



Panasonic®

Operating Instructions

DVD/CD PLAYER

DVD-S43

Model No.

Dear customer

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully.

Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.

If you have any questions contact
1-800-561-5505

Region number

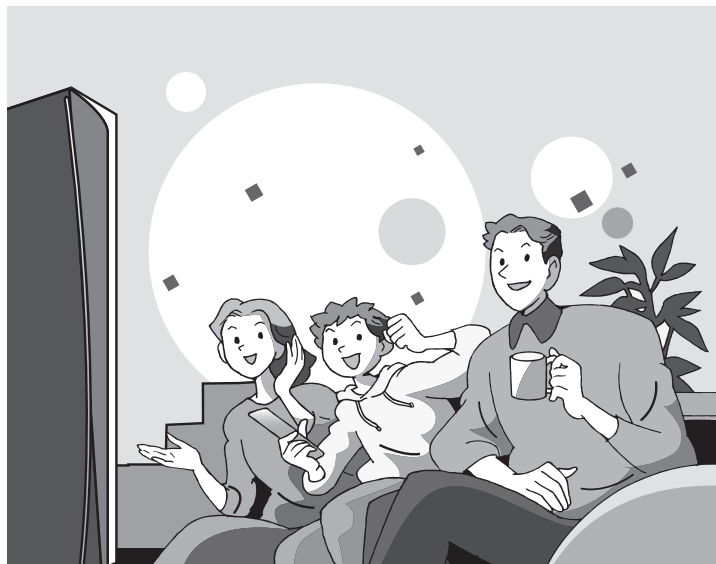
The player plays DVD-Video marked with labels containing the region number "1" or "ALL".

Example:



MULTI-FORMAT PLAYBACK

See page 4 for details



Getting started

Operations

Reference



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Getting started

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IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these operating instructions handy for future reference.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Accessories



To order accessories, call the dealer from whom you have made your purchase.

Use numbers indicated in parentheses when asking for replacement parts. (Product numbers correct as of January 2007. These may be subject to change.)

- ☐ 1 Remote control (EUR7631240)
- ☐ 1 Audio/video cable (K2KA6BA00004)
- ☐ 2 Remote control batteries

The included Canadian French language sheet corresponds to this unit's English displays.

User memo:

DATE OF PURCHASE _____
DEALER NAME _____
DEALER ADDRESS _____
TELEPHONE NUMBER _____

The model number and serial number of this product can be found on either the back or the bottom of the unit. Please note them in the space provided below and keep for future reference.

MODEL NUMBER **DVD-S43** _____
SERIAL NUMBER _____

CAUTION!

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE,

- **DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.**
- **USE ONLY THE RECOMMENDED ACCESSORIES.**
- **DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

CAUTION!

DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.

The socket outlet shall be installed near the equipment and easily accessible. The mains plug of the power supply cord shall remain readily operable. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from AC receptacle.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



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



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



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

Discs that can be played

Commercial discs

Disc Logo	Indicated in these instructions by	Remarks
	DVD-V	High quality movie and music discs
	VCD	Music discs with video Including SVCD (Conforming to IEC62107)
	CD	Music discs

Discs that cannot be played

Blu-ray, HD DVD, DVD-Audio, Version 1.0 of DVD-RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridges, 2.6-GB and 5.2-GB DVD-RAM, PAL discs and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

Handling precautions

- Do not attach labels or stickers to discs (This may cause disc warping, rendering it unusable).
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
 - Discs with exposed adhesive from removed stickers or labels (rented discs etc.).
 - Discs that are badly warped or cracked.
 - Irregularly shaped discs, such as heart shapes.

Recorded discs (Yes: Available, No: Not available)

Disc Logo	Recorded on a DVD recorder, etc.		Recorded on a personal computer, etc.					Finalizing ^{#5}
	DVD-VR ^{#2}	DVD-V ^{#3}	WMA	MP3	JPEG	MPEG4	DivX	
DVD-RAM 	Yes	—	No	Yes	Yes	No	No	Not necessary
DVD-R/RW 	Yes	Yes	No	Yes	Yes	Yes	Yes	Necessary
DVD-R DL 	No	Yes	No	No	No	No	No	Necessary
+R/+RW —	No	(Yes) ^{#4}	No	No	No	No	No	Necessary
+R DL —	No	(Yes) ^{#4}	No	No	No	No	No	Necessary
CD-R/RW ^{#1} —	—	—	Yes	Yes	Yes	Yes	Yes	Necessary ^{#6}

It may not be possible to play the above discs in some cases due to the type of discs, the condition of the recording, the recording method and how the files were created (→ 5, Tips for making WMA, MP3, JPEG, MPEG4 and DivX discs).

^{#1} This unit can also play CD-R/RW recorded with CD-DA or Video CD format.

^{#2} Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

^{#3} Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.

^{#4} Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

^{#5} A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.

^{#6} Closing the session will also work.

Note about using a DualDisc

The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so play may not be possible.

■ Tips for making WMA, MP3, JPEG, MPEG4 and DivX discs

Format	Disc	Extension	Reference
WMA	CD-R/RW ^{#1}	“.WMA” “.wma”	- You cannot play WMA files that are copy protected. - This unit is not compatible with Multiple Bit Rate (MBR: a file that contains the same content encoded at several different bit rates).
MP3	DVD-RAM ^{#2} DVD-R/RW ^{#3} CD-R/RW ^{#1}	“.MP3” “.mp3”	- Sampling frequency: DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24, 44.1 and 48 kHz CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz - This unit is not compatible with ID3 tags.
JPEG	DVD-RAM ^{#2} DVD-R/RW ^{#3} CD-R/RW ^{#1}	“.JPG” “.jpg” “.JPEG” “.jpeg”	- JPEG files taken on a digital camera that conform to DCF Standard Version 1.0 are displayed. - Files that have been altered, edited or saved with computer picture editing software may not be displayed. - This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF) or play pictures with attached audio.
MPEG4	DVD-R/RW ^{#3} CD-R/RW ^{#1}	“.ASF” “.asf”	- You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/ MPEG4 (Simple Profile) video system/G.726 audio system] recorded with the Panasonic SD multi cameras or DVD recorders with this unit. - The recording date may differ from that of the actual date.

Format	Disc	Extension	Reference
DivX	DVD-R/RW ^{#3} CD-R/RW ^{#1}	“.DIVX” “.divx” “.AVI” “.avi”	- Plays all versions of DivX video (including DivX[®] 6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX[®] media files. Functions added with DivX Ultra are not supported. - GMC (Global Motion Compensation) is not supported. - DivX files greater than 2GB or have no index may not play properly on this unit. - This unit supports all resolutions up to maximum of 720 × 480. - You can select up to 8 types of audio and subtitles on this unit.

