# Panasonic®

Operating Instructions
Manuel d'utilisation

**Portable DVD/CD Player**
**Lecteur DVD/CD portatif**

Model No./Modèle **DVD-LX110**

## *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.

## *Cher client*

Nous vous remercions d'avoir arrêté votre choix sur cet appareil. Pour en tirer un rendement optimal, lire attentivement le présent manuel.
Avant de raccorder, régler ou utiliser l'appareil, il est recommandé de lire attentivement le manuel d'utilisation. Conserver ce manuel.

| **MULTI-FORMAT PLAYBACK** | **LECTURE MULTIFORMAT** |
|---|---|
| See page 10 for details. | Pour plus de renseignements, voir la page 10. |

DVD AUDIO/VIDEO

COMPACT DIGITAL VIDEO

RAM COMPATIBLE PLAYER

SD™

**U.S.A.:** The warranty can be found on page 40.
**Canada:** The warranty can be found on page 39.
La garantie se trouve à la page 39.

**If you have any questions contact/**
**Pour toute demande de renseignements, appeler au**

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

## PalmTheater

| **Region number/Code régional** | **Example:**
**Exemple:** |
|---|---|
| The player plays DVD-Video marked with labels containing the region number "**1**" or "**ALL**".

Le lecteur prend en charge les disques DVD-Vidéo identifiés par le code régional "**1**" ou par la mention "**ALL**". | ① ALL ①②④ |

Operations in these instructions are described mainly with the main unit, but you can do the operations on the remote control if the remote controls are the same.
Les instructions du présent manuel font référence à l'appareil. Toutefois, les fonctions peuvent être activées au moyen des touches de la télécommande identiques à celles de l'appareil.

PP

The following mark and symbols are located on bottom of the unit.

| | CAUTION | |
|---|---|---|
| ⚡ | RISK OF ELECTRIC SHOCK<br>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.

CAUTION - LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. DO NOT STARE INTO BEAM.   FDA 21 CFR / Class II

CAUTION - CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
IEC60825-1 +A2/ Class 1M

ATTENTION - RAYONNEMENT LASER VISIBLE ET INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE ET LORSQUE LA SÉCURITÉ EST NEUTRALISÉE.   NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.

(Bottom of product)

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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.

## Batteries
1. **Battery pack (Lithium ion battery pack)**
   - Use this unit to recharge the battery pack.
   - Do not use the battery pack with equipment other than the specified player.
   - 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.
2. **Button-type battery (Lithium battery)**
   - Insert with poles aligned.
   - Do not touch the terminals ($+$ and $-$) with metal objects.
   - Do not disassemble, remodel, heat or throw into fire.
   - Keep out of reach of children

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.

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

## CAUTION:
The batteries used in this device may present a risk of fire or chemical burn if mistreated. Do not disassemble or incinerate the batteries. Do not heat the batteries above the following temperatures.

| | |
|---|---|
| **Button-type battery** | **100 $^\circ$C (212 $^\circ$F)** |
| **Battery pack** | **60 $^\circ$C (140 $^\circ$F)** |

Do not recharge the button-type battery.
Replace only with Panasonic part number indicated below:

| | |
|---|---|
| **Button-type battery** (Lithium battery) | |
| (for remote control) | **CR2025** |
| **Battery pack** | |
| (Lithium ion battery pack) | **CGR-H713** |
| **Optional battery pack** | |
| (Lithium ion battery pack) | **CGR-H712** |

Use of other batteries may present a risk of fire or explosion.

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 110 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.

**THE FOLLOWING APPLIES ONLY IN THE U.S.A.**
**Notice:**
This product has parts that contain a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance:<http://www.eiae.org.>

**For USA-California Only**
This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material – special handling may apply.
See
www.dtsc.ca.gov/hazardouswaste/perchlorate.

## 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.

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# 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.
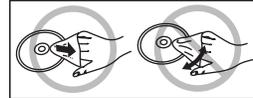
**Disc handling precautions**
● Do not attach labels or stickers to discs (This may cause disc warping, rendering it unusable).
● Do not write on the label side with a ball-point pen or other writing instrument.
● Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids 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.

**Card handling precautions**
● Do not detach the label and do not attach other labels.

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# Accessories

Use numbers indicated in parentheses when asking for replacement parts.

