Panasonic®

Operating Instructions
Portable DVD/CD Player

Model No. **DVD-LS80**
DVD-LS82
DVD-LS850

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

U.S.A.: 1-800-211-PANA(7262)
Canada: 1-800-561-5505

DVD VIDEO™   **COMPACT disc DIGITAL VIDEO**   **RAM COMPATIBLE PLAYER**   **PalmTheater**

MULTI-FORMAT PLAYBACK   **See page 6 for details.**

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

Example:

1   **ALL**   **1 2 4**

U.S.A.: The warranty can be found on page 32.
Canada: The warranty can be found on page 34.

Unless otherwise indicated, illustrations in these operating instructions are of DVD-LS80.

P   PC

RQT8912-4P

Accessories

Use numbers indicated in parentheses when asking for replacement parts.

(Product numbers correct as of December 2006. These may be subject to change.)

(For U.S.A.) To order accessories, refer to "Accessory Purchases" on page 33.
(For Canada) To order accessories, call the dealer from whom you have made your purchase.

☐ **1 Audio/video cable** (K2KA6CB00003)
☐ **1 AC adaptor**
  For U.S.A. (RFEA216W or RFEA217P)
  For Canada (RFEA216W)
☐ **1 AC power supply cord** (K2CB2CB00020)
  For use with this unit only. Do not use it with other equipment.
  Also, do not use cords for other equipment with this unit.
☐ **1 Car DC Adaptor** (RFEC203M-Y)
☐ **1 Headrest Mounting Bracket** (RXQ1405A)
  only included with `DVD-LS82` `DVD-LS850`
☐ **1 Rechargeable battery pack**

	Included	Optional
`DVD-LS80` `DVD-LS850`	CGR-H711	CGR-H701 CGR-H712
`DVD-LS82`	CGR-H712	

- Depending on the battery pack, playback time may differ. (→ page 9, Approximate recharging and play times)
- `DVD-LS80` `DVD-LS850` CGR-H711 is not available as option. When purchasing a replacement, request one of the optional batteries listed above.

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.

Table of contents

Accessories/Table of contents

3
RQT8912

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.

Batteries

1. Battery pack (Lithium ion battery pack)
- Use the specified unit to recharge the battery pack.
- Do not use the battery pack with equipment other than the specified unit.
- Do not use the player outside if it is snowing or raining. (The battery pack is not waterproof.)
- Do not get dirt, sand, liquids, or other foreign matter on the terminals.
- Do not touch the plug terminals (+ and −) with metal objects.
- Do not disassemble, remodel, heat or throw into fire.

If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.
If any electrolyte should come into contact with your eyes, never rub the eyes.
Rinse eyes thoroughly with water, and then consult a doctor.

2. Disposing of the batteries
Check and follow your local regulations before disposal.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Warning

Risk of fire, explosion and burns. Do not disassemble, heat above <u>60°C (140°F)</u> or incinerate.

A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

WARNING:

The driver must not operate this unit while the vehicle is moving.
Do not operate this unit where it can be viewed by the driver.
Driver operation or viewing of this unit while the vehicle is moving will cause distraction which may result in serious accident and personal injury or property damage.

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.

AC adaptor

This AC adaptor operates on AC between 100 V and 240 V.
But
- In the U.S.A. and Canada, the AC adaptor must be connected to a 120 V AC power supply only.
- When connecting to an AC supply outside of the U.S.A. or Canada, use a plug adaptor to suit the AC outlet configuration.
- When connecting to a supply of greater than AC 125 V, ensure the cord you use is suited to the voltage of the AC supply and the rated current of the AC adaptor.
- Contact an electrical parts distributor for assistance in selecting a suitable AC plug adaptor or AC cord set.

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.

Listening caution

Do not play your headphones or earphones at a high volume. Hearing experts advise against continuous extended play.
If you experience a ringing in your ears, reduce volume or discontinue use.
Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.
You should use extreme caution or temporarily discontinue use in potentially hazardous situations.
Even if your headphones or earphones are the open-air type designed to let you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.
Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.
Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.
To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:
- Leave it there.

Do not rest the unit on your lap for a long time while using it. The unit can become hot and cause burns.

To prevent damage

Avoid the following:
- Spraying flammable insecticides near the unit.
- Pressing the LCD.
- Touching the lens and other parts of the laser pickup.

Do not use the unit in the following places:
- Sandy places such as beaches.
- On top of cushions, sofas, or hot equipment such as amplifiers.

Do not leave in an unventilated automobile or exposed to direct sunlight and high temperatures.

-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.

RQT8912

Discs that can be played

Commercial discs

Disc Logo	Indicated in these instructions by	Remarks
DVD-Video `DVD` `DVD VIDEO`	`DVD-V`	High quality movie and music discs
Video CD `COMPACT disc DIGITAL VIDEO` `COMPACT disc SUPER VIDEO`	`VCD`	Music discs with video Including SVCD (Conforming to IEC62107)
CD `COMPACT disc DIGITAL AUDIO` `COMPACT disc DIGITAL AUDIO TEXT`	`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 and 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.

Recorded disc (Yes: Available No: Not available)

Disc Logo	Recorded on a DVD recorder, etc.		Recorded on a personal computer, etc.					Necessity of finalize[4]
	`DVD-VR` [2]	`DVD-V` [3]	`WMA`	`MP3`	`JPEG`	`MPEG4`	`DivX`	
DVD-RAM `DVD RAM RAM4.7`	Yes	—	No	Yes	Yes	Yes	Yes	Not Necessary
DVD-R/RW `DVD R4.7` `DVD RW`	Yes	Yes	No	Yes	Yes	Yes	Yes	Necessary
DVD-R DL `DVD R DL`	Yes	Yes	No	No	No	No	No	Necessary
+R/+RW —	No	(Yes)	No	No	No	No	No	Necessary
+R DL —	No	(Yes)	No	No	No	No	No	Necessary
CD-R/RW [1] —	—	—	Yes	Yes	Yes	Yes	Yes	Necessary[5]

● It may not be possible to play the above discs in all cases due to the type of discs, the condition of the recording, the recording method and how the files were created (➔ page 7, Tips for making data discs).

[1] This unit can play CD-R/RW recorded with CD-DA or Video CD format. (`WMA` `MP3` `JPEG` This unit also plays HighMAT™ discs.)

[2] Discs recorded on DVD recorders, DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard). For DVD-R DL: Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

[3] Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format. For +R/+RW and +R DL: Discs recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

[4] 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.

[5] 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.
● Do not use a DualDisc in this unit as it may not be possible to insert it correctly and it may get scratched or scraped.

Tips for making data discs

Format	Disc	Extension	Reference
WMA	**CD-R/RW**	".WMA" ".wma"	● Compatible compression rate: between 48 kbps and 320 kbps ● 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** **DVD-R/RW** **CD-R/RW**	".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 ● Compatible compression rate: between 32 kbps and 320 kbps. ● This unit is not compatible with ID3 tags.
JPEG	**DVD-RAM** **DVD-R/RW** **CD-R/RW**	".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-RAM** **DVD-R/RW** **CD-R/RW**	".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.
DivX	**DVD-RAM** **DVD-R/RW** **CD-R/RW**	".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. ● 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.

● If groups were created away from the root like "002 group" in the illustration below, the eighth one and onwards is displayed on the same vertical line in the menu screen.
● There may be differences in the display order on the menu screen and computer screen.
● This unit cannot play files recorded using packet writing.

Naming folders and files on data discs
(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).

DVD-RAM

● Discs must conform to UDF 2.0.

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.

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.

e.g. MP3
root

root
001 group
— 001 track.mp3
— 002 track.mp3
— 003 track.mp3
002 group
— 001 track.mp3
003 group
— 002 track.mp3
— 003 track.mp3
— 004 track.mp3
— 001 track.mp3
— 002 track.mp3
— 003 track.mp3

Tips for making data discs
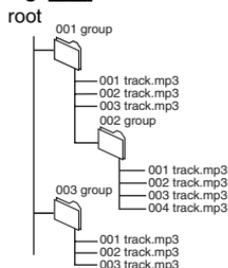
Preparations

❶ Attaching the battery (When the unit is off)

The illustrations shown are of CGR-H711; however the steps for CGR-H712 (included with `DVD-LS82`) or CGR-H701 (optional) are the same.

Bottom side of this unit

Battery pack

Clicks into place
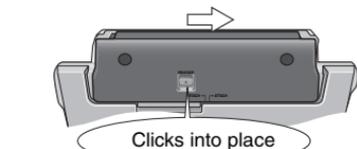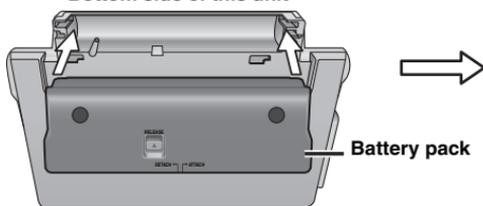
Check to make sure it is securely fastened.

