonic.com/contactinfo

You may also contact us directly at:
1-800-211-PANA (7262),
Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am - 7 pm, EST.

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Accessory Purchases

Purchase Parts, Accessories and Instruction Books online for all Panasonic
Products by visiting our Web Site at:

http://www.pasc.panasonic.com

or, send your request by E-mail to:

npccparts@panasonic.com

You may also contact us directly at:
1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only)  (Monday - Friday 9 am to 8 pm, EST.)
Panasonic Services Company
20421 84th Avenue South,
Kent, WA 98032
(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277

Service in Puerto Rico
Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company
Factory Servicenter:
Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park,
 Carolina, Puerto Rico 00985
Phone (787)750-4300 Fax (787)768-2910

As of October 2003
Medidas de seguridad y precauciones importantes

**ADVERTENCIA**

PARA REDUCIR EL RIESGO DE GOLPES ELÉCTRICOS, INCENDIOS, HERIDAS O DAÑOS A ESTE PRODUCTO, LÉAS Y SIGA TODAS LAS INSTRUCCIONES DE SEGURIDAD Y FUNCIONAMIENTO. TENGA EN CUENTA TODAS LAS ADVERTENCIAS INDICADAS EN EL MANUAL Y EN EL PRODUCTO.

**INSTALACIÓN**

1. **PRECAUCIÓN CON LA FUENTE DE ALIMENTACIÓN**
   - Evite ubicaciones muy calientes o sometidas a cambios de temperatura que se indiquen en el manual o en este producto.

2. **CONECTOR POLARIZADO O CON TOMA A TIERRA**
   - Como característica de seguridad, este producto de video viene equipado con un enchufe de cable de alimentación polarizado (sólo una pata es más ancha que la otra), o con un enchufe del tipo con toma a tierra de tres patas. SUGERENCIA DE SEGURIDAD
   - Este enchufe está diseñado para proteger contra descargas eléctricas. La pata más ancha del enchufe o con toma a tierra de tres patas está diseñada para que se conecte a la toma de red adecuada. No desactive esta función de seguridad manipulando el enchufe de ninguna manera.

3. **CABLE DE ALIMENTACIÓN**
   - Asegúrese de que los cables de alimentación son dispuestos de tal forma que no se apoye nada sobre ellos, o que estén en el paso de tráfico al caminar. Si se utiliza un cable alargador, asegúrese de que el enchufe del cable alargador sea de los que tienen con toma a tierra de tres patas. Un cable polarizado (solo una pata es más ancha que la otra), o con enchufe del tipo con toma a tierra de tres patas, nunca debe ser enchufado en una toma sin conexión a tierra, para que le instale una toma de red adecuada. No desactive esta función de seguridad manipulando el enchufe de ninguna manera.

**PRECAUCIÓN CON ENCHUFES CON TOMA A TIERRA**
   - Este enchufe está diseñado para proteger contra descargas eléctricas. La pata más ancha del enchufe o con toma a tierra de tres patas está diseñada para que se conecte a la toma de red adecuada. No desactive esta función de seguridad manipulando el enchufe de ninguna manera.

4. **NO BLOQUEE LOS ORIFICIOS DE VENTILACIÓN**
   - Las aberturas de ventilación del mueble libera el calor generado durante el funcionamiento de la unidad. Si se bloquearan, el calor acumulado dentro de la unidad podría ocasionar fallos que pueden llevar a riesgos de incendio o daños por calor en las cassettes utilizadas.

5. **EVITE UBICACIONES MUY CALIENTES O SOMETIDA A CAMBIOS BRUSCOS DE TEMPERATURA**
   - No coloque la unidad encima o cerca de cuero tipo de cafetera o regulador, bajo la luz solar directa, dentro de vehículos o estación de servicios. La unidad puede liberar gases de escape calentados subitamente entre sitios con variaciones extremas de temperatura. Si la unidad se llevara bruscamente de un sitio húmedo a otro calido, la humedad puede condensarse en la unidad y en la cinta.