^{#1} CD-R/RW

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

^{#2} DVD-RAM

Discs must conform to UDF 2.0.

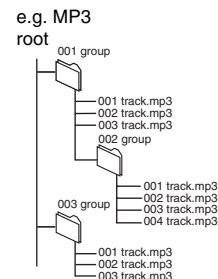
^{#3} DVD-R/RW

- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit is not compatible with multi-session. Only the default session is played.

- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

Naming folders and files (Files are treated as contents and folders are treated as groups on this unit.)

At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times).

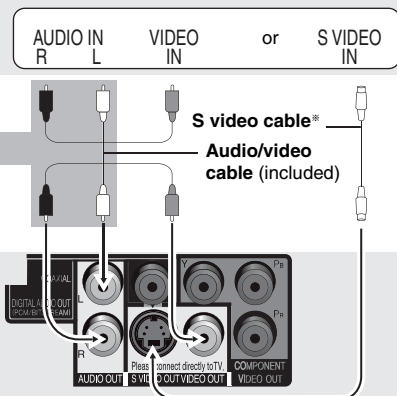


STEP 1 Connection

- Do not place the unit on amplifiers or equipment that may become hot. The heat can damage the unit.
- **Do not connect through the video cassette recorder.** Due to copy guard protection, the picture may not display properly.
- Turn off all equipment before connection and read the appropriate operating instructions.
- Connect the terminals of the same colour.

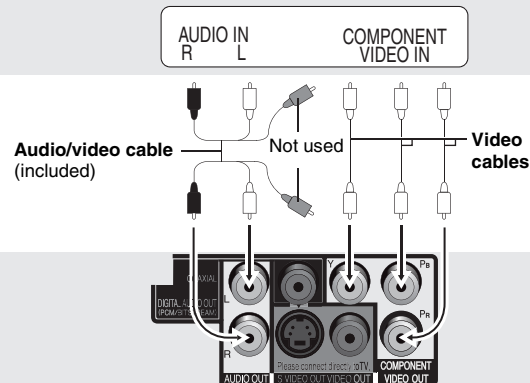
Television

With VIDEO IN or S VIDEO IN



* When using this connection, the audio cable (red and white plugs) should also be connected.

With COMPONENT VIDEO IN



Select "DARKER" from the "BLACK LEVEL" (→ 16, "VIDEO" menu).

To enjoy progressive video

Connect to a progressive output compatible television. Set "VIDEO OUT (I/P)" to "PROGRESSIVE", then follow the instructions on the menu screen (→ 16, "VIDEO" menu).

All Panasonic televisions with 480p input connectors are compatible. Consult the manufacturer if you have another brand of television.

Back of the unit

You can connect the audio cable to the 2-channel audio input terminals of an analog amplifier or system component to enjoy stereo sound.

■ Enjoying multi-channel surround sound

Amplifier with a built-in decoder or a decoder-amplifier combination

COAXIAL IN

Coaxial cable

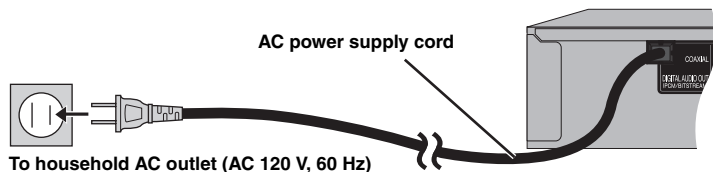


Back of the unit

- You cannot use DTS Digital Surround decoders not suited to DVD.

Change "PCM OUTPUT", "DOLBY DIGITAL" and "DTS" (→ 17, "AUDIO" menu).

■ Connect the AC power supply cord last

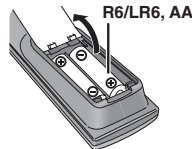


Conserving power

This unit consumes a small amount of power even when it is turned off (1 W). To save power when the unit is not to be used for a long time, unplug it from the household AC outlet.

STEP 2 The remote control

■ Batteries



- Insert so the poles (+ and -) match those in the remote control.
- Do not use rechargeable type batteries.

Do not:

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

■ Use

Aim at the remote control sensor (→ 8), avoiding obstacles, at a maximum range of 7 m (23 feet) directly in front of the unit.

STEP 3 Quick setup

Preparation

Turn on the television and select the appropriate video input on the television.

- 1 Press [⏻].
- 2 Press [SETUP].
QUICK SETUP screen appears.
- 3 Follow the on-screen instructions and select the settings with [▲ ▼] and [ENTER].
 - Press [RETURN] to return to previous screen.
- 4 Press [ENTER] to finish setting.
- 5 Press [SETUP] to exit the setup menu.

- To change these settings later, select "QUICK SETUP" (→ 17, "OTHERS" menu).

Basic play

1 Power ON.



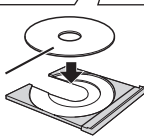
Remote control sensor

2 Open the disc tray.

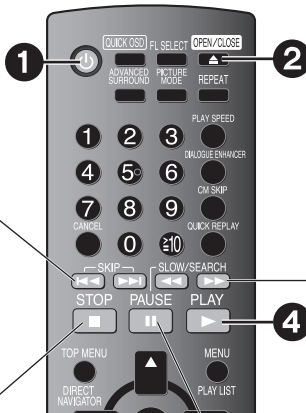


3 Load the disc.

- Load double-sided discs so the label for the side you want to play is facing up.
- DVD-RAM: Remove discs from their cartridges before use.



4 Start play.



Skip

- Press [◀◀▶▶] to skip chapters, tracks, etc.
- **DVD-VR** Can also skip to the markers.

Stop

The position is memorized when "▷" flashes on the display.

- Press [▶] (PLAY) to resume. (**Resume play**)
- Press [■] to clear the position.

Search (during play)

Slow-motion (during pause)

- Up to 5 steps
- Press [▶] (PLAY) to restart play.
- **VCD** Slow-motion: forward direction only
- **MPEG4** **DivX** Slow-motion: Does not work.

Pause

- Press [▶] (PLAY) to restart play.

Standby/on switch (⏻/⏻)

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

Note

- **DISCS CONTINUE TO ROTATE WHILE MENUS ARE DISPLAYED.** Press [■] when you finish to preserve the unit's motor and your television screen.