Detaching
● Turn the unit off before detaching the battery pack.

❷

❶ **Press and hold**
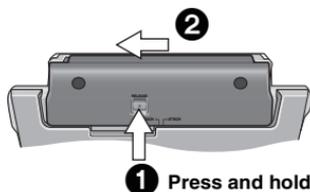
When not using for long periods of time
● Remove the battery pack (➜ left).
  (Even when the unit is turned off, there is a small amount of voltage running through the unit, and this may result in a malfunction.)
● Recharge the battery for re-use.

❷ Recharging the battery

The battery is not charged at the time of purchase. Charge before initial use.

AC power supply cord (included)

① DC IN 12 V ⊘–ⓒ–⊘

DC IN

② **AC adaptor** (included)

③ **To household AC outlet**
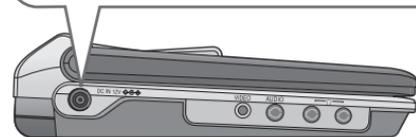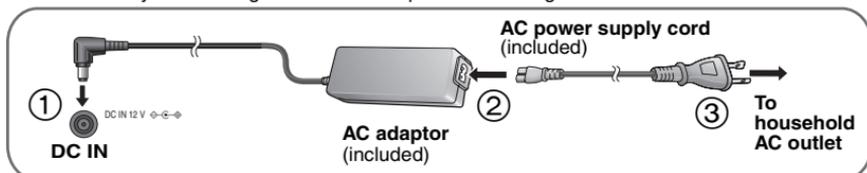
● You can also use this unit without charging while connecting the AC adaptor and the AC power supply cord.
● You can also use this unit without charging while connecting Car DC Adaptor (➜ page 20, Enjoying in a car).

To conserve power
This unit consumes 0.4 W of power even when turned off. When the unit is not going to be used for a long time, disconnect the AC power supply cord from the household AC outlet.

CHG ▭   ⏻ ▭

CHG	**⏻**
Started	**Finished**

[⏻] goes out ➜ lights※
[CHG] lights ➜ goes out
※ Only when recharged with the unit off.

Recharging time :
➜ **page 9, Approximate recharging and play times**

When finished, disconnect the AC adaptor and the AC power supply cord.

Preparations

Approximate recharging and play times (Hours)

Battery pack	Recharging (When the unit is off)	Play (at room temperature using headphones)			
		LCD brightness level			LCD Off
		−5	0	5	
CGR-H711 [*1]	4	6	3.5	2.5	8
CGR-H712 [*2]	7	12	7	5	16
CGR-H701 (option)	4	5.5	3	2	7

[*1] included with **DVD-LS80** **DVD-LS850** (not available as option)
[*2] included with **DVD-LS82**
● The times indicated above may differ depending on use.
● To change the LCD brightness (➜ page 12, When selecting "USER MODE").

Checking the remaining battery charge

When the unit is on (➜ page 11) and powered by the battery pack
Press [DISPLAY] to check on the LCD (Displays for a few seconds).

(screen)

(flashing)

Recharge
Appears automatically when there is only a few minutes of charge remaining.

❸ Adjusting the LCD angle

Open the LCD

Standard

Compact

Free

Slide

Clicks!
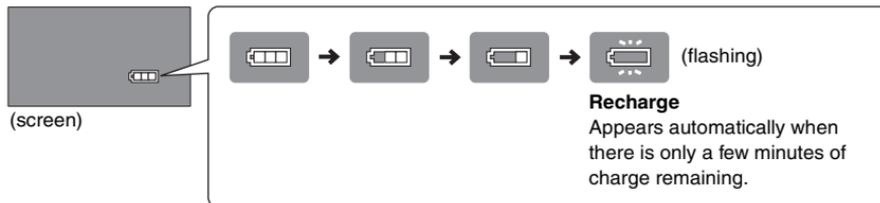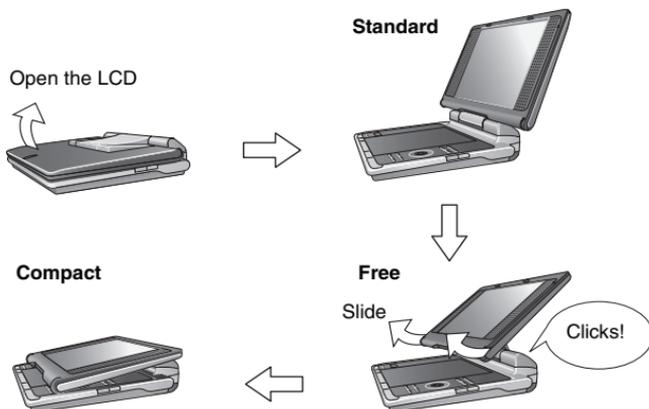
●**When moving the unit : Close the LCD. Don't hold by the LCD.**
●**Functions operated by buttons on the unit will not work when the LCD is closed.**

Playing discs

1 Open the lid.

OPEN

Headphone terminals [◯]
φ 3.5 mm (1/8″) stereo mini jack

AV SELECT

2 Insert a disc and close the lid.

Click into place

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.
● Some discs start to play automatically when the unit is on.

3 Press and hold.

► ON

The unit turns on and play begins.
● **When "AUX" is displayed, press [AV SELECT].**
(Watching video from other equipment → page 26)

4 Adjust the volume.

VOL   I   +

When using headphones, turn down the volume before connection.

● To play audio (MP3), picture (JPEG) or video (MPEG4 DivX) on DVD-RAM with recorded titles (DVD-VR), select "Play as Data Disc" (→ page 23, Other Menu).
● While stopped, the unit automatically turns off once 15 minutes (after approximately 5 minutes when using the battery pack) have elapsed.
● Total title number may not be displayed properly on +R/+RW.
● If you are experiencing problems, refer to troubleshooting guide (→ page 29).

Note
● DISCS CONTINUE TO ROTATE WHILE MENUS ARE DISPLAYED. Press **[■, –OFF]** when you finish to preserve the unit's motor.

Operations

Turn unit on/play		When the unit is off: Press and hold and the power comes on and play begins. When the unit is on: Press and play begins.
Pause		Press **[▶, ON]** to restart play.
Stop		The position is memorized when "Press PLAY to resume play" appears on the screen. ● Press **[▶, ON]** to resume. **(Resume play)** Opening the disc lid, or pressing **[■, –OFF]** while "Press PLAY to resume play" appears on the screen cancels the memorized position.
Turn unit off		Press and hold until "OFF" is displayed.
Skip		Press **[|◀◀, ▶▶|]**. `DVD-VR` Can also skip to the markers.
Search		Press and hold **[|◀◀, ▶▶|]** (up to 5 steps).
Slow play		Press and hold **[|◀◀, ▶▶|]** (up to 5 steps) while paused. Press **[▶, ON]** to return to normal play. `VCD` **[▶▶|]** only ● `MPEG4` `DivX` : Does not work.
Top menu	TOP MENU	`DVD-V`
Playing programs		`DVD-VR` (➔ page 17)
Playback Menu		`WMA` `MP3` `JPEG` `MPEG4` `DivX` (➔ page 16)
Menu	MENU	`DVD-V`
Playing playlists		`DVD-VR` (➔ page 17)
Navigation menu		`WMA` `MP3` `JPEG` `MPEG4` `DivX` (➔ page 16)
Return	RETURN	Returns to the previous screen. `VCD` (with playback control) Returns to the menu.
Menu operation		Press **[▲ ▼ ◀ ▶]** to select an item and press **[ENTER]** to confirm.
Number Select		`VCD` (with playback control) ① While the disc menu is displayed, press **[DISPLAY]** to display On-Screen Menus. ② Press **[▲▼]** to select "Number Select". ③ Press **[▶]** then **[▲▼]** to enter number. ● Press and hold **[▲▼]** to alter faster. ④ Press **[ENTER]**.
Frame-by-frame		`DVD-VR` `DVD-V` `VCD` While paused, press **[◀ ▶]**. `VCD` **[▶]** only
Group skip		`WMA` `MP3` `JPEG` `MPEG4` `DivX` Press **[▲ ▼]**. ● Does not work while paused.

Playing discs

Useful functions

Selecting how to show 4:3 aspect pictures on the LCD

LCD–SIZE

Press to change.

MONITOR NORMAL: Normal
MONITOR FULL: Stretched horizontally
MONITOR OFF: No picture
● If you are not using the LCD on this unit, select "MONITOR OFF" to conserve power.
 (The **[⏻]** indicator flashes)
● The LCD turns off automatically if you close it.

Selecting the picture quality on the LCD

BRIGHT–LCD

Press to change.