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

*(For U.S.A.) To order accessories, refer to "Accessory Purchases" on page 41.*
*(For Canada) To order accessories, call the dealer from whom you have made your purchase.*

☐ **1 Remote control** (N2QAHC000021)
☐ **1 Button-type battery** for remote control (for replacement, see below)
  ●Keep out of the small children.
   Accidental swallowing of batteries can result in stomach and intestinal damage.
☐ **1 Audio/video cable** (K2KA6CB00003)
☐ **1 AC adaptor** (RFEA214W)
☐ **1 AC power supply cord** (K2CB2CB00018)
  ●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** (RFEC202M-M)
☐ **1 Headrest Mounting bracket** (RXQ1405B)
☐ **1 Monitor holder** (RGQ0459-K)
☐ **1 Rechargeable battery pack** (CGR-H713)
  For replacement: Available from Panasonic dealers (CGR-H713, CGR-H712)
  CGR-H713: Same as the included rechargeable battery pack (Playback time is the same)
  CGR-H712: Playback time is shorter than the included rechargeable battery pack
  (Recharging time ➜ page 8, Playback time ➜ page 9)

# The remote control

## *Insert the button-type battery (included)*

**Bottom**

① While sliding (①),
pull out (②).

③ + facing up
Lithium battery: **CR2025**

## *Range of use*

Aim at the sensor. Maximum
range is up to 7 m (23 feet).

30°
30°
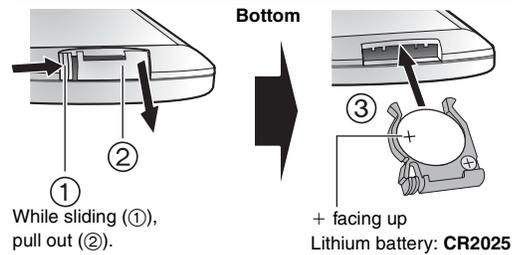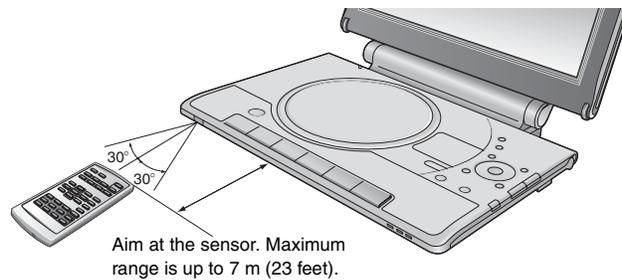
# Preparations

## ❶ Attaching the battery (When the unit is off)

An optional battery pack (CGR-H712) is also available. The procedure for attaching and detaching is 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.

② 

① **Press and hold**
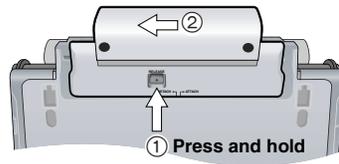
**When not using for long periods of time**
● Remove the battery pack (➜ left).
(Even when the unit is turned off, there is a small amount of voltage running through the unit, and this may result in a malfunction.)
● Recharge the battery for re-use.

## ❷ Recharging the battery (When the unit is off)

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**

**AC adaptor** (included) ②

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 32, Enjoying in a car).

**To conserve power**
This unit consumes 0.3 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  SLEEP

⏻  **CHG**

| | **Started** | | **Finished** |
|---|---|---|---|
| [⏻] | goes out | ➜ | lights |
| [CHG] | lights | ➜ | goes out |

**Recharging time :**
**Approx. 8 hours** (CGR-H713, included)
**Approx. 6 hours** (CGR-H712, optional)
When finished, disconnect the AC adaptor and the AC power supply cord.

## *Approximate play times* (Hours)

| Battery pack | Play (at room temperature using headphones) | | | |
| | LCD brightness level | | | LCD Off |
| | −5 | 0 | 5 (factory preset) | |
|---|---|---|---|---|
| CGR-H713 (included) | 6 (7) | 4 (5) | 3 (4) | 12 (18) |
| CGR-H712 (optional) | 3 (3.5) | 2 (2.5) | 1.5 (2) | 6 (9) |

● Times for when playing SD cards are in parenthesis.
● The times indicated above may differ depending on use.
● To change the LCD brightness (➜ page 16, Adjusting the picture quality on the LCD).