- To play **MP3** or **JPEG** contents on DVD-RAM, set "DVD-VR/DATA" to "DATA" (→ 17, "OTHERS" menu).
- Total title number may not be displayed properly on +R/+RW.

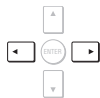
If you are experiencing problems, refer to troubleshooting guide (→ 19, 20).

Frame-by-frame

(during pause)

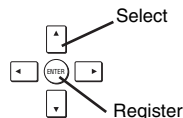
DVD-VR **DVD-V**

VCD



- **DVD-VR** **VCD** forward direction only

On-screen item select



Return to previous screen



Enter number



DVD-VR **DVD-V** **VCD** **CD**

e.g. To select 12: [≥ 10] → [1] → [2]

WMA **MP3** **JPEG** **MPEG4** **DivX**

e.g. To select 123:

[≥ 10] → [1] → [2] → [3] → [ENTER]

Disc menu



DVD-V

Shows a disc top menu.

DVD-VR

Plays the programs (→ 11).



DVD-V

Shows a disc menu.

DVD-VR

Plays a playlist (→ 11).



VCD with playback control (→ 18, Glossary)

Shows a disc menu.

Main unit display



Number display

↑
Time display

Convenient functions

QUICK OSD

Displaying current playback condition

Quick OSD

Press [**QUICK OSD**].

e.g. **CD**

Current playback number

Press [$\blacktriangle$ $\blacktriangledown$] to change current/elapsed play time.

Play mode

---: Normal play
PGM: Program play
RND: Random play



Playback condition Current position

- To exit the screen, press [**QUICK OSD**] again.

REPEAT

Repeat play

(Only when the elapsed play time can be displayed.)

JPEG: you can use this feature even if there is no elapsed time display.)

Press [**REPEAT**] to select an item to be repeated.

e.g. **DVD-V**

- To cancel, press [**REPEAT**] to select "OFF".



PLAY SPEED

Changing play speed

(Only when the elapsed play time can be displayed) **DVD-VR** **DVD-V**

1 During play, press [**PLAY SPEED**].

2 Press [$\blacktriangle$ $\blacktriangledown$] to increase or decrease the playing speed from "×0.6" to "×1.4" in 0.1 units.



- Press [$\blacktriangleright$] (PLAY) to return to the normal play.
- After you change the speed
 - ADVANCED SURROUND (→ 10) does not work.
 - Digital audio output switches to PCM 2ch.
- This may not work depending on the disc's recording.

CM SKIP

Skipping about one minute forward

DVD-VR **DVD-V**

Convenient when you want to skip commercials, etc.

During play, press [**CM SKIP**].

- This may not work depending on the play position.
- **DVD-VR** Does not work:
 - with parts containing still pictures.
 - when playing a playlist.

Convenient functions

QUICK REPLAY



Quick replay

(Only when the elapsed play time can be displayed)

DVD-VR **DVD-V** **VCD** **CD** **WMA** **MP3**

Press **[QUICK REPLAY]** to skip back about 10 seconds.

- This may not work depending on the disc's recording.

ADVANCED SURROUND



Enjoying virtual surround

ADVANCED SURROUND

DVD-VR **DVD-V** **VCD** **CD** **WMA** **MP3** (2 channels or more only)

Press **[ADVANCED SURROUND]** to select "A.SURROUND 1", "A.SURROUND 2", "A.SURROUND 3" or "OFF".

OFF → A.SURROUND 1 → A.SURROUND 2
 ↑ A.SURROUND 3 ←



A.SURROUND 1: Light effect
A.SURROUND 2: Medium effect
A.SURROUND 3: Strong effect
OFF

- When using discs recorded with surround sound, sound seems to come from speakers on either side of you.
- Optimum seating position is 3 to 4 times the distance between the front left and right speakers or the width of the television if using the television's speakers.
- Do not use in combination with surround effects on other equipment.

DIALOGUE ENHANCER



Making the dialogue easier to hear

DIALOGUE ENHANCER

DVD-V (Dolby Digital, DTS, 3-channel or over, with the dialogue recorded in the center channel)

DivX (Dolby Digital, 3-channel or over, with the dialogue recorded in the center channel)

To make the dialogue in movies easier to hear

Press **[DIALOGUE ENHANCER]** to select "ON".

- To cancel, press **[DIALOGUE ENHANCER]** again to select "OFF".



SUBTITLE



Changing subtitles

Discs with subtitles

Press **[SUBTITLE]** to select the subtitle language.

e.g. **DVD-V**

- To clear the subtitles, press **[SUBTITLE]** several times to select "OFF".
- On +R/+RW, subtitle number may be shown for subtitles that are not displayed.
- This may not work depending on the discs.



AUDIO



Changing soundtracks

DVD-V **DivX** with multiple soundtracks

DVD-VR **VCD**

DVD-V **DivX**

Press **[AUDIO]** to select the soundtrack.

e.g. **DivX**

DVD-VR **VCD**

Press **[AUDIO]** to select "L", "R", "L+R" or "L R".



ANGLE/PAGE



Angle select

DVD-V with multiple angles

Press **[ANGLE/PAGE]** to select the angle.



ANGLE/PAGE



Still picture rotation

JPEG

During pause, press **[ANGLE/PAGE]** to rotate the still picture.

ZOOM



Zoom

DVD-VR **DVD-V** **VCD** **JPEG** **MPEG4** **DivX**

1 **JPEG** Press **[II]**.

2 Press **[ZOOM]** to select the zoom ratio.

NORMAL → AUTO (**DVD-VR** **DVD-V** **VCD** only) → ×2 → ×4

NORMAL: Displayed in the size used for recording.

AUTO: Automatically zooms in and adjusts the size of images with upper and lower black bands.

×2: 2X zoom

×4: 4X zoom



TRANSFER MODE

Transfer mode

Discs with pictures

If you have set "VIDEO OUT (I/P)" to "PROGRESSIVE" (→ 16, "VIDEO" menu)

Press [TRANSFER MODE] to select the method of conversion for progressive output to suit the type of material.



AUTO1 (normal): Automatically detects the film and video content, and appropriately converts it.

AUTO2: In addition to AUTO1, automatically detects film contents with different frame rates and appropriately converts it.

VIDEO: Select when using AUTO1 and AUTO2, and the content is distorted.

• When the tray is opened, the setting will return to AUTO1.

PICTURE MODE

Changing picture mode

Discs with pictures

Press [PICTURE MODE] to select the picture quality.



NORMAL: Normal images

CINEMA1: Mellows images and enhances detail in dark scenes.

CINEMA2: Sharpens images and enhances detail in dark scenes.