DAYLIGHT: Displays the picture a bit brighter.
MOONLIGHT: Displays the picture a bit darker.
USER MODE: ➜ below

■ When selecting "USER MODE"

Press [▲ ▼] to select the item, and [◀ ▶] to change the setting.

ENTER

BRIGHT: Adjusts the brightness of the picture (−5 to 5)
COLOR: Adjusts the shade of the picture's color (−5 to 5)
● **To exit the screen:** Press **[RETURN].**

Repeat play (Only when the elapsed play time can be displayed. JPEG: you can use even if there is no elapsed time display.)

REPEAT

Press several times to select the content to be repeated.

☑Menu
Repeat   Off

To repeat a specified section (A-B Repeat)
Only when the elapsed play time can be displayed.
Except DVD-VR (still picture part) DivX JPEG and MPEG4

1

DISPLAY

During play, press once.

2

ENTER

① **Press [▲ ▼] to select "Other Settings".**
② **Press [▶] then [▲ ▼] to select "Play Menu".**
③ **Press [▶] then [▲ ▼] to select "A-B Repeat".**
④ **Press [ENTER] at the starting and ending points.**

● Press **[ENTER]** again to cancel.
● **To exit the screen:** Press **[RETURN].**

☑Menu
A-B Repeat ✲✲

Useful functions

Reviewing titles/programs to play (Advanced Disc Review)
DVD-VR **DVD-V** *(Except +R/+RW)*

1

DISPLAY

Press once.

2

ENTER

① **Press [▲ ▼] to select "Other Settings".**
② **Press [▶] then [▲ ▼] to select "Play Menu".**
③ **Press [▶] then [▲ ▼] to select "Advanced Disc Review".**
④ **Press [ENTER].**
　 Reviews each title/program.

Title 1　Chapter 1　Time 0 : 00 : 22

⑤ **Press [▶, ON] when you find a title/program to play.**

- You can also review each 10 minutes. Select "Interval Mode" (➜ page 24, "Advanced Disc Review" in "Disc" tab).
- This may not work depending on the play position.
- **DVD-VR** Does not work:
  – with still picture part.
  – when playing a playlist.
- **To exit the screen:** Press **[RETURN].**

Changing play speed **DVD-VR** **DVD-V**

1

DISPLAY

During play, press once.

2

ENTER

① **Press [▲ ▼] to select "Other Settings".**
② **Press [▶] then [▲ ▼] to select "Play Speed".**
③ **Press [ENTER] and [▲ ▼] to select "Normal" or "×0.6" to "×1.4" (in 0.1 units).**
④ **Press [ENTER].**

Play Speed	×1.4
	×1.3
	×1.2
	×1.1
	√Normal
	×0.9
	×0.8
	×0.7
	×0.6
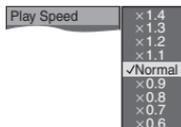
- Press **[▶, ON]** to return to normal play.
- After you change the speed
  – H.Bass (➜ page 15), Advanced Surround (➜ below) and Sound Enhancement (➜ page 23, Audio Menu) do not work.
  – 96 kHz sampling frequency is converted to 48 kHz.
- This may not work depending on the disc's recording.
- **To exit the screen:** Press **[RETURN].**

Enjoying virtual surround (Advanced Surround)
Motion pictures with 2 or more channels

1
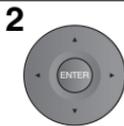
DISPLAY

Press once.

2

ENTER

① **Press [▲ ▼] to select "Other Settings".**
② **Press [▶] then [▲ ▼] to select "Audio Menu".**
③ **Press [▶] then [▲ ▼] to select "Advanced Surround".**
④ **Press [▶] then [▲ ▼] to select "SP 1 Natural", "SP 2 Enhanced", "HP 1 Natural" or "HP 2 Enhanced"**
⑤ **Press [ENTER].**

A surround sound effect can be made using 2 speakers (on other equipment).
- When **using headphones**, press to select "HP 1 Natural" or "HP 2 Enhanced".
- 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.
- This does not work when H.Bass (➜ page 15) is on.
- Do not use in combination with surround effects on other equipment.
- **To exit the screen:** Press **[RETURN].**

Useful functions

Useful functions

Changing soundtracks *Motion pictures*

1

DISPLAY

Press once.

2
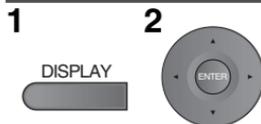
ENTER

① **Press [▲ ▼] to select "Audio".**
② **Press [▶] then [▲ ▼] to select the soundtrack.**
③ **Press [ENTER].**

DVD-VR **DivX**
"L", "R" or "L R" can be selected.
VCD
"L", "R", "L R" or "L + R" can be selected.
DVD-V (Karaoke discs)
①Press [▲ ▼] to select "Vocal".
②Press [▶] then [▲ ▼] to select "On" or "Off" for vocals.
Read the disc's instructions for details.
● **To exit the screen :** Press **[RETURN].**

☑ **Menu**

Audio   1

Signal type/data
LPCM/DD Digital/DTS/MP3/MPEG: Signal type
kHz (Sampling frequency)/bit/ch (Number of channels)
Example: 3/2 .1ch

┌── 1: Low frequency effect
│   (not displayed if there is no signal)
├── 0: No surround
│   1: Mono surround
│   2: Stereo surround (left/right)
└── 1: Center
      2: Front left+Front right
      3: Front left+Front right+Center

● **DivX** It may take some time for play to start if you change the audio on a DivX video disc.

Changing subtitles *Discs with subtitles*

1

DISPLAY

Press once.

2
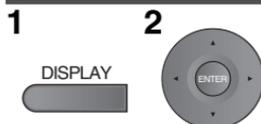
ENTER

DVD-VR **DVD-V** **VCD** **DivX**
① **Press [▲ ▼] to select "Subtitle".**
② **Press [▶] then [▲ ▼] to select "Off" or "On" and the subtitle language.**
③ **Press [ENTER].**

☑ **Menu**

Subtitle   Off

● On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.
● **DVD-VR** (with subtitle on/off information)
  – On or Off only can be selected.
  – Subtitle on/off information cannot be recorded using Panasonic DVD Recorders.
● **To exit the screen:** Press **[RETURN].**

Angle select **DVD-V** *with multiple angles* */Still picture rotation* **JPEG**

1

DISPLAY

Press once.

2
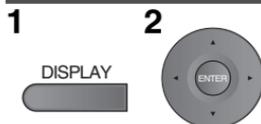
ENTER

① **Press [▲ ▼] to select "Angle" or "Rotate Picture".**
② **Press [▶] then [▲ ▼] to select the angle or rotate the still picture.**
③ **Press [ENTER].**
● **To exit the screen:** Press **[RETURN].**

e.g. **DVD-V**

☑ **Menu**

Angle   1/4

Displaying current playback condition (Quick OSD)

■ Basics

DISPLAY

Press twice.

e.g. DVD-V
Current playback number   Elapsed play time

Playback condition ➞

Title 1   Chapter 1   Time 0 : 00 : 22

Current position

■ Details

DISPLAY

Press three times.

e.g. DVD-V

See page 14 for changing soundtracks
See page 14 for changing subtitles
See page 14, Angle select for changing angles
Aspect of current playback title

● Details-DVD-Video
Audio   1 --- DTS 3/2.1ch
Subtitle   -- --
Angle   1/1
Source Aspect 4:3
Title Total Time 0:54:28

Total play time of current playback title

● MPEG4 DivX Video and audio information is not displayed during search.
● **To exit the screen :** Press [RETURN].

Enjoying higher quality audio and video

Enjoying heavy bass with the speakers (H.Bass) DVD-V DVD-VR

1

DISPLAY

Press once.

2

ENTER

① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Audio Menu".**
③ **Press [▶] then [▲▼] to select "H.Bass".**
④ **Press [▶] then [▲▼] to select "On" or "Off".**
⑤ **Press [ENTER].**

◎ **Menu**
H.Bass   Off

● This is effective on 5.1 channel DVD-Video and DVD-VR discs. This is also effective on some portions of 2 channel discs as well.
● If the sound is distorted or there is noise, set to "Off".
● **To exit the screen:** Press [RETURN].

Providing the suitable picture quality for enjoying movies (Cinema1/Cinema2)

Cinema1: Mellows images and enhances detail in dark scenes.
Cinema2: Sharpens images and enhances detail in dark scenes.

1

DISPLAY

Press once.

2

ENTER

① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Picture Menu".**
③ **Press [▶] to select "Picture Mode".**
④ **Press [▶] then [▲▼] to select "Cinema1" or "Cinema2".**
⑤ **Press [ENTER].**

◎ **Menu**
Picture Mode   Cinema1

● **To exit the screen:** Press [RETURN].