## *Checking the remaining battery charge*

When the unit is on (➜ page 12, 15) 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



**Standard**

Open the LCD

**Compact**          **Free**

Slide

Clicks!
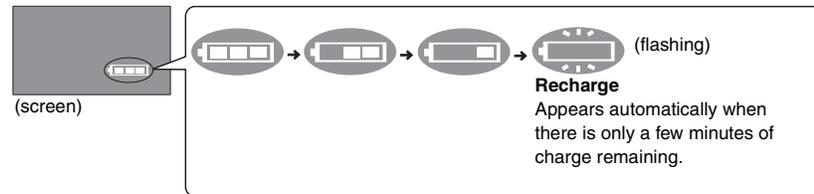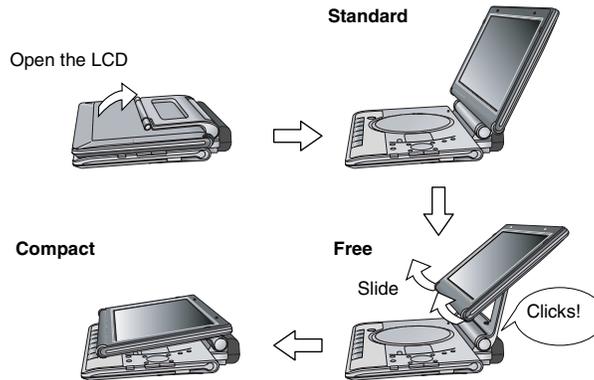
**When moving the unit : Close the LCD. Don't hold by the LCD.**

# Discs that can be played

**Commercial discs**

| Disc Logo | Indicated in these instructions by | Remarks |
|---|---|---|
| **DVD-Video** <br> DVD VIDEO  DVD VIDEO | DVD-V | High quality movie and music discs |
| **DVD-Audio**[1, 2] <br> DVD AUDIO | DVD-A | High quality music discs |
| **Video CD** <br> COMPACT DIGITAL VIDEO  COMPACT SUPER VIDEO | VCD | Music discs with video Including SVCD (Conforming to IEC62107) |
| **CD** <br> COMPACT DIGITAL AUDIO  COMPACT DIGITAL AUDIO TEXT | CD | Music discs |

## ■ Discs that cannot be played

Version 1.0 of DVD-RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD, DivX Video Discs and Photo CD, DVD-RAM that cannot be removed from their cartridges, 2.6-GB and 5.2-GB DVD-RAM, PAL discs (you can still play the audio on DVD-Audio) and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

[1] Some multi-channel DVD-Audio will prevent down-mixing (➔ page 35, Glossary) of all or part of their contents if this is the manufacturer's intention.

[2] Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" (➔ page 27, Other Menu).

## Recorded disc (Yes: Available No: Not available)

| Disc Logo | Recorded on a DVD video recorder, etc. | | Recorded on a personal computer, etc. | | | | Necessity of finalize[4] |
|---|---|---|---|---|---|---|---|
| | DVD-VR [2] | DVD-V [3] | WMA | MP3 | JPEG | MPEG4 | |
| **DVD-RAM** <br> DVD RAM RAM4.7 | Yes | — | No | Yes | Yes | Yes | Not Necessary |
| **DVD-R/RW** <br> DVD R R4.7  DVD RW | Yes | Yes | No | Yes | Yes | Yes | Necessary |
| **DVD-R DL** <br> DVD R R DL | Yes | Yes | No | No | No | No | Necessary |
| **+R/+RW** <br> — | No | (Yes) | No | No | No | No | Necessary |
| **+R DL** <br> — | No | (Yes) | No | No | No | No | Necessary |
| **CD-R/RW**[1] <br> — | — | — | 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 25, 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.