DYNAMIC: Enhances the contrast for powerful images.

ANIMATION: Suitable for animation.

SOFT SKIN: Softens the skin of people in the images.

DNR

Smoothing block noise

Motion picture

You can smooth block noise and reduce the smudging that appears around contrasting sections of the picture.

Press [DNR] to select "1", "2", "3" or "OFF".

1: Light effect

2: Medium effect

3: Strong effect

OFF



Playing programs/playlists

DVD-VR

- Titles appear only if they have been entered.
- You cannot edit playlists and titles.
- Set "DVD-VR/DATA" to "DVD-VR" to play **DVD-VR** on DVD-RAM (→ 17, "OTHERS" menu).

DIRECT NAVIGATOR

Playing the programs

- 1 While stopped, press [DIRECT NAVIGATOR].
- 2 Press [▲ ▼] to select the program.
 - Press [◀ ▶] to skip page by page.
- 3 Press [ENTER].

PG	DATE	LENGTH	TITLE
1	01/25 04:31	0:55:31	MOVIE PICTURE PLAYBACK
2	01/25 05:20	0:28:20	STILL PICTURE PLAYBACK
3	01/28 10:00	0:36:00	HYBRID PICTURE PLAYBACK
4	01/29 11:15	0:48:55	PARTIAL PLAYBA CK

PLAY LIST

Playing a playlist
(Only when the disc contains a playlist)

- 1 While stopped, press [PLAY LIST].
- 2 Press [▲ ▼] to select the playlist.
 - Press [◀ ▶] to skip page by page.
- 3 Press [ENTER].

PL	DATE	LENGTH	TITLE
1	01/10 10:00	0:30:11	MOVIE PICTURE PLAYBACK
2	01/15 08:00	0:55:30	STILL PICTURE PLAYBACK
3	01/18 08:01	0:55:31	HYBRID PICTURE PLAYBACK
4	01/19 07:59	0:55:29	PARTIAL PLAYBA CK

Playing audio (WMA/MP3), picture (JPEG) and video (DivX/MPEG4) discs

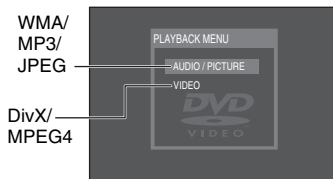
Preparation

Set "DVD-VR/DATA" to "DATA" to play **MP3** or **JPEG** contents on DVD-RAM (→ 17, "OTHERS" menu).

- Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

While the "PLAYBACK MENU" is displayed

Press [▲ ▼] to select "AUDIO/PICTURE" or "VIDEO" and press [ENTER].



- While the menu is displayed

Press [▲ ▼ ◀ ▶] to select an item and press [ENTER].

- Repeat this step if there are multiple layers.

Folder icon: :Group (Folder)*

File icon: :DivX/MPEG4 content (File)*



Folder icon: :Group (Folder)*

File icon: :WMA/MP3 content (File)*

File icon: :JPEG content (File)*



*Files are treated as contents and folders are treated as groups in these instructions.

- Press [ANGLE/PAGE] to skip page by page.
- Press [RETURN] to go back to previous screen.
- Press [MENU] to display/exit the screen.

DivX The video content is distorted according to the recorded method to the discs. This unit cannot play these kinds of discs normally.

Select the picture in Thumbnail menu **JPEG**

- While pictures are being displayed, press [TOP MENU] to display the thumbnails.

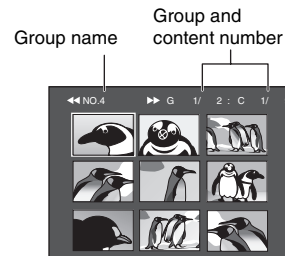
To select a picture in a group

Press [▲ ▼ ◀ ▶] to select the picture and press [ENTER].

- Press [▶▶] to skip forward page by page.
- Press [◀◀] to skip backward page by page.

To select picture in other group

- Press [▲] to select the group name.
- Press [◀ ▶] to select the group and press [ENTER].
- Press [▲ ▼ ◀ ▶] to select the picture and press [ENTER].



About DivX VOD content

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the on line instructions for purchasing DivX VOD content to enter the unit's registration code and register the unit. For more information about DivX VOD, visit www.divx.com/vod.

Display the unit's registration code

(→ 17, REGISTRATION in "OTHERS" menu)

8 alphanumeric
characters



- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for the first time, another registration code is then displayed in "REGISTRATION". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.
- If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("AUTHORIZATION ERROR" is displayed.)

Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ("RENTAL EXPIRED" is displayed.)

When playing this content

- The number of remaining plays is reduced by one if
 - you press [⏮] or [SETUP].
 - you press [■]. (Press [⏮] to stop play.)
 - you press [⏮] or [⏭] etc. and arrive at another content or the start of the content being played.
- Resume (→ 8, Stop) function does not work.

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

"DTS" is a registered trademark of DTS, Inc. and "DTS 2.0 + Digital Out" is a trademark of DTS, Inc.

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.

This product is licensed under the MPEG-4 Visual patent portfolio license for the personal and non-commercial use of a consumer for (i) encoding video in compliance with the MPEG-4 Visual Standard ("MPEG-4 Video") and/or (ii) decoding MPEG-4 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed by MPEG LA to provide MPEG-4 Video. No license is granted or shall be implied for any other use. Additional information including that relating to promotional, internal and commercial uses and licensing may be obtained from MPEG LA, LLC. See <http://www.mpegla.com>.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

Official DivX® Certified product.

Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.

DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

Changing the play sequences

PLAY MODE

☐

Program play
 Except **DVD-VR** (up to 30 items)

1 **WMA MP3 JPEG MPEG4 DivX**

Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

If the "PLAYBACK MENU" is displayed

Press [**▲ ▼**] to select "AUDIO/PICTURE" or "VIDEO" and press [**ENTER**].

WMA/MP3/JPEG

DivX/MPEG4

2 While stopped, press [PLAY MODE] several times to select "*** PROGRAM".

- When playing a disc with both WMA/MP3 and JPEG recorded, select "MUSIC PROGRAM" for WMA/MP3 or "PICTURE PROGRAM" for JPEG pictures.
- You cannot set both "MUSIC PROGRAM" and "PICTURE PROGRAM".

e.g. **DivX**

VIDEO PROGRAM	
SELECT CONTENT	CONTENT NAME
ALL	1
#a01_divx001	2
#a02_divx002	3
#a03_divx003	4
	5
	6
	7
	8
	9
	10

START: PLAY CLEAR ALL

3 Press [**▲ ▼**] to select an item and press [**ENTER**].

- Repeat this step to program other items.
- To select all items in a disc or group, select "ALL" and press [**ENTER**].
- Press [**ANGLE/PAGE**] to skip page by page.
- Press [**RETURN**] to return to the previous menu if any.