Reducing noise in pictures (Depth Enhancer/MPEG DNR)

Depth Enhancer: Reduces the rough noise in the background to give a greater feeling of depth.
MPEG DNR: Smooths block noise and reduces the smudging that appears around contrasting sections of the picture.

1

DISPLAY

Press once.

2

ENTER

① **In the procedure 2–④ (➜ above, Cinema1/Cinema2), select "User" and press [ENTER].**
② **Press [▲▼] to select "Picture Adjustment" and press [ENTER].**
③ **Press [▲▼] to select "Depth Enhancer" or "MPEG DNR".**
④ **Press [◄ ►] to change the setting. (Depth Enhancer: 0 to +4, MPEG DNR: 0 to +3)**

○ Picture Adjustment
Depth Enhancer   0
MPEG DNR   0

● **To exit the screen:** Press [RETURN].
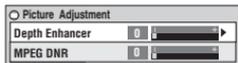
The above indicated features may not work depending on the disc's recording.

Useful functions/Enjoying higher quality audio and video

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

Select "Play as Data Disc" (➔ page 23, Other Menu) in the following cases:
–To play HighMAT discs without using the HighMAT function
–To play audio (`MP3`), picture (`JPEG`) or video (`MPEG4` `DivX`) on DVD-RAM with recorded titles (`DVD-VR`)
● To return to playing titles (`DVD-VR`), select "Play as DVD-VR" in "Other Menu" (➔ page 23).

Playing items in order (Playback Menu)

While the menu is displayed

Press [▲ ▼] to select "All", "Audio", "Picture" or "Video" and press [ENTER].
● **To display/exit the screen:**
Press **[TOP MENU].**

	○ Playback Menu	
All content	All	Total 438
WMA/MP3	Audio	Total 9
JPEG	Picture	Total 427
MPEG4 and DivX video	Video	Total 2
	▲▼ to select and press ENTER	

Playing from the selected item (Navigation Menu)

1 MENU Press once.

2 **Press [▲ ▼ ◄ ►] to select the group and press [ENTER].**

● To play content in the group in order:
Press [ENTER].
● To start play from the selected content:
Press [▲ ▼] to select and press [ENTER].

Group and content number currently playing

⊜ Navigation Menu
002 My favorite2\005 Japanese\001 Lady Starlish
Perfume
001 My favorite1
002 My favorite2
001 Brazilian
002 Chinese
003 Czech
004 Hungarian
005 Japanese
006 Mexican
007 Philippine
008 Swedish
009 Piano
010 Vocal

001 Lady Starfish
002 Metal Glue
003 Life on Jupiter
004 Starperson
005 Starperson

Group 005/023   Content 0001/0005
DISPLAY to display the sub menu   RETURN to exit

Group   Content

⊡: JPEG
♪ᵇ: WMA/MP3
▤: MPEG4 and DivX video

Number currently selected

● **To listen to WMA/MP3 while showing a JPEG image on the screen**
Select a JPEG file first, and then select WMA/MP3. (The opposite order is not effective.)
● **To exit the screen :** Press **[MENU].**

■ *Using the submenu*

While the navigation menu (➔ see above) is displayed.
1 **Press [DISPLAY].**
2 **Press [▲ ▼] to select the sub menu and press [ENTER].**

Submenu

✓Multi ——— Groups and content
List ——— Content only
Tree ——— Groups only
Thumbnail ——— Thumbnail images `JPEG`
Next group ——— To the next group
Previous group ——— To the previous group
✓All ——— All content
Audio ——— WMA/MP3 only
Picture ——— JPEG only
Video ——— MPEG4 and DivX video only
✓Help display ——— To switch between guide messages and the playback condition indicator
Find ——— To search by content or group title (➔ see below)

■ *Searching by a content or group title*

Press [◄ ►] to highlight a group title to search a group, or a content title to search its content.
1 **Select "Find" and press [ENTER].** (➔ see above)
2 **Press [▲ ▼] to select a character and press [ENTER].**
● Repeat to enter another character.
● Lower case is also searched.
● Press and hold **[I◄◄, ►►I]** to skip between A, E, I, O and U.
● Press **[◄]** to erase a character.
● Erase the asterisk (✳) to search for titles starting with that character.

⟨ ✳ A   Find ⟩

3 **Press [►] to select "Find" and press [ENTER].** The search result screen appears.
4 **Press [▲ ▼] to select the content or group and press [ENTER].**

Playing HighMAT™ discs [WMA] [MP3] [JPEG]

While the menu is displayed
Press [▲ ▼ ◄ ►] to select items and press [ENTER].

Menu:
Takes you to the next menu which shows playlists or another menu.
Playlist:
Play starts.

- To return to the menu screen, press **[TOP MENU]** then press **[RETURN]** several times.
- To change the menu background, press **[DISPLAY]**. The background changes to the one recorded on the disc.
- **To display/exit the screen:** press **[TOP MENU]**.

Selecting from the list
1. Press **[MENU]**.
2. Press **[◄]** then **[▲ ▼]** to switch among "Playlist", "Group" and "Content" lists.
3. Press **[►]** then **[▲ ▼]** to select an item and press **[ENTER]**.
- **To exit the screen :** Press **[MENU]**.

Playlist	• All By Artist	• Pink Island
Playlist	No.	Content title
Group	1	Few times in summer
Content	2	Less and less
	3	And when I was born
	4	Quatre gymnopedies
	5	You've made me sad
	6	I can't quit him
	7	Evening glory
	8	Wheeling spin
	9	Velvet Cuppermine
	10	Ziggy starfish

▲▼◄► to select   ENTER to play   RETURN to exit

Playing programs/playlists [DVD-VR]

- Titles appear only if they have been entered.
- You cannot edit playlists and titles.

1

To play programs:

TOP MENU

To play playlists:

MENU

2
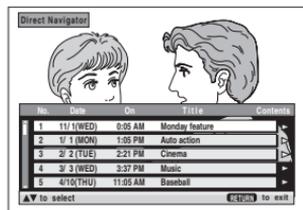
Press [▲ ▼] to select the program or playlist and press [ENTER].

Direct Navigator

No.	Date	On	Title	Contents
1	11/ 1(WED)	0:05 AM	Monday feature	
2	1/ 1 (MON)	1:05 PM	Auto action	
3	2/ 2 (TUE)	2:21 PM	Cinema	
4	3/ 3 (WED)	3:37 PM	Music	
5	4/10(THU)	11:05 AM	Baseball	

▲▼ to select   RETURN to exit

Playlist

No.	Date	Total Time	Title
1	11/1	0:00:01	City Penguin
2	1/1	0:01:20	Ashley at Prom
3	2/2	1:10:04	Formula one
4	3/3	0:10:20	Soccer
5	4/10	0:00:01	Baseball
6	4/11	0:00:01	City Penguin
7	4/15	0:01:10	Ashley at Prom
8	4/17	0:13:22	Formula one
9	4/20	0:05:30	Soccer
10	4/22	0:07:29	Baseball

▲▼ to select and press ENTER   RETURN to exit

- Only when the disc contains a playlist.

- Press **[►]** to show the contents of the program (Only when playing the program).
- **To exit the screen :** Press **[RETURN]**.

Playing CD using menus [CD]

Titles appear with CD text playback.

1

MENU

e.g. CD text

CD		1 / 17 2:21
Disc Title	: All By Artist	
Disc Artist	: BLAZE	
Track Title	: AFTER THE RAIN	
Track Artist	: BRAZE	

1	♪	AFTER THE RAIN
2	♪	NEVER MORE
3	♪	EAT ME
4	♪	RAT RACE
5	♪	Garasu No Jealousy
6	♪	BAD BOY
7	♪	SHOUT MY LOUD VOICE
8	♪	RUN TO THE SKY
9	♪	YOU SEND ME
10	♪	DO THE NIGHT

▲▼ to select and press ENTER   RETURN to exit

2

Press [▲ ▼] to select the tracks and press [ENTER].

- **To exit the screen :** Press **[RETURN]**.

Press **[DISPLAY]** to switch between guide messages and the playback condition indicator.

Enjoying in a car

- Do not leave the unit on a surface that may become hot such as a dashboard. The unit is not heat-resistant so may malfunction.
- The driver must not operate this unit while the vehicle is moving.
  Do not operate this unit where it can be viewed by the driver.
  Driver operation or viewing of this unit while the vehicle is moving will cause distraction which may result in serious accident and personal injury or property damage.