6. **PARA EVITAR LESIONES PERSONALES**
   - No coloque equipos no fijados en superficies inclinadas.
   - No coloque esta unidad sobre ningún soporte que no esté firme, nivelado y que sea adecuadamente fuerte. La unidad podría caerse y producir graves lesiones a niños o adultos y dañar la unidad misma.
   - La combinación de aparato y cartón debe moverse con cuidado. Las paradas bruscas, una fuerza excesiva o en superficies irregulares pueden ocasionar el vuelco de la unidad y caídas mortales.
   - Siga atentamente las instrucciones de funcionamiento y utilice los accesorios recomendados por el fabricante al hacer funcionar esta unidad o al conectarla a otros equipos.

**CONEXIÓN SEGURA DE LA ANTENA Y DE LOS CABLES**
   - Si se conectara una antena o sistema de cable conectado al equipo, el usuario deberá asegurarse de que la antena o el sistema de cable disponen de toma a tierra como forma de proporcionar protección contra la acumulación de cargas estáticas y salvo de corrientes. La sección 810 del Código Eléctrico Nacional, ANSI/NFPA 70 (en Canadá, la parte 1 del Código Eléctrico Canadiense) proporciona información con respecto a la conexión a tierra correcta del masif y la estructura de soporte, conexión a tierra de los cables de bajada de antena a una unidad de descarga, tamaño de los conductores a tierra, ubicación de la unidad de descarga de antena, conexión de los electrodos a tierra y requisitos del electrodo de toma a tierra.

2. **MANTENGA LA ANTENA LIBRE DE LÍNEAS O CIRCUITOS DE ALTO VOLTaje**
   - Un sistema de antena exterior deberá ser colocado bien alejado de líneas de alimentación, luz eléctrica o circuitos de alimentación para que nunca esté en contacto con tales fuentes de alimentación si se cayera. Al instalar una antena exterior, debe tenerse mucho cuidado para evitar las líneas de alimentación, conductos u otras fuentes de alimentación ya que esto podría resultar mortal. Debido a los riesgos implicados en la instalación de una antena, tal operación debe dejarse a un profesional.

**UTILIZACIÓN DE LA UNIDAD DE VÍDEO**

Si la unidad ha estado almacenada o trasladada a una nueva ubicación, remítase primero a la sección de INSTALACIÓN de estas medidas de seguridad.

1. **MANTENGA ESTA UNIDAD DE VÍDEO ALEJADA DEL AGUA O DE HUMEDAD DE CUALQUIER TIPO**
2. **SI EL EQUIPO ES EXPUESTO A LA LLUVIA, HUMEDAD, O FUERTES IMPACTOS, desenchufe la unidad y que sea revisada por un técnico cualificado antes de volver a utilizarla.**

3. **DURANTE UNA TORMENTA ELÉCTRICA**
   - Durante una tormenta con rayos, tanto en interiores como en el exterior, o antes de dejar la unidad sin utilizar durante largos periodos de tiempo, desconecte todos los equipos de la fuente de alimentación como la antena y el sistema de cableado.

4. **AL ENCHUFRAR LA UNIDAD**
   - No expone nunca la unidad a la lluvia o el agua. NO LA HAGA FUNCIONAR con el tablero húmedo, con agua, o con un ambiente húmedo.

5. **EVITE LAVAR LA UNIDAD**
   - Desenchufe la unidad. Luego utilice un paño limpio, seco y que no contenga disolventes o alcohol para limpiar la unidad.

6. **NO LIMPIE LA ANTENA EXTERIOR**
   - Desenchufe la unidad. Luego utilice un paño limpio, seco y que no contenga disolventes o alcohol para limpiar la unidad.

7. **NO LIMPIE LA UNIDAD ELECTRICA**
   - Desenchufe la unidad. Luego utilice un paño limpio, seco y que no contenga disolventes o alcohol para limpiar la unidad.