4 Press [**▶**] (PLAY) to start play.

Clearing the program

Press [**▶**] and then press [**▲ ▼**] to select the item and press [**CANCEL**].

Clearing the whole program

Press [**▶**] several times to select "CLEAR ALL" and press [**ENTER**]. The whole program is also cleared when the unit is turned off or the disc tray is opened.

To exit the program screen

Press [**PLAY MODE**] several times.

PLAY MODE

☐

Random play
DVD-V VCD CD
WMA MP3 JPEG MPEG4 DivX

1 **WMA MP3 JPEG MPEG4 DivX**

Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

If the "PLAYBACK MENU" is displayed

Press [**▲ ▼**] to select "AUDIO/PICTURE" or "VIDEO" and press [**ENTER**].

WMA/MP3/JPEG

DivX/MPEG4

2 While stopped, press [PLAY MODE] several times to select "*** RANDOM".

- When playing a disc with both WMA/MP3 and JPEG recorded, select "MUSIC RANDOM" for WMA/MP3 or "PICTURE RANDOM" for JPEG pictures.

e.g. **DivX**

3 **WMA MP3 JPEG MPEG4 DivX**

Only when the disc has groups (folders)

Press [**▲ ▼**] to select a group and press [**ENTER**].

- "*" will be displayed next to the selected groups.
- Press [**ENTER**] again to clear.
- To select multiple groups, repeat this step.
- Press [**ANGLE/PAGE**] to skip page by page.
- To select all items in a disc, select "ALL".

DVD-V

Only when the disc has multiple titles

Press [**▲ ▼**] to select a title and press [**ENTER**].

- "*" will be displayed next to the selected title.

4 Press [**▶**] (PLAY) to start play.

To exit the random screen

Press [**PLAY MODE**] several times.

Using on-screen menus

1 FUNCTIONS



Each time you press the button:

On-screen menu 1 (Disc/Play)

↓
On-screen menu 2 (Video)

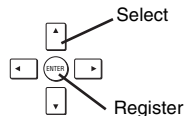
↓
On-screen menu 3 (Audio)

↓
exit

Display the on-screen menus.

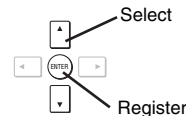
Items shown differ depending on the type of software.

2



Select the item.

3



Make the settings.

4



Press to exit.

On-screen menu 1 (Disc/Play)

e.g. DVD-V T1 C2	PG SEARCH PL SEARCH TITLE SEARCH CHAPTER SEARCH TRACK SEARCH CONTENT SEARCH	To start from a specific item Press [▲ ▼] to select and press [ENTER]. ● VCD This does not work when using playback control (→ 18, Glossary).
	AUDIO	→ 10, Changing soundtracks
	PLAY SPEED	→ 9, Changing play speed
	REPEAT MODE	→ 9, Repeat play A-B repeat 1 Press [▲ ▼] to select "A-B". 2 Press [ENTER] at the starting and ending points. ● Press [ENTER] again to cancel.
	SUBTITLE	→ 10, Changing subtitles
	ANGLE	→ 10, Angle select
	DATE DISPLAY JPEG	Select "ON" to display shooting date ON ↔ OFF
	ROTATION JPEG	→ 10, Still picture rotation

On-screen menu 2 (Video)

	PICTURE MODE	→ 11, Changing picture mode
	ZOOM	→ 10, Zoom
	DNR	→ 11, Smoothing block noise
	TRANSFER MODE	→ 11, Transfer mode
	SOURCE SELECT DivX	When you select "AUTO" the constructing method of the DivX contents is automatically distinguished and output. If the picture is distorted, select "INTERLACE" or "PROGRESSIVE" depending on which constructing method was used when the contents were recorded to disc. AUTO INTERLACE PROGRESSIVE

On-screen menu 3 (Audio)

	DIALOGUE ENHANCER	→ 10, Making the dialogue easier to hear
	ADVANCED SURROUND	→ 10, Enjoying virtual surround

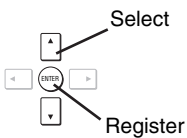
Changing the player settings

1



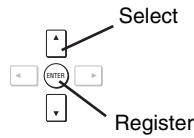
Shows setup menu.

2



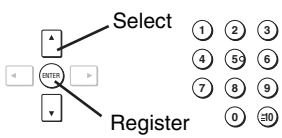
Select the menu.

3



Select the item.

4



Make the settings.

5



Press to exit.

- Underlined items are the factory preset.
- The QUICK SETUP enables successive settings of the items in the shaded area.

■ “DISC” menu

SETTING STATE	Display the current setting of the items below
AUDIO Choose the audio language.	<u>ENGLISH</u> FRENCH SPANISH ORIGINAL ^{#1} OTHER---- ^{#2}
SUBTITLE Choose the subtitle language.	<u>AUTO</u> ^{#3} ENGLISH FRENCH SPANISH OTHER---- ^{#2}
MENUS Choose the language for disc menus.	<u>ENGLISH</u> FRENCH SPANISH OTHER---- ^{#2}
RATINGS Set a ratings level to limit DVD-Video play.	Setting ratings (When level 8 is selected) 0 LOCK ALL: To prevent play of discs without ratings levels. 1 to 7: To prohibit play of DVD-Video with corresponding ratings recorded on them. 8 NO LIMIT: To play all discs. When setting a ratings level, a password screen is shown. Follow the on-screen instructions. Do not forget your password. A message screen will be shown if a DVD-Video exceeding the ratings level is inserted in the unit. Follow the on-screen instructions.
PASSWORD Change the password for “RATINGS” (→ above).	1 Select “CHANGE” and press [ENTER]. 2 Enter the current password with the numbered buttons, then press [ENTER]. 3 Enter the new password with the numbered buttons, then press [ENTER]. 4 When “VERIFY” is displayed, please verify the password and input it again.