Enjoying video in the back seat with the Headrest Mounting Bracket

You can enjoy video in the back seat attaching the unit to the back of the front seat.
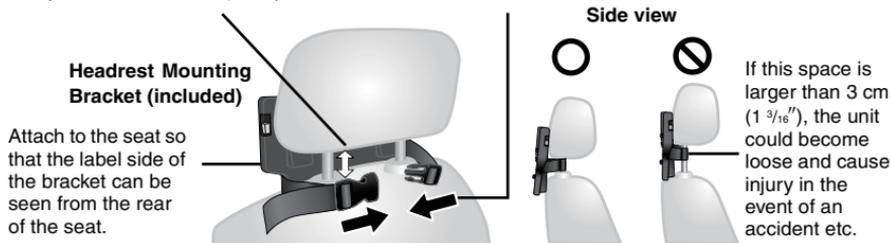`DVD-LS82` `DVD-LS850` included
`DVD-LS80` not included
- Please insert the disc before attaching the unit to the headrest bracket.

- **Do not attach or detach while driving, and do not attach in the following locations, otherwise it may result in injury or traffic accidents:**
  –anywhere other than the back of the seat
  –in a location that interferes with the driver's view or operation of the car
  –in a location that interferes with the operation of an airbag
  –in a location that interferes with the driving instruments
- **Make sure that the bracket belt is securely fastened, and check the lock on the unit.**
  In the event of an accident, sudden acceleration, or braking, the unit could become loose and cause injury.

1   Attaching the headrest bracket to the front seat.

① Adjust the headrest so there is an open space of about 3 cm (1 $^{3}/_{16}''$).

② Close the buckle and adjust the belt until it fits tightly around the headrest.

Side view

Headrest Mounting Bracket (included)

Attach to the seat so that the label side of the bracket can be seen from the rear of the seat.

If this space is larger than 3 cm (1 $^{3}/_{16}''$), the unit could become loose and cause injury in the event of an accident etc.

2   Adjusting the monitor.

① Fold the monitor down towards the front of the unit.

② Rotate the monitor backwards so the screen is facing out.
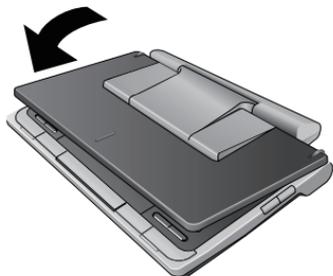
3 Attaching the unit to the bracket.

While holding the unit with both hands, line up the unit just below the protruding sections on the bracket. Press the unit down about 4 to 5 mm ($^5/_{32}''$ to $^3/_{16}''$) so that the protrusions on the bracket fit into the holes on the bottom of the unit.
● Please check the following points before use.
  –The bracket is securely fastened to the unit.
  –The unit is not loose and cannot be lifted upwards.
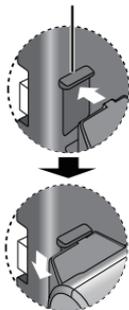
Line up the protruding sections here.

When correctly attached, you will hear a locking sound.

click!
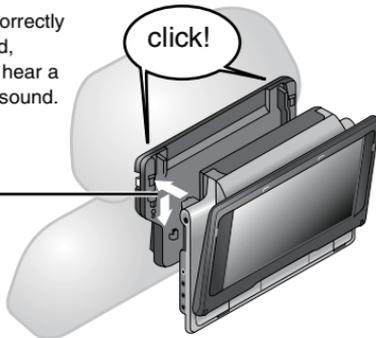
Diagram of attached bracket

Use the monitor in the open position as shown in the illustration to the right to prevent abnormal audio or damage resulting from vibrations in the car.
The angle of the monitor can be adjusted up to about 30°.

30°

● The angle of the monitor may shift while driving due to vibration, etc.

● Depending on the type of headrest, you may not be able to attach the bracket.

23 cm (9 $^1/_{16}''$) or less
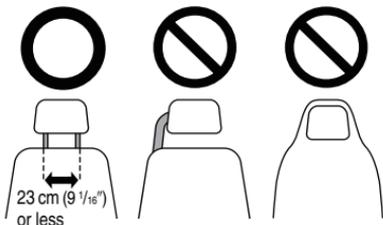
In the event of an accident etc., the unit could become loose and cause injury.

Releasing the unit from the bracket

① ②
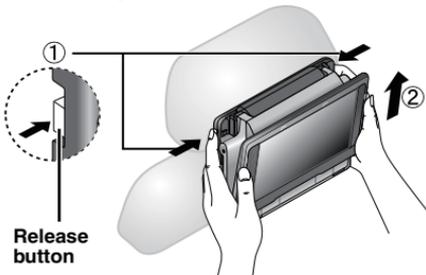
Release button

① Press the release buttons (left and right) in towards the center of the bracket.
② Lift the unit up to release it.
● Do not press the release buttons any time other than when detaching the unit from the bracket.

Enjoying in a car

Connecting the included Car DC Adaptor

Before connection, consult your car owner's manual or your dealer.
● Connect to the cigarette lighter socket of a vehicle that has a 12 V battery. It is not compatible with a vehicle that has a 24 V battery.
● This is a special negative grounded Car DC Adaptor. Using this Car DC Adaptor with a plus grounded car can cause malfunction and lead to fire.

Car DC Adaptor (included)

DC IN

DC IN 12 V ⊖─ⓒ─⊕

Left side of this unit
Place the unit on a stable surface.

To the cigarette lighter socket

Replacing the fuse
Replace only with the specified 125 V/250 V, 2.5 A fuse. Use of any other type can cause fire.

2 **Replace the fuse.** (125 V/250 V, 2.5 A type)

3 Close

1 Open
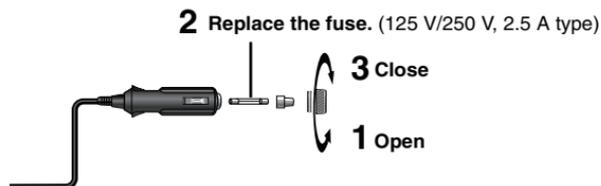
Cautions
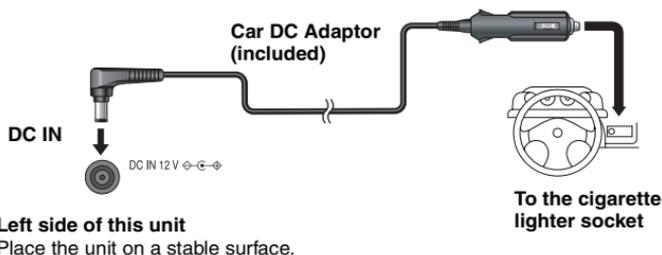
● **To avoid draining your car battery**
 –Disconnect the Car DC Adaptor from the cigarette lighter after use. The Car DC Adaptor continues to consume some power even if it is not being used, and if a battery pack is attached to this unit, it will start recharging which uses more power.
 –Do not use the Car DC Adaptor for long periods when the engine is not running.
● Turn the unit off before stopping the engine while using Car DC Adaptor, otherwise resume play (➜ page 11) may not work.
● Leave some slack in the cord.
● No responsibility will be taken for damage that occurs due to faulty installation.

You can enjoy audio through your car audio system by connecting a car stereo cassette adaptor (not included) to the headphone jack on the left side of this unit.

(Left side of this unit)

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
(➔ page 25, "DivX Registration" in "Others" tab)

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 "DivX 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 turn off the unit or display "Setup" menu.
  –you press [■]. (Press [❙❙] to stop play.)
  –you press [◀◀ ▶▶❙] (Skip or search) etc. and arrive at another content or the start of the content being played.
- Resume play (➔ page 11, Stop) does not work.

About DivX VOD content

Using On-Screen Menus

1

DISPLAY

Press once.

2

ENTER

① **Press [▲ ▼] to select the menu.**
② **Press [►] to go to the next menu and [▲ ▼] to set.**
   Repeat step ② if necessary.
● Items shown differ depending on the type of software.
● Press [◄] to go to the previous menu.
● If the setting does not change, press **[ENTER]**.
● **To exit the screen:** Press **[RETURN].**

Main menus

Program, Group, Title Chapter, Track, Playlist Content	**To start from a specific item** ● Press **[▲ ▼]** to select and press **[ENTER]**. ● Press and hold **[▲ ▼]** to alter faster.
Time	**To skip incrementally or decrementally (Time Slip for play only)** (Except +R/+RW) 1. Press **[ENTER]** twice to show Time Slip indicator. 2. Press **[▲ ▼]** to select the time and press **[ENTER]**. ●Press and hold **[▲ ▼]** to alter faster. **To change remaining/elapsed time display**
Video	**To display pixel number [DivX fps (frame per second) is also displayed.]**
Audio	(➜ page 14, Changing soundtracks)
	To display the current bitrate or sampling frequency
Number Select **VCD** (with playback control)	**To enter number** ●Press and hold **[▲ ▼]** to alter faster.
Thumbnail	**To show thumbnail images**
Subtitle	(➜ page 14, Changing subtitles)
Marker (VR)	**To recall a marker recorded on DVD recorders**
Angle	(➜ page 14, Angle select)
Rotate Picture	(➜ page 14, Still picture rotation)
Slideshow	**To turn on/off slideshow** **To change the slideshow timing ("1 Fast" to "5 Slow")** ● When using Slideshow, Skip/Rotate picture may not work correctly depending on the play position.
Other Settings	**(➜ See below)**

Other Settings

Play Speed	(➜ page 13, Changing play speed)

Play Menu (Only when the elapsed play time can be displayed, JPEG: The Repeat function can be used.)