**SÉRVICIO**

1. **EL USUARIO NO DEBE REALIZAR NINGUNA OPERACIÓN DE SERVICIO TÉCNICO POR SI MISMO.**
   - Sí, después de observar atentamente las diferenciadas instrucciones de funcionamiento, este producto de video no funciona correctamente, no intente abrir o extraer las tapas, o realizar cualquier ajuste no indicado en este manual. Desenchufe la unidad y llévela a un técnico cualificado de servicio técnico.

2. **SI FUERAN NECESARIAS PIEZAS DE RECAMBIO**
   - Asegúrese de que el técnico de servicio utiliza sólo piezas especificadas por el fabricante, ded, de las mismas características que las piezas originales. La utilización de substitutos no autorizados puede ser causa de incendios, sacudidas eléctricas, u otros peligros.

3. **QUE EL TÉCNICO DE SERVICIO TÉCNICO REALICE UNA COMPROBACIÓN DE SEGURIDAD**
   - Después de cualquier servicio o reparación de la unidad, solicite al técnico de servicio que realice una comprobación de seguridad tal como se describe en la literatura de servicio técnico del fabricante para asegurarse así que la unidad de video se encuentra en condiciones de funcionamiento seguras.
PRECAUCIONES DE SEGURIDAD

⚠️ ADVERTENCIA ⚠️

PARA PREVENIR INCENDIOS O CHOQUES ELÉCTRICOS NO EXPONGA ESTE APARATO A LA LLUVIA O LA HUMEDAD.

⚠️ PRECAUCIÓN ⚠️

PARA PREVENIR CHOQUES ELÉCTRICOS, ASEGURASE QUE LA CLAVIJA HAGA JUEGO CON EL ENCHUFE Y CONÉCTELO COMPLETAMENTE.

Este símbolo advierte al usuario de que hay voltaje sin aislamiento dentro de la unidad de suficiente magnitud como para ocasionar sacudidas eléctricas. Por lo tanto, resultará peligroso realizar cualquier tipo de contacto con toda pieza interna de la unidad.

Este símbolo alerta al usuario de que se ha incluido importante literatura sobre el funcionamiento y mantenimiento de esta unidad. Por tanto, debe leerse atentamente tal literatura a fin de evitar cualquier problema.

Advertencia FCC: Cualquier cambio o modificación no autorizado de este equipo anulará la autorización al usuario para hacer funcionar la unidad.

FCC Warning: Any unauthorized changes or modifications to this equipment would void the user’s authority to operate.
CONEXIONES/CONFIGURACION INICIAL (READY TO PLAY)
Realice la conexión de la antena o TV por cable antes de enchufar el cable de CA.
El DVD/VCR iniciará automáticamente la fijación de los canales y del reloj al enchufar el cable de CA.

CONEXIONES
Para Ant/Cable → DVD/VCR → TV
1. Conecte el cable de la antena al terminal IN FROM ANT del DVD/VCR.
2. Conecte el terminal OUT TO TV del DVD/VCR a la entrada de la antena VHF/UHF del TV con el cable RF incluido.

Para Sistema Digital de Satelite (DSS)/ Convertidor de cable → DVD/VCR → TV
1. Conecte la salida del convertidor de cable al terminal IN FROM ANT.
2. Conecte el terminal OUT TO TV del DVD/VCR a la entrada de la antena VHF/UHF del TV con el cable RF incluido.

CONFIGURACION INICIAL
1. Encienda el TV y cambie al canal 3.
2. Enchufe el cable de CA.
El DVD/VCR se encenderá e iniciará las fijaciones de los canales y del reloj.
• Si no aparece la pantalla de abajo, compruebe la conexión del DVD/VCR-TV y si el canal del TV está a 3, intente cambiando al canal 4.
• Para cambiar el canal de salida del DVD/VCR, consulte las instrucciones de “Canal de salida del VCR” (informaciones en inglés página 19).

Enchufe el cable de CA.
Al inicio, el idioma de la pantalla está fijado a inglés.
Para cambiar el idioma, seleccione la pantalla MENU (informaciones en inglés página 18).