■ “VIDEO” menu

SETTING STATE	Display the current setting of the items below
TV ASPECT Choose the setting to suit your television and preference.	<u>4:3PAN&SCAN</u> 4:3LETTERBOX 4:3ZOOM 16:9NORMAL 16:9SHRINK 16:9ZOOM
TV TYPE Select to suit the type of television.	<u>STANDARD</u> CRT LCD PROJECTION PLASMA
STILL MODE Specify the type of picture shown when paused.	AUTO FIELD: The picture is not blurred, but picture quality is lower. FRAME: Overall quality is high, but the picture may appear blurred.
BLACK LEVEL Change the black level of the picture if you connected a television through the COMPONENT VIDEO OUT terminals.	LIGHTER: When connected through VIDEO OUT or S VIDEO OUT. DARKER: When connected through COMPONENT VIDEO OUT.
VIDEO OUT (I/P) Select “PROGRESSIVE” only if connecting to a progressive output compatible television.	INTERLACE PROGRESSIVE When you select “PROGRESSIVE”, a message screen will appear. • For progressive output, press [▲] and then press [ENTER]. • Press [RETURN] to cancel.

■ “AUDIO” menu

SETTING STATE	Display the current setting of the items below	
PCM OUTPUT Check the digital input limitations of the equipment you connect using COAXIAL terminal and select the maximum sampling frequency of PCM digital output.	UP TO 48 kHz:	When connected to equipment compatible with 44.1 or 48 kHz
	UP TO 96 kHz:	When connected to equipment compatible with 88.2 or 96 kHz
DOLBY DIGITAL With COAXIAL connections (→ 7)	BITSTREAM	Select “BITSTREAM” when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select “PCM”. (If the bitstream is output to the equipment without a decoder, high levels of noise can be output and may damage your speakers and hearing.)
DTS With COAXIAL connections (→ 7)	PCM	
	BITSTREAM	
	PCM	
DYNAMIC RANGE	ON: Adjusts for clarity even when the volume is low through compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with DOLBY DIGITAL) OFF	

■ “DISPLAY” menu

SETTING STATE	Display the current setting of the items below	
LANGUAGE	ENGLISH	FRANÇAIS ESPAÑOL

■ “OTHERS” menu

SETTING STATE	Display the current setting of the items below	
REGISTRATION Displays the unit's registration code.	You need this registration code to purchase and play DivX Video-on-Demand (VOD) content. Select “SHOW CODE” and press [ENTER]. (→ 13, About DivX VOD content)	
JPEG TIME	To change the slideshow timing 1 SEC to 15 SEC (in 1 unit) 15 SEC to 60 SEC (in 5 unit) 60 SEC to 180 SEC (in 30 unit) • “3 SEC” is the factory preset.	
FL DIMMER Changes the brightness of the unit's display.	BRIGHT	DIM AUTO: The display is dimmed, but brightens only when you perform some operations.
AUTO POWER OFF	ON:	
	OFF	OFF The unit switches to standby mode after about 30 minutes in the stop mode.
QUICK SETUP	Select “SET” and press [ENTER].	
DVD-VR/DATA	DVD-VR:	To play DVD-VR on DVD-RAM.
	DATA:	To play MP3 or JPEG contents on DVD-RAM.
DEFAULTS This returns all values in the setup menus to the default settings.	Select “RESET” and press [ENTER]. The password screen is shown if “RATINGS” (→ 16) is set. Please enter the same password with the numbered buttons, then press [ENTER], then turn the unit off and on again.	

※1 The original language designed on the disc is selected.

※2 Input a code number referring to the table (→ 18).

※3 If the language selected for “AUDIO” is not available, subtitles appear in that language (If available on the disc).

Language code list

Abkhazian:	6566	Gujarati:	7185	Quechua:	8185
Afar:	6565	Hausa:	7265	Rhaeto-Romance:	8277
Afrikaans:	6570	Hebrew:	7387	Romanian:	8279
Albanian:	8381	Hindi:	7273	Russian:	8285
Ameharic:	6577	Hungarian:	7285	Samoan:	8377
Arabic:	6582	Icelandic:	7383	Sanskrit:	8365
Armenian:	7289	Indonesian:	7378	Scots Gaelic:	7168
Assamese:	6583	Interlingua:	7365	Serbian:	8382
Aymara:	6589	Irish:	7165	Serbo-Croatian:	8372
Azerbaijani:	6590	Italian:	7384	Shona:	8378
Bashkir:	6665	Japanese:	7465	Sindhi:	8368
Basque:	6985	Javanese:	7487	Singhalese:	8373
Bengali, Bangla:	6678	Kannada:	7578	Slovak:	8375
Bhutani:	6890	Kashmiri:	7583	Slovenian:	8376
Bihari:	6672	Kazakh:	7575	Somali:	8379
Breton:	6682	Kirghiz:	7589	Spanish:	6983
Bulgarian:	6671	Korean:	7579	Sundanese:	8385
Burmese:	7789	Kurdish:	7585	Swahili:	8387
Byelorussian:	6669	Laotian:	7679	Swedish:	8386
Cambodian:	7577	Latin:	7665	Tagalog:	8476
Catalan:	6765	Latvian, Lettish:	7686	Tajik:	8471
Chinese:	9072	Lingala:	7678	Tamil:	8465
Corsican:	6779	Lithuanian:	7684	Tatar:	8484
Croatian:	7282	Macedonian:	7775	Telugu:	8469
Czech:	6783	Malagasy:	7771	Thai:	8472
Danish:	6865	Malay:	7783	Tibetan:	6679
Dutch:	7876	Malayalam:	7776	Tigrinya:	8473
English:	6978	Maltese:	7784	Tonga:	8479
Esperanto:	6979	Maori:	7773	Turkish:	8482
Estonian:	6984	Marathi:	7782	Turkmen:	8475
Faroese:	7079	Moldavian:	7779	Twì:	8487
Fiji:	7074	Mongolian:	7778	Ukrainian:	8575
Finnish:	7073	Nauru:	7865	Urdu:	8582
French:	7082	Nepali:	7869	Uzbek:	8590
Frisian:	7089	Norwegian:	7879	Vietnamese:	8673
Galician:	7176	Oriya:	7982	Volapük:	8679
Georgian:	7565	Pashto, Pushto:	8083	Welsh:	6789
German:	6869	Persian:	7065	Wolof:	8779
Greek:	6976	Polish:	8076	Xhosa:	8872
Greenlandic:	7576	Portuguese:	8084	Yiddish:	7473
Guarani:	7178	Punjabi:	8065	Yoruba:	8979
				Zulu:	9085

Glossary

DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size.

Film and video

DVD-Videos are recorded using either film or video. This unit can determine which type has been used, then uses the most suitable method of progressive output.

Film: Recorded at 24 frames per second. (Recorded at 30 frames per second as well). Generally appropriate for motion picture films.