Repeat	(➜ page 12, Repeat play)
A-B Repeat	(➜ page 12)
Advanced Disc Review	(➜ page 13)

Picture Menu

Picture Mode	(➜ page 15, Cinema1/Cinema2/Depth Enhancer/MPEG DNR)
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 "I (Interlace)" or "P (Progressive)" depending on which constructing method was used when the contents were recorded to disc. **Auto I (Interlace) P (Progressive)**

Audio Menu

H.Bass	(→ page 15)
Advanced Surround	(→ page 13)
Dialogue Enhancer	**To make the dialogue in movies easier to hear** **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) **On ←→ Off**
Sound Enhancement	**You can enjoy comfortable, analog-like sound.** **DVD-VR** **DVD-V** (recorded with 48 kHz only) **VCD** **CD** **WMA** **MP3** (recorded with other than 8 kHz, 16 kHz or 32 kHz) **On ←→ Off** ● This feature does not work with **MP3** on DVD-RAM or DVD-R/RW. ● This does not work when H.Bass (→ page 15) or Advanced Surround (→ page 13) is on. ● This may not work depending on the disc's recording.

Display Menu

Information	**On ←→ Off**
Subtitle Position	**0 to -60 (in 2 units)**
Subtitle Brightness	**Auto, 0 to -7**
Just Fit Zoom	*Motion pictures* To expand the letterbox picture to fit the screen. Press **[▲▼]** to select the preset aspect ratio or "Auto". **DVD-VR** **DVD-V** **VCD** Auto ←→ 4:3 Standard ←→ European Vista ←→ 16:9 Standard ⇅ Cinemascope2 ←→ Cinemascope1 ←→ American Vista ● Depending on the disc, the preset aspect ratio may not be displayed. **MPEG4** **DivX** Standard ←→ Original ↖→ Full ←↗
Manual Zoom	*Motion pictures* Press **[▲▼]** for fine adjustments. (Press and hold to alter faster.) –from ×1.00 to ×1.60 (in 0.01 units) –from ×1.60 to ×2.00 (in 0.02 units) **MPEG4** **DivX** only –from ×2.00 to ×4.00 (in 0.05 units) It may not be possible to zoom up to ×4.00 depending upon the connected television and its settings.
Bit Rate Display	*Motion pictures* **On ←→ Off**
GUI See-through	**Off, On, Auto (Switches on automatically when the images appear on the display.)**

Other Menu

Setup	(→ page 24, Changing the player settings)
Play as DVD-VR Play as HighMAT or Play as Data Disc	Select "Play as Data Disc" in the following cases: –To play HighMAT discs without using the HighMAT function –To play audio (**MP3**), picture (**JPEG**) or video (**MPEG4** **DivX**) on DVD-RAM with recorded titles (**DVD-VR**) ● To return to playing titles (**DVD-VR**), select "Play as DVD-VR".

Using On-Screen Menus
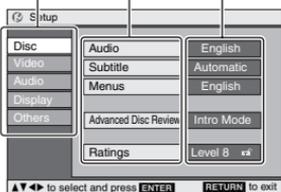
Changing the player settings

● Referring to pages 24 to 25, change as required.
● Underlined items are the factory presets.
The settings remain intact even if you switch the unit to standby.

1

DISPLAY

Press once.

2

ENTER

① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Other Menu".**
③ **Press [▶] then [▲▼] to select "Setup".**
④ **Press [ENTER].**

Menu   Item   Content

Setup		
Disc	Audio	English
Video	Subtitle	Automatic
Audio	Menus	English
Display		
Others	Advanced Disc Review	Intro Mode
	Ratings	Level 8

▲▼◀▶ to select and press **ENTER**   **RETURN** to exit

● Press **[▲ ▼ ◀ ▶]** to select the menu, item, content and press **[ENTER]**.
● To enter number: press **[▲▼]** to select and Press **[ENTER]**.
● To return to the previous screen: Press **[RETURN]**.
● **To exit the screen:** Press **[RETURN].**

"Disc" tab

Audio	● <u>English</u>　　● French　　● Spanish ● Original (The original language designated on the disc is selected) ● Other∗∗∗∗※
Subtitle	● <u>Automatic</u> [If the language selected for "Audio" is not available, subtitles appear in that language (If available on the disc).] ● English　　● French　　●Spanish　　●Other∗∗∗∗※
Menus	● <u>English</u>　　● French　　●Spanish　　●Other∗∗∗∗※
Advanced Disc Review Select how to review (➜ page 13).	● <u>Intro Mode</u>: Reviews each title/program. ● Interval Mode: Reviews each 10 minutes.
Ratings Set a ratings level to limit DVD-Video play. ● Follow the on- 　screen 　instructions.	Setting ratings (When level 8 is selected) ● <u>8 No Limit.</u> ● 1 to 7: 　To prohibit play of DVD-Video with corresponding ratings recorded on them. ● 0 Lock All: To prevent play of discs without ratings levels. 　　　　　　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.

※Input a code number referring to the table on page 25.

"Video" tab

TV Aspect Choose the setting to suit your television and preference.	● 4:3 Pan&Scan: Regular aspect television (4:3) 　The sides of the widescreen picture are cut off so it fills the screen (unless prohibited by the disc). ● 4:3 Letterbox: Regular aspect television (4:3) 　Widescreen picture is shown in the letterbox style. ● <u>16:9</u>: Widescreen television Use the television's screen modes to change the way the picture is shown.
Still Mode Specify the type of picture shown when paused.	● <u>Automatic</u> ● Field: The picture is not blurred, but picture quality is lower. ● Frame: Overall quality is high, but the picture may appear blurred.

Changing the player settings

"Audio" tab

Dynamic Range Compression	• Off
	• 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)

"Display" tab

Menu Language	• English • Français • Español
On-Screen Messages	• On • Off
Background during Play Select background during JPEG, MPEG4 and DivX video playback.	• Black • Gray

"Others" tab

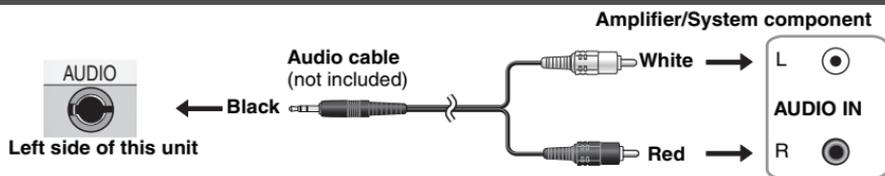| DivX Registration	You need this registration code to purchase and play DivX Video-on-Demand (VOD) content. (➜ page 21)
Re-initialize Setting This returns all values in the Setup menus to the default settings.	• Yes: The password screen is shown if "Ratings" (➜ page 24) is set. Please enter the same password and press **[ENTER]**. When "Initialized" appears on the screen, wait for about 10 seconds. Press **[ENTER]** and turn the unit off and on again. • No

Language code list

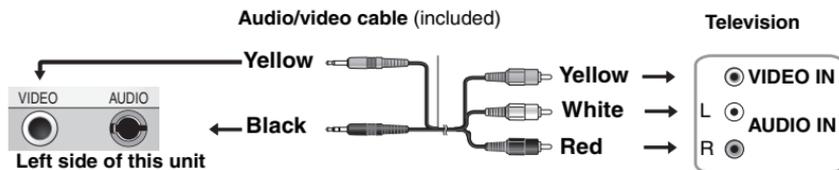|					
Abkhazian: 6566	Chinese: 9072	Hindi: 7273	Malagasy: 7771	Samoan: 8377	Tibetan: 6679
Afar: 6565	Corsican: 6779	Hungarian: 7285	Malay: 7783	Sanskrit: 8365	Tigrinya: 8473
Afrikaans: 6570	Croatian: 7282	Icelandic: 7383	Malayalam: 7776	Scots Gaelic:	Tonga: 8479
Albanian: 8381	Czech: 6783	Indonesian: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

Using this unit with other equipment

Turn off all equipment before connecting and read the appropriate operating instructions.
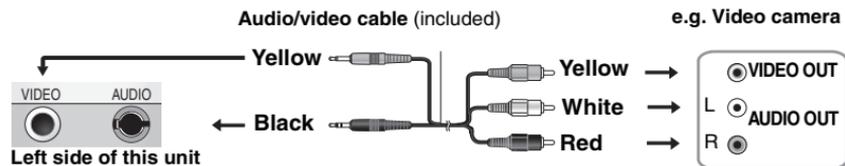
Enjoying stereo audio

Amplifier/System component

AUDIO

Audio cable (not included)

Left side of this unit

White →

Black ←

L ⊙

AUDIO IN

Red →

R ⊙

Enjoying with a television

Connect the video output from this unit directly to the television.