Si está usando un convertidor de TV por cable y en su área hay un canal de Public Broadcast Station (PBS), ajuste su convertidor al canal PBS de su área. Si está usando un receptor DSS, este debe estar apagado.

Nota:
• Los botones de funciones no funcionan durante la configuración inicial.
• Para retirar un cassette durante el ajuste automático, presione EJECT en el control remoto o STOP dos veces en el aparato. En este caso, los ajustes de los canales y la hora se deben hacer manualmente. Para los ajustes seleccione la pantalla MENU (informaciones en inglés página 18).
• Dependiendo de las condiciones, el ajuste automático puede durar más de 30 minutos. En ese caso, presione STOP para detener el ajuste automático y realice los ajustes manualmente en la pantalla MENU.

PRECAUCIÓN
Al usar cables coaxiales RF del tipo “tuerca”, apríételos solamente con los dedos. Un apriete excesivo puede dañar los terminales.

3. Las fijaciones se realizan automáticamente. Cuando termina las fijaciones, aparecerá la siguiente pantalla.

AJUSTE MANUAL DEL RELOJ
Si la fijación ha sido incompleta.
1. Presione la tecla ACTION en el control remoto para visualizar la pantalla del menú SET CLOCK.

2. Presione ▲▼ para seleccionar el mes y SET para ajustar. De la misma forma, seleccione y ajuste la fecha, año, hora y DST (hora de verano).

3. Presione dos veces la tecla ACTION para poner el RELOJ en marcha y salir.

Para solicitar ayuda, por favor llame al: 1-800-211-PANA(7262) o consultenos a través de página web en http://www.panasonic.com/contactinfo
**Operaciones básicas para la reproducción**

1. **Inserte un cassette.**
   - La alimentación del DECK se activa. Si Auto VCR/TV (consulte la página 32) está en “INACT (OFF)”, presione VCR/TV en el control remoto para el modo VCR.

2. **Presione PLAY** para reproducir el cassette.
   - Si el cassette no tiene la lengüeta de prevención de grabación (página 6), se inicia la reproducción automáticamente.

**Detalles especiales durante la grabación**

- Presione FF/SLOW+ o REW/SLOW- para búsqueda de escenas hacia delante/ hacia atrás. **Presione PLAY** para liberar. Durante la búsqueda, cada vez que presione FF o REW se cambia la velocidad:
  - Presione PAUSE/STILL para imagen Fija (Congelada).
  - Presione PAUSE/STILL en el modo de imagen fija para imágenes cuadro a cuadro.

3. **Presione STOP** para detener el cassette.

**Rebobinado/Avance rápido**

- **Presione REW/SLOW- o FF/SLOW+ en el modo de parada para rebobinado/avance rápido del cassette.**
- **Rebobina una cinta T-120 en aproximadamente 1 minuto.**
- **Presione EJECT en el control remoto, o STOP/EJECT en el DECK para expulsar el cassette.**

**Operaciones básicas para la grabación**

1. **Inserte el cassette con lengüeta de protección de grabación (página 6).**
   - La alimentación del DECK se activa. Si Auto VCR/TV (consulte la página 32) está en “INACT (OFF)”, presione VCR/TV en el control remoto para el modo VCR.

2. **Presione CH ▲▼ o las teclas de números para seleccionar el canal.**

3. **Presione SPEED** para seleccionar la velocidad de grabación (página 6)
   - SP = Reproducción normal
   - SLP = Reproducción extra larga

4. **Presione REC** para comenzar a grabar.
   - Para eliminar escenas indeseadas, presione PAUSE/STILL para hacer una pausa, y al presionar nuevamente continúa la grabación.
   - No podrá ver otro canal durante la grabación.

5. **Presione STOP** para detener la grabación.

---

**Programación fácil para la grabación con temporizador**

1. **Presione PROG** para visualizar la pantalla de Programación.