Video: Recorded at 30 frames/60 fields per second. Generally appropriate for TV drama programs or animation.

Finalize

A process that makes play of a recorded CD-R, CD-RW, DVD-R, etc. possible on equipment that can play such media.

After finalizing, the disc becomes play-only and you can no longer record or edit.

JPEG (Joint Photographic Experts Group)

This is a system used for compressing/decoding colour still pictures. If you select JPEG as the storage system on digital cameras, etc., the data will be compressed to 1/10–1/100 of its original size. The benefit of JPEG is less deterioration in picture quality considering the degree of compression.

MPEG4

A compression system for use on mobile devices or a network, that allows highly efficient recording at a low bit rate.

MP3 (MPEG Audio Layer 3)

An audio compression method that compresses audio to approximately one tenth of its size without any considerable loss of audio quality.

Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus. (This unit is compatible with version 2.0 and 1.1.)

Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated in the chart do not solve the problem, refer to "Product information" on page 22. (Reference pages are shown in parentheses.)

Power

No power.	Insert the AC power supply cord securely into the household AC outlet. (7)
The unit is automatically switched to the standby mode.	When "AUTO POWER OFF" is set to "ON", the unit automatically switches to standby after approximately 30 minutes in the stop mode. (17)

No operation

No response when any buttons pressed.	- This unit cannot play discs other than the ones listed in these operating instructions. (4) - The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it. - Condensation has formed: Wait 1 to 2 hours for it to evaporate.
No response when remote control buttons pressed.	- Check that the batteries are installed correctly. (7) - The batteries are depleted: Replace them with new ones. (7) - Point the remote control at the remote control sensor and operate. (8)
No picture or sound.	- Check the video or audio connection. (6, 7) - Check the power or input setting of the connected equipment. - Check that the disc has something recorded on it.
You have forgotten your ratings password. Reset all the settings to Factory Preset.	While stopped, remove the disc, and then press and hold [▶] (PLAY) and [■] on the unit and then also press and hold [POWER ○/I] on the unit until "INITIALIZED" disappears from the television. Turn the unit off and on again. All settings will return to the default values.

Specific operation impossible or incorrect

It takes time before play starts.	- Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed, however this is normal. - This is normal on DivX video.
The program play function do not work.	These functions do not work with some DVD-Videos.
Menu doesn't appear. [VCD] with playback control	Press [■] twice and then press [▶] (PLAY).

Play doesn't start.	- If a disc contains CD-DA and other formats, proper playback may not be possible. - This unit may not play WMA and MPEG4 that contains still picture data. - If playing DivX VOD content, refer to the homepage where you purchased it. (Example: www.divx.com/vod)
No subtitles.	Display the subtitles. (10)
The subtitles overlap closed captions recorded on discs.	Clear the subtitles. (10)
In A-B repeat, point B is automatically set.	The end of an item becomes point B when it is reached.
Repeat play is automatically canceled.	Repeat play may be canceled when you press [QUICK REPLAY] or [CM SKIP].

Picture incorrect

Picture distorted.	- Ensure that the unit is not connected through a video cassette recorder. (6) - Make sure that progressive output has not been selected when the connected television is not progressive compatible. Press and hold [RETURN] until the picture displays correctly. The settings will return to "INTERLACE". DivX Change "SOURCE SELECT" in "On-screen menu 2 (Video)". (15)
Picture size doesn't fit the screen.	- Change "TV ASPECT" in "VIDEO" menu. (16) - Use the television to change the aspect. If your television does not have that function, change "TV ASPECT". (16) - Change the Zoom setting. (10)
Picture stops.	Picture may stop if the DivX files are greater than 2GB.
The television may display incorrectly or colours appear faded.	- PAL discs cannot be played. - Connect to a progressive output compatible television to enjoy progressive video.
Menu not displayed correctly.	- Restore the zoom ratio to "NORMAL". (10) - Change "TV ASPECT" in "VIDEO" menu. (16)

Troubleshooting guide

Progressive video

There is ghosting when progressive output is on.	This problem is caused by the editing method or material used on DVD-Video, but should be corrected if you use interlace output. Change "VIDEO OUT (I/P)" in "VIDEO" menu to "INTERLACE". (16)
Pictures not in progressive output.	If the unit is connected to the television through VIDEO OUT or S VIDEO OUT terminal output will be interlace.
Closed captions not displayed.	When progressive output is on, closed captions will not be displayed.

Sound incorrect

Sound distorted.	Set ADVANCED SURROUND to "OFF". (10)
Piercing noise comes from the speakers.	If you have connected a digital amplifier which does not include decoder, be sure to select "PCM" in "DOLBY DIGITAL" or "DTS" in "AUDIO" menu. (17)
Effects do not work.	- None of the audio effects work when the unit is outputting bitstream signals from the COAXIAL terminal. (7) - Some audio effects do not work or have less effect with some discs. - ADVANCED SURROUND does not work if you have changed the play speed. (9)
No sound	- There may be a pause in sound when you change the play speed. DivX Audio may not be output due to how files were created. (5)

Recording

Cannot record to digital recording equipment. (Incorrect sound recorded.)	- You cannot record WMA/MP3. - You cannot record DVDs that have protection preventing digital recording. - You cannot record DVDs if the recording equipment cannot handle signals with a sampling frequency of 48 kHz. - Make the following settings: - ADVANCED SURROUND: OFF (10) - PCM OUTPUT: UP TO 48 kHz (17) - DOLBY DIGITAL/DTS: PCM (17)
--	--

Unit displays

	- You inserted a disc the unit cannot play; insert one it can. (4) - You inserted a blank disc. - You inserted a disc that has not been finalized. (4)
	- The disc may be dirty. (21) - You haven't inserted the disc correctly: Insert it correctly. (8)

 The number following "H" depends on the status of the unit.	- Trouble may have occurred. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it. - If the service numbers fail to clear, note the service number and contact a qualified service person.
	- You haven't inserted a disc: Insert one. - You haven't inserted the disc correctly: Insert it correctly. (8)