Audio/video cable (included)   **Television**

VIDEO   AUDIO

Yellow ←

Black ←

Yellow →
White →
Red →

⊙ **VIDEO IN**
L ⊙ **AUDIO IN**
R ⊙

Left side of this unit

- The unit's speakers do not have magnetic shielding. Do not place the unit near televisions, personal computers or other devices easily influenced by magnetism. Do not keep this unit and magnetized cards (bank cards, commuter passes, etc.) close together.
- If you raise the volume on the television while playing this unit, the volume may abruptly become very loud when you switch to a television broadcast. Return the volume to its normal level before changing.

Watching video from other equipment

1 Connect the equipment to this unit.

Audio/video cable (included)   **e.g. Video camera**

VIDEO   AUDIO

Yellow ←

Black ←

Yellow →
White →
Red →

⊙ **VIDEO OUT**
L ⊙ **AUDIO OUT**
R ⊙

Left side of this unit

2 Press [AV SELECT] to switch to "AUX" .

"AUX" lights on the unit's display.

- Operate playback using the connected equipment. (Please read the operating instructions for the connected equipment)
- The unit does not turn off automatically while "AUX" mode is on. Turn the unit off when you have finished using it.

Frequently asked questions

Reference pages are shown in parentheses.

Can I play a DVD-Video bought in another country?	You can play if the region number includes "1" or "ALL" and the video standard is NTSC. Check the disc jacket.
Can I use on an airplane or in a hospital?	Electromagnetic waves that are emitted from this unit may affect equipment on an airplane or in a hospital. Please obey the rules and/or instructions indicated by the hospital or airline.
Can I use in a car?	You can use this unit by connecting with the included Car DC Adaptor for power. Damage may occur if you do not use the specified car adaptor. **(20)**
Can I connect with a computer?	You can enjoy use of the computer as a television monitor when connecting with the AV input terminal on a computer. However, you cannot operate this unit as peripheral equipment.

Maintenance

To clean this unit, wipe with a soft, dry cloth.
- Use eyeglass cleaner to remove stubborn dirt from the LCD.
- Never use alcohol, paint thinner or benzine to clean this unit.

Maintenance of the lens
- Remove dust carefully with an air blower for camera lenses (optional).
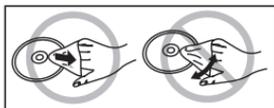- Recommended product:
  Lens cleaner kit (SZZP1038C)
  (Available from Panasonic dealers.)
- You cannot use a CD type lens cleaner.
- Be careful not to touch the lens with your fingers.

To clean discs
- Wipe with a damp cloth and then wipe dry.

Disc 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 drop stack, or impact discs. Do not place objects on them.
- To protect discs from scratches and dirt, return them to their cases or cartridges when you are not using them.
- 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.

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 _____

SERIAL NUMBER _____

Frequently asked questions/Maintenance

Specifications

Operating temperature range:
$+5$ to $+35\ ^{\circ}$C ($+41$ to $+95\ ^{\circ}$F)
Operating humidity range:
5 to 85 % RH (no condensation)
Discs played [8 cm (3 ″) or 12 cm (5 ″)]:
(1) DVD (DVD-Video, DivX※6, 8)
(2) DVD-RAM (DVD-VR※9, JPEG※4, 6, 7,
MP3※2, 6, MPEG4※5, 6, DivX※6, 8)
(3) DVD-R (DVD-Video, DVD-VR※9,
JPEG※4, 6, 7, MP3※2, 6, MPEG4※5, 6, DivX※6, 8)
(4) DVD-R DL (DVD-Video, DVD-VR※9)
(5) DVD-RW (DVD-Video, DVD-VR※9,
JPEG※4, 6, 7, MP3※2, 6, MPEG4※5, 6, DivX※6, 8)
(6) +R/RW (Video)
(7) +R DL (Video)
(8) CD, CD-R/RW [CD-DA, Video-CD,
SVCD※1, MP3※2, 6, WMA※3, 6, JPEG※4, 6, 7,
MPEG4※5, 6, DivX※6, 8, HighMAT Level 2
(Audio and Image)]

Signal system: NTSC
LCD screen: 8.5″ α-Si, TFT wide-screen LCD
Composite-video output/input:
Output/input level: 1 Vp-p (75 Ω)
Output/input terminal:
φ 3.5 mm (1/8″) mini jack
Number of terminals: 1 system
(output/input selectable)
Audio output/input:
Output/input level:1.5 Vrms (1 kHz, 0 dB, 10 kΩ)
Output/input terminal:
φ 3.5 mm (1/8″) stereo mini jack
Number of terminals: 1 system
(output/input selectable)
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): 91 dB
● CD audio: 92 dB
(4) Total harmonic distortion:
●CD audio: 0.01 %
Headphone output:
Output: φ 3.5 mm (1/8″) stereo mini jack
Number of terminals: 2 systems
Pickup:
Wave length: 662 nm/785 nm (DVD/CD)
Laser power:
(For U.S.A.) CLASS II/CLASS I (DVD/CD)
(For Canada) CLASS 1M/CLASS 1M (DVD/CD)

Power supply: DC 12 V (DC IN terminal)/
DC 7.2 V (Exclusive battery terminal)
Power consumption (using included AC adaptor)**:**
14 W (Unit only: 12 W)
**Power consumption in Standby mode
(using included AC adaptor):**
approx. 0.4 W
Power consumption in Recharge mode
(using included AC adaptor)**:**
12 W

AC adaptor:
Power source: AC 100 to 240 V, 50/60 Hz
Power consumption: 22 W
DC output: 12 V, 1.3 A
Car DC Adaptor:
DC output: 12 V, 1.5 A
(Vehicle with 12 V battery only)
Battery pack (lithium ion)
DVD-LS80 DVD-LS850 CGR-H711 (included):
Voltage: 7.2 V
Capacity: 2250 mAh
DVD-LS82 CGR-H712 (included):
Voltage: 7.2 V
Capacity: 4500 mAh
Dimensions (W×D×H)
(excluding protrusions and battery):
242.6 mm×173.5 mm×46.0※ mm
(9 9/16″×6 27/32″×1 13/16″)
※23.9 mm (15/16″) at lowest point
DVD-LS80 DVD-LS850
[D=173.5 mm (6 27/32″) including battery]
[H=46.6 mm (1 27/32″) including battery]
DVD-LS82 [D=179.3 mm (7 1/16″) including battery]
[H=51.5 mm (2 1/32″) including battery]
Mass (Weight)
(including battery):
DVD-LS80 DVD-LS850
approximately 1032 g (36.40 oz)
DVD-LS82 approximately 1120 g (39.51 oz)
(without battery): 890 g (31.39 oz)

> **Note**
> Specifications are subject to change without notice.

※1 Conforming to IEC62107
※2 MPEG-1 Layer3, MPEG-2 Layer3
※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 4:0:0,
4:2:0, 4:2:2 or 4:4:4)
※5 MPEG4 data recorded with the Panasonic SD
multi cameras or DVD recorders
Conforming to SD VIDEO specifications (ASF
standard)/MPEG4 (Simple Profile) video system /
G.726 audio system.
※6 The total combined maximum number of
recognizable audio, picture and movie
contents and groups: 4000 audio, picture and
movie contents and 400 groups.
※7 Extremely long and slender pictures may not
be displayed.
※8 Plays all versions of DivX® video (including
DivX®6) with standard playback of DivX® media
files. Certified to the DivX Home Theater Profile.
※9 CPRM doesn't cope with it.

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 "Customer Services Directory" on page 33 if you reside in the U.S.A., or refer to "Product information" on page 33 if you reside in Canada. In other areas, consult your dealer for instructions. (Reference pages are shown in parentheses.)

> **The following do not indicate malfunction.**
> ●Sound from the AC adaptor during recharging.
> ●The battery pack warming up when recharging or during use.
> ●The surface and area around the unit becoming warm when used for long periods.