2. **Orden para elegir**
   - Fecha de hoy
   - Fecha anterior
   - Fecha siguiente

3. **Presione ▲▼ para seleccionar un número que no está usando para ingresar más programas y presione SET para finalizar PROGRAM.**

**Grabación de un toque**

**Presione REC** repetidamente para ajustar la hora de grabación (30 min - 4 horas).

- La videograbadora termina la grabación a una hora programada.

**Grabación normal**: 0:30 - 1:00

**4:00**: 3:00 - 2:00: 1:30
Spanish Quick Use Guide/ Guía para rápida consulta

Operaciones básicas del DVD

1) Presione **POWER** en el control remoto o el aparato.

2) Presione **DVD** para seleccionar el modo DVD.

3) 1) Presione **OPEN/CLOSE**.

   2) Ponga un disco en la bandeja de disco.
   • Sujete el disco sin tocar ninguna de sus superficies, pongalo con el lado donde esté impreso el título hacia arriba, alineándolo con las guías y pongalo en su posición apropiada.
   Discos de 3" (8 cm) / Discos de 5" (12 cm)

4) Presione **PLAY** para iniciar la reproducción.
   La bandeja del disco se cierra automáticamente.
   • Si está usando un DVD interactivo y aparece el menú de títulos (TITLE MENU), siga al paso 5.

5) Presione **▲▼◄►** o las teclas numéricas para seleccionar el artículo deseado.
   Presione **SET** o **PLAY** para la reproducción.
   Si usa las teclas numéricas, la reproducción comienza automáticamente.

6) Presione **STOP** para parar la reproducción.

7) Presione **OPEN/CLOSE** para expulsar el disco.

- Para buscar una escena particular
  Búsqueda hacia adelante
  Presione **FF/SLOW+** en el modo de reproducción.
  Búsqueda hacia atrás
  Presione **REW/SLOW-** en el modo de reproducción.
  (Para liberar, presione **PLAY**)

- Para saltar un capítulo o una pista
  Salto hacia adelante
  Presione **SKIP** en el modo de reproducción.
  Salto hacia atrás
  Presione **◄ SKIP** en el modo de reproducción.

- Para ver una imagen fija
  Presione **PAUSE/STILL** durante la reproducción.
  (Para liberar, presione **PLAY**)

- Para ver imágenes cuadro a cuadro (DVD)
  Presione **PAUSE/STILL** en el modo de imagen fija.
  La imagen avanza un cuadro cada vez que presiona la tecla. (Para volver a la reproducción normal, presione **PLAY**)

- Para ver en cámara lenta (DVD)
  Presione **FF/SLOW+** o **REW/SLOW-** en el modo de imagen fija.
  (Para liberar, presione **PLAY**)

Funcionamiento del DVD utilizando visualizaciones en pantalla

Cuando se presiona **DISPLAY**, la visualización en pantalla muestra la información del disco (título / capítulo / número de lista, tiempo transcurrido de reproducción, audio / idioma del subtítulo, y ángulo) e información (repetir la reproducción, modo reproducción, Karaoke vocal encendido / apagado, etc.).

1) Presione **DISPLAY** en el modo reproducción o parada para visualizar las visualizaciones en pantalla.
   • Cada vez que se presione **DISPLAY**, la visualización en pantalla cambia como se muestra a continuación.

   Información seleccionada del disco
   Información seleccionada del **DECK**
   Pantalla normal

2) Presione **▲▼** (o **◄►**) para seleccionar el ítem deseado.
   Presione **SET** para ajustar.

3) Presione **▲▼** para seleccionar el ajuste deseado.
   Presione **SET** para ajustar.
   Para volver a la pantalla normal, presione repetidamente **CLEAR** o **DISPLAY**.