Television displays

"ERR H□□" (□□ stands for a number.)	- Trouble may have occurred. The number following "ERR H" depends on the status of the unit. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it. - If the service numbers fail to clear, note the service number and contact a qualified service person.
"ERR U11"	- The disc may be dirty. (21) - You haven't inserted the disc correctly: Insert it correctly. (8)
"⊘"	The operation is prohibited by the unit or disc.
"NO DISC"	- You haven't inserted a disc: Insert one. - You haven't inserted the disc correctly: Insert it correctly. (8)
"CANNOT PLAY AUDIO" "NO AUDIO"	Audio has not been recorded, or recorded in a format this unit cannot playback. Video playback only is possible. (5)
"THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC."	- You inserted a disc the unit cannot play; insert one it can. (4) - You inserted a disc that has not been finalized. (4) - You inserted a blank disc.
"THIS DISC MAY NOT BE PLAYED IN YOUR REGION."	You can only play DVD-Video if their region number is "1", "ALL" or multiple region numbers including "1". (Cover)
"AUTHORIZATION ERROR"	You are trying to play the DivX VOD content that was purchased with a different registration code. You cannot play the content on this unit. (13)
"RENTAL EXPIRED"	The DivX VOD content has zero remaining plays. You cannot play it. (13)

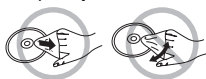
Maintenance

■ Clean this unit with a soft, dry cloth

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.
- Cleaning of the lens is generally not necessary although this depends on the operating environment.
- Do not use commercially available lens cleaners as they may cause malfunction.

■ Clean discs

Wipe with a damp cloth and then wipe dry.



Specifications

Signal system: NTSC

Operating temperature range:
+5 to +35 °C (+41 to +95 °F)

Operating humidity range: 5 to 90 % RH (no condensation)

Discs played [8 cm (3 ") or 12 cm (5 ")]:

- (1)DVD (DVD-Video, DivX[®]6,7)
- (2)DVD-RAM (DVD-VR, JPEG[®]4,7, MP3[®]2,7)
- (3)DVD-R (DVD-Video, DivX[®]6,7, MP3[®]2,7, JPEG[®]4,7, MPEG4[®]5,7, DVD-VR)
- (4)DVD-R DL (DVD-Video)
- (5)DVD-RW (DVD-Video, MPEG4[®]5,7, DivX[®]6,7, MP3[®]2,7, JPEG[®]4,7, DVD-VR)
- (6)+R/+RW (Video) (7)+R DL (Video)
- (8)CD, CD-R/RW (CD-DA, Video CD, SVCD[®]1, MP3[®]2,7, WMA[®]3,7, JPEG[®]4,7, MPEG4[®]5,7, DivX[®]6,7)

Video output:
Output level: 1 Vp-p (75 Ω)
Output connector: Pin jack (1 system)

S-video output:
Y output level: 1 Vp-p (75 Ω)
C output level: 0.286 Vp-p (75 Ω)
Output connector: S terminal (1 system)

Component video output:
[NTSC: 525 (480)p/525 (480)i]

Y output level: 1 Vp-p (75 Ω)
P_B output level: 0.7 Vp-p (75 Ω)
P_R output level: 0.7 Vp-p (75 Ω)
Output connector: Pin jack (Y: green, P_B: blue, P_R: red) (1 system)

Audio output:
Output level: 2 Vrms (1 kHz, 0 dB)
Output connector: Pin jack
Number of connectors: 2 channel: 1 system

- Audio performance:**
- (1) Frequency response:
 - DVD (linear audio): 4 Hz to 22 kHz (48 kHz sampling)
4 Hz to 44 kHz (96 kHz sampling)
 - CD Audio: 4 Hz to 20 kHz
 - (2) S/N ratio:
 - CD Audio: 115 dB
 - (3) Dynamic range:
 - DVD (linear audio): 92 dB
 - CD Audio: 90 dB
 - (4) Total harmonic distortion:
 - CD Audio: 0.003 %

Digital audio output:
Coaxial digital output: Pin jack

Pickup:
Wave length: 653 nm/790 nm
Laser power: CLASS 1/CLASS 1M

Power supply: AC 120 V, 60 Hz

Power consumption: 8 W

Power consumption in standby mode: approx. 1 W

Dimensions (W×D×H):
430 mm × 231 mm × 43 mm (excluding protrusions)
(16 ¹⁵/₁₆" × 9 ¹/₁₆" × 1 ¹¹/₁₆")
430 mm × 263 mm × 43 mm (including protrusions)
(16 ¹⁵/₁₆" × 10 ⁶/₁₆" × 1 ¹¹/₁₆")

Mass: approx. 2.0 kg (4.4 lb)

- ^{¶1} Conforming to IEC62107
- ^{¶2} MPEG-1 Layer 3, MPEG-2 Layer 3
- ^{¶3} Windows Media Audio Ver.9.0 L3
Not compatible with Multiple Bit Rate (MBR)
- ^{¶4} Exif Ver 2.1 JPEG Baseline files
Picture resolution:
between 160×120 and 6144×4096 pixels
(Sub sampling is 4:2:2 or 4:2:0)
- ^{¶5} MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders
Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/
G.726 audio system
- ^{¶6} Plays all versions of DivX[®] video (including DivX[®]6) with standard playback of DivX[®] media files. Certified to the DivX Home Theater Profile.
GMC (Global Motion Compensation) is not supported.
- ^{¶7} The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 256 groups.

Limited Warranty

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

PANASONIC PRODUCT – LIMITED WARRANTY EXCHANGE PROGRAM

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship and agrees to replace the product for a period as stated below from the date of original purchase.

Panasonic Portable / Clock Radio (without Tape, CD, MD)
Panasonic Audio Product
Panasonic DVD Product
Accessories including rechargeable batteries

One (1) year
One (1) year
One (1) year
Ninety (90) days

LIMITATIONS AND EXCLUSIONS

This warranty does not apply to products purchased outside Canada or to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, or which has been altered or repaired in any way that affects the reliability or detracts from the performance, nor does it cover any product which is used commercially. Dry cell batteries are also excluded from coverage under this warranty.

This warranty is extended to the original end user purchaser only. A purchase receipt or other proof of date of original purchase is required before warranty service is performed.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

CONTACT INFORMATION

For product information and operation assistance, please contact:

Our Customer Care Centre:	Telephone #:	(905) 624-5505
	1-800 #:	1-800-561-5505
	Fax #:	(905) 238-2360
	Email link:	"customer support" on www.panasonic.ca

For defective product exchange within the warranty period, please contact the original dealer or our Customer Care Centre.

Product Service

- 1. Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or AC adaptor has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
- 2. Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- 3. Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4. Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Product information

For product information or assistance with product operation:
 Contact the Panasonic Canada Inc. Customer Care Centre at 1-800-561-5505, or visit the website (www.panasonic.ca), or an authorized Servicentre closest to you.

–If you see this symbol–



Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



(Inside of product)



As an ENERGY STAR® Participant, Panasonic has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



This manual was printed with soy based ink.

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