Power

No power.	● Check connections to the AC adaptor or battery pack. **(8)** ● The unit has protection circuitry that is activated if it becomes too hot or too cold. The unit will not work if this occurs. Use the unit between 5 °C (41 °F) and 35 °C (95 °F).
Unit turns off automatically.	● The unit turns off after it has been stopped for about 15 minutes (5 minutes when the unit is powered by the battery pack) to conserve power. Turn the unit on again.
Cannot charge or the [CHG] indicator fails to light.	● The charging time increases when the temperature is too hot or too cold, and charging may not be possible under some circumstances. ● Check connections to the AC adaptor or battery pack. **(8)**
Play time dramatically reduced after recharging.	● The battery pack has reached the end of its service life (It can be recharged about 300 times).

No operation

No response when any buttons pressed.	● This unit cannot play discs other than the ones listed in these operating instructions. **(6)** ● 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 power source (AC or battery pack), and then reconnect it. ● Condensation has formed: Wait 1 to 2 hours for it to evaporate. ● Please insert the disc correctly. **(10)**
You have forgotten your ratings password.	● While stopped, press and hold [◀◀] and [▮▮] on the unit and then also press and hold [▶, ON] on the unit until "Initialized" disappears from the screen. Turn the unit off and on again. All settings will return to the default values.
No picture or sound.	● Check that the disc has something recorded on it.

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.
Menu doesn't appear. **VCD** with playback control	● Press [■, – OFF] twice and then press [▶, ON].
Subtitle position is wrong.	● Adjust the position. ("Subtitle Position" in Display Menu) **(23)**
No subtitles.	● Display the subtitles. **(14)**
The subtitles overlap closed captions recorded on discs.	● Clear the subtitles. **(14)**
In A-B repeat, point B is automatically set.	● If you have set only the starting point (point A), the end of an item becomes point B when it is reached.

Troubleshooting guide

Troubleshooting guide

Specific operation impossible or incorrect

Play doesn't start.	• 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 the DivX VOD content. (Example: www.divx.com/vod) • If a disc contains CD-DA and other formats, proper playback may not be possible.

Picture incorrect

Picture distorted.	• There may be some video distortion during search, but this is normal. • Picture quality may worsen or some frames may be skipped when viewing MPEG4, but this is normal. • **DivX** Change "Source Select" in Picture Menu. **(22)**
Picture stops.	• Picture may stop if the DivX files are greater than 2 GB.
No picture on the LCD.	• Check connections. **(8)** • Select a LCD-SIZE other than "MONITOR OFF" (No picture). **(12, Selecting how to show 4:3 aspect pictures on the LCD)**.
The LCD is dark.	• Select "DAYLIGHT" or adjust the brightness. **(12)**
LCD pixels turn black or radiate different colors.	• The LCD is constructed with precision technology so 99.99 % of the pixels are active, but of the remaining of 0.01 %, there are pixels that may be black or emit light constantly. This phenomenon is not a malfunction.
Picture doesn't appear on the television (or the size of the picture seems wrong).	• Check connections. **(26)** • Check that the television is on. • Check that the input mode on the television is correct. • Check the settings in "Video—TV Aspect". **(24)** • Turn off the zooming feature on your television if you are using Zoom. **(23)** • Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder. **(26)** • Use the television to change the aspect. • Adjust "Just Fit Zoom" in Display Menu. **(23)**
Menu not displayed correctly.	• Restore the zoom ratio to ×1.00. **(23)** • Set "Subtitle Position" in Display Menu to "0". **(23)**
Auto zoom function does not work well.	• Turn off the zooming feature on your television. • Use the other preset aspect ratios or manual adjustment. **(23)** • Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc.

Sound incorrect

Sound distorted.	• Select "Off" in "Advanced Surround". **(13)** • Move unit away from mobile phones. • Noise may occur when playing WMA or MPEG4 files.
Effects do not work.	• Some audio effects do not work or have less effect with some discs. • H.Bass, Advanced Surround and Sound Enhancement do not work if you have changed the play speed.
No sound from the unit's speaker.	• The speaker is off if the LCD is closed or headphones are connected. • Turn up the volume. **(10)**
No sound from other speakers.	• Check all connections and settings. **(26)**
No sound when you change the play speed.	• There may be a pause in sound. This is not a malfunction.
No sound.	• **DivX** Audio may not be output due to how files were created. **(7)**

Troubleshooting guide (sidebar)

Displays

"⊘"	● The operation is prohibited by the unit or disc.
No On-Screen display.	● Select "On" for "On-Screen Messages" in "Display" tab. **(25)**
"Check the disc." **"U11"**	● Clean the disc. **(27)** ● You inserted a disc that has not been finalized. **(6)**
" ▭▭▭ ERROR 01"	● A problem has occurred with the battery pack. Consult your dealer.
" ▭▭▭ ERROR 02"	● The battery pack has been recharging for 20 hours but has failed to recharge for some reason. Recharge again.
" ▭▭▭ ERROR 03"	● You are recharging in a location that is too hot or too cold. Recharge at normal temperature [+5 to +35 °C (+41 to +95 °F)].
"H ▢▢" ▢▢ **stands for a** **number.**	● Trouble has occurred. The number appearing after "H" depends on the problem. Turn the unit off and on again. Alternatively, turn the unit off, disconnect the power source (AC or battery pack), reconnect the power and turn the unit on again. If the service numbers fail to clear, note the service numbers and consult your dealer.
"Cannot display group xx, **content xx"**	● You are trying to play incompatible groups or content. **(7)**
"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. **(21)**
"Rental Expired"	● The DivX VOD content has zero remaining plays. You cannot play it. **(21)**

[⏻] and [CHG] indicators

The [⏻] indicator **flashes rapidly.**	● The unit has malfunctioned. Consult your dealer.
The [⏻] indicator **flashes slowly.**	● The unit is on and the LCD is closed or the LCD-SIZE is set to "MONITOR OFF" (No picture). Turn the unit off when you have finished.
The [CHG] indicator **flashes rapidly.**	● There is a problem with the battery pack. Turn the unit on and check the message on the LCD. **(above)**
The [CHG] indicator **flashes slowly.**	● Battery pack charge is low. The unit will turn off automatically after a few minutes.

Troubleshooting guide

Limited Warranty (ONLY FOR U.S.A.)

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America
One Panasonic Way Secaucus,
New Jersey 07094

Panasonic Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park, Carolina,
Puerto Rico 00985

Panasonic DVD Player 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 Puerto Rico, Inc. (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.

Product or Part Name	Parts	Labor
DVD Player	One (1) Year	Ninety (90) Days
Rechargeable Batteries (in exchange for defective item)	Ten (10) Days	Not Applicable
Headrest mounting bracket, Headphones, Accessories (in exchange for defective item)	Ninety (90) Days	Not Applicable

During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This Limited Warranty only applies to products purchased and serviced in the United States or Puerto Rico. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

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 Puerto Rico, Inc. (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

IF REPAIR IS NEEDED DURING THE LIMITED WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

Limited Warranty Limits And Exclusions
This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as hotel, office, restaurant, or other business), rental use of the product, or service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

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/consumersupport
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.pstc.panasonic.com
or, send your request by E-mail to:
npcparts@us.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 Service and Technology 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

Panasonic Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787)750-4300, Fax (787)768-2910

F1104

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:
In the U.S.A., refer to "Customer Services Directory" above.

In Canada, 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.

Limited Warranty (ONLY FOR U.S.A.)/Product Service

RQT8912

Limited Warranty (ONLY FOR CANADA)

Panasonic Canada Inc.
PANASONIC PRODUCT – LIMITED WARRANTY

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

Technics Audio Product	**One (1) year, parts and labour**
Panasonic Portable/Clock Radio (without Tape, CD, MD)	**One (1) year, parts and labour**
Panasonic Audio/SD Audio Product	**One (1) year, parts and labour**
Panasonic DVD Product	**One (1) year, parts and labour**
Panasonic Combination DVD Player/VCR	**One (1) year, parts and labour**
Panasonic Combination DVD Recorder/VCR	**One (1) year, parts and labour**
Accessories including rechargeable batteries	**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.

WARRANTY SERVICE

FOR PRODUCT 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 PRODUCT REPAIRS, please locate your nearest Authorized Servicentre at www.panasonic.ca :

Link : "Servicentres™ locator" under "Customer support"

IF YOU SHIP THE PRODUCT TO A SERVICENTRE
Carefully pack and send prepaid, adequately insured and preferably in the original carton.
Include details of the defect claimed, and proof of date of original purchase.

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" is a trademark of DTS, Inc.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, and 4,819,098, 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.

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.

HighMAT™ and the HighMAT logo are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

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

This product is protected by certain intellectual property rights of Microsoft Corporation and third parties. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary and third parties.

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.

THE FOLLOWING APPLIES ONLY IN THE U.S.A.
Notice:
This product has a fluorescent lamp that contains mercury. Disposal may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronic Industries Alliance: <http://www.eiae.org>

Index

PRINTED WITH
SOY INK ™
This manual was printed with soy based ink.

RQT8912-4P
F1206BL4047