<Ejemplo (Video DVD)>

<table>
<thead>
<tr>
<th>TÍTULO</th>
<th>00:00:34</th>
<th>02:45:45</th>
</tr>
</thead>
</table>

<Ejemplo (DVD-RAM)>

<table>
<thead>
<tr>
<th>TÍTULO</th>
<th>00:00:34</th>
<th>02:45:45</th>
</tr>
</thead>
</table>

Para solicitar ayuda, por favor llame al: 1-800-211-PANA(7262) o consultenos a través de página web en: http://www.panasonic.com/contactinfo
Fijaciones iniciales

1 Presione DVD para seleccionar el modo DVD.

2 Presione ACTION en el modo de parada para visualizar MENU.

3 Presione ▲▼ para seleccionar el artículo deseado. Presione SET.

IDIOMAS DEL DISCO
Todos los idiomas ofrecidos en el disco pueden ser ajustados. Si el idioma ajustado no es ofrecido en el disco, se seleccionará el idioma original del disco.

SALIDA DE AUDIO
Puede usted ajustar la salida audio procedente del terminal de salida audio digital.

DETEÑER RASTREO
Para seleccionar "CAMPO", "CUADRO" o "AUTO" para prevenir inestabilidad o para permitir ver textos pequeños o patrones finos claramente en el modo de imagen fija.

TV PREFERENCIA
Para seleccionar cuando el material del video es para pantalla ancha y se quiere reproducir en el estilo Pan&Scan, en el estilo Letterbox o en el estilo 16:9 en la pantalla.

4 Presione ▲▼ para seleccionar el artículo deseado. Presione SET.

5 Volver a visualizar el menú de DVD para continuar el ajuste. Presione ACTION y pase al paso 3 para ajustar otro ajuste o, para salir, presione ACTION dos veces.

Cambio del idioma de subtítulos

El idioma de los subtítulos seleccionado al hacer las fijaciones iniciales se puede cambiar por otro idioma diferente, si éste se encuentra disponible.

1 Presione SUBTITLE durante la reproducción. Cuando no haya subtítulos grabados, se visualizará "-" en lugar del número de idioma.

2 Presione SUB TITLE, ▲▼ o las teclas numéricas para seleccionar el idioma deseado.

Selección de IDIOMAS DEL DISCO [DVD solamente]

Selección "AUDIO"
(Fijación de fábrica : inglés)
Inglés / Español / Francés / Japonés :
Original : Se seleccionará el idioma original de cada disco.
OTRO 0000 : Se puede seleccionar el otro idioma.

Selección "SUBTITULO"
AUTO : Se seleccionará el mismo que fue seleccionado en la preparación de "AUDIO". (Fijación de fábrica)
• Si el idioma seleccionado en la preparación de "AUDIO" se utiliza durante la reproducción, los subtítulos no aparecerán.
• Si se utiliza otro idioma durante la reproducción, los subtítulos aparecerán en el idioma seleccionado en la preparación de "AUDIO"
Inglés / Español / Francés / Japonés :
OTRO 0000 : Se puede seleccionar el otro idioma.

Selección "MENU"
(Fijación de fábrica : inglés)
Inglés / Español / Francés / Japonés :
OTRO 0000 : Se puede seleccionar el otro idioma.

Visión desde otro ángulo

Algunos discos DVD tienen escenas que han sido filmadas simultáneamente desde ángulos diferentes. Con estos discos, la misma escena podrá verse desde cada uno de estos ángulos diferentes utilizando el botón ANGLE.

1 Presione ANGLE durante la reproducción para visualizar la selección del ángulo.

2 Presione ANGLE repetidamente o ▲▼ para seleccionar el ángulo deseado.
Selección de vocal para los discos de Karaoke [DVD solamente]

1. Presione AUDIO durante la reproducción para visualizar la pantalla AUDIO.

2. Presione para seleccionar VOZ y presione AUDIO o para seleccionar tal como se indica a continuación.

- DVD Karaoke (1 vocal): VOZ ACTIVO — VOZ INACTIVO
- DVD Karaoke (2 vocales): VOZ V1 — VOZ V2 — VOZ V1+V2 — VOZ INACTIVO

Cambio del idioma de la pista de sonido [DVD solamente]

El idioma de la pista de sonido seleccionado al hacer las fijaciones iniciales se puede cambiar por otro idioma diferente, si éste se encuentra disponible.

1. Presione AUDIO durante la reproducción para visualizar SONIDO en la pantalla.

2. Presione AUDIO, o las teclas numéricas para seleccionar el idioma deseado.

Utilización de un menú de títulos [DVD solamente]

Algunos discos con películas, vienen con dos o más títulos. Por ejemplo, si el disco tiene un menú de títulos grabados, el botón TITLE podrá utilizarse para seleccionar el título de la película.

1. Presione TITLE durante la reproducción. Ahora se visualiza una lista de los títulos del disco.

2. Presione o las teclas de números para seleccionar el título deseado. Presione SET o PLAY para elegir.

Utilización de un menú de DVD [DVD solamente]

Algunos discos DVD ofrecen un menú especial. Este menú incluye guías para contenidos únicos, audio, subtítulos, idiomas, etc. Aunque los contenidos y las operaciones se cambian, los siguientes son unos pasos básicos para el uso del menú.

1. Presione MENU durante la reproducción. El menú de DVD introducido en el disco se visualiza ahora.

2. Presione o las teclas de números para seleccionar el ítem deseado. Presione SET o PLAY para elegir.

Ampliación de la imagen [DVD solamente]

Durante la reproducción de un DVD, puede ampliar partes específicas de una imagen y seleccionar la relación de zoom usando el botón ZOOM.

Presione ZOOM repetidamente para cambiar el tamaño de la imagen como se indica a continuación:

- Use los botones para desplazar la posición hacia arriba, hacia abajo, hacia la izquierda o hacia la derecha.
Funcionamiento de la ejecución de MP3/JPEG

Puede utilizar esta unidad para reproducir audio de formato MP3/JPEG, grabado para uso personal con una computadora, etc., en un CD-ROM o CD-RW. La ejecución no podrá realizarse en algunos casos, debido a las condiciones de la grabación.

1 Presione POWER en el control remoto o DECK.


3 Se visualizará el MENÚ MP3/JPEG y la ejecución se iniciará automáticamente. (Se visualizará el directorio del CD.)

Estado de la función

Area de las carpetas
(La carpeta visualizada actualmente se volverá verde)

Area de archivos
(El archivo/la carpeta se visualiza con un cursor.)

MODO DE REPRODUCCIÓN

4 Ejecución MP3/JPEG (Durante el modo STOP)

Presione ▲▼ para seleccionar un archivo MP3 ( iş) o un archivo JPEG (ş), y presione SET o PLAY.

- MP3
  Búsqueda hacia adelante/hacia atrás ➡ Presione FF/SLOW+ oREW/SLOW- durante la ejecución.
  Salto de pista hacia adelante/hacia atrás ➡ Presione SKIP+ ▶ o SKIP- ▼ durante la ejecución.

- JPEG
  Búsqueda siguiente/anterior ➡ Presione SKIP+ ▶ o SKIP- ▼
  Inicie la muestra-diapositiva ➡ Presione FF/SLOW+ oREW/SLOW-.
  Ampliar una imagen ➡ Presione ZOOM. Girar una imagen ➡ Presione ANGLE.
  Presione STOP para detener la operación descrita arriba.

5 Seleccione MODO DE REPRODUCCIÓN (Durante el modo STOP)

Presione ▲▼ para seleccionar el MODO DE REPRODUCCIÓN deseado.

[MODO DE REPRODUCCIÓN]
NORMAL:
 Todos los archivos se reproducen sólo una vez.

REPETICION DE UNA MUSICA:
 El archivo seleccionado se reproduce repetidamente.

REPETICION DE UN ARCHIVO:
 Los archivos que se encuentran en la carpeta seleccionada se reproducen repetidamente.

REPETICION DEL DISCO:
 Todos los archivos se reproducen repetidamente.

Presione ACTION para regresar al DVD MENU PRINCIPAL.

Guía para rápida consulta

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(Deck & VCR)

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