# Cards that can be played

| Card Logo | Indicated in these instructions by | Remarks |
|---|---|---|
| **SD Memory Card/ miniSD™ Card**∗ <br><br> *SD logo (graphic)* <br><br> ● SD logo is a trademark. <br> ● miniSD™ is a trademark of SD Card Association. | `SD PICTURE` <br> `SD VIDEO` | ● `SD PICTURE` **Still Pictures** <br> JPEG data recorded with Panasonic SD multi cameras or DVD recorders using DCF (Design rule for Camera File system) Standard Version 1.0. <br> ● `SD VIDEO` **Moving pictures** <br> 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]. <br> ● You can use SD Memory Cards with the following capacities (from 8 MB to 2 GB). <br> **8 MB, 16 MB, 32 MB, 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB (Maximum)** <br> ● Useable memory is slightly less than the card capacity. <br> ● Please confirm the latest information on the following website. (This site is in English only.) <br> **http://panasonic.co.jp/pavc/global/cs** <br> ● If the SD Memory Card is formatted or recorded on a PC, you may not be able to use it on this unit. <br> ● This unit supports SD Memory Cards formatted with equipment conforming to SD File System specifcations Ver. 1.01 such as Panasonic SD multi cameras or DVD recorders (Conforming to FAT 12 standard and FAT 16 standard). <br> ● We recommend using a Panasonic SD card. <br> ● Operation is not guaranteed with MultiMediaCard. <br> ● MOTION JPEG and MPEG2 are not supported. <br> ● Some files are not compatible with this unit and cannot be played back. For example: <br> – Moving picture files recorded using a digital still camera with moving picture function <br> ● The recording date may differ from that of the actual date. <br><br> **Structure of folders displayed by this unit** <br> (Files are treated as contents and folders are treated as groups on this unit. However there are no groups with `SD VIDEO`.) <br><br> The following ☐ can be displayed on this unit. <br><br> ✳✳✳: Numbers      XXX:Letters <br> **Card** <br><br> **DCIM** (Higher folder) <br>     ✳✳✳**XXXXX** (Picture folder) <br>        XXXX✳✳✳✳.JPG <br><br> **SD_VIDEO** <br>     PRL✳✳✳ (Video folder) <br>        MOL✳✳✳.ASF <br><br> ● Some folders cannot be displayed depending on the folder name. <br> ● A folder name or file name input may not be displayed properly or played properly. |

∗A miniSD™ card adaptor included with the miniSD™ card is necessary.
● It may not be possible to play the above cards in all cases due to the type of cards, the condition of the recording, the recording method and how the files were created.
● **Keep the SD Memory Card out of reach of children. If swallowed, seek medical advice immediately.**

# 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 "SD" or "AUX" is displayed, press [AV SELECT] several times until "DISC" is displayed.**
(Playing SD cards➜ page 14/ Watching video from other equipment ➜ page 33)

## 4  Adjust the volume.

| – | + |

**VOL**

When using headphones, turn down the volume before connection.

● To play **JPEG**, **MP3** or **MPEG4** on DVD-RAM that contain both **DVD-VR** and another format (e.g. **JPEG**), select "Play as Data Disc" (➜ page 27, Other Menu).
● While stopped, the unit automatically turns off once 15 minutes (after approximately 5 minutes when using the battery pack) have elapsed.
● Discs continue to rotate while menus are displayed. Press [■, – OFF] when you finish to preserve the unit's motor.
● Total title number may not be displayed properly on +R/+RW.
● If you are experiencing problems, refer to troubleshooting guide (➜ page 36).

## Main unit operations

| | | |
|---|---|---|
| ►<br>ON | **Turn unit on/play** | When the unit is off:<br>Press and hold and the power comes on and play begins.<br><br>When the unit is on:<br>Press and play begins. |
| ❚❚ | **Pause** | Press **[►, ON]** to restart play. |
| ■<br>– OFF | **Stop** | The position is memorized when "Press PLAY to resume play" appears on the screen.<br><br>● Press **[►, ON]** to resume. **(Resume play)**<br>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 [◄◄, ►►]. <br> 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. <br> Press [►, ON] to return to normal play. <br> ● VCD [►►] only <br> ● MPEG4 : Does not work. |
| TOP MENU ◯ | **Top menu** | DVD-A DVD-V |
| | **Playing programs** | DVD-VR (➔ page 22) |
| | **Playback Menu** | WMA MP3 JPEG MPEG4 <br> Playing data discs (➔ page 24) |
| MENU ◯ | **Menu** | DVD-V |
| | **Playing playlists** | DVD-VR (➔ page 22) |
| | **Navigation Menu** | WMA MP3 JPEG MPEG4 <br> Playing data discs (➔ page 24) |
| ◯ RETURN | **Return** | Returns to the previous screen. <br> VCD (with playback control) Returns to the menu. |
| △ <br> ◁ ENTER ▷ <br> ▽ | **Menu operation** | Press [▲ ▼ ◄ ►] to select an item and press [ENTER] to confirm. |
| | **Frame-by-frame** | DVD-VR DVD-V VCD <br> While paused, press [◄ ►]. <br> VCD [►] only |
| | **Group skip** | WMA MP3 JPEG MPEG4 <br> Press [▲ ▼]. <br> ● Does not work while paused. |

## Remote control operations

| | | |
|---|---|---|
| [⏻] | **Turn unit on/off** | ● **You cannot turn on the unit with the remote control if the unit is powered by the battery pack.** |
| PLAY [►] | **Play** | Press and play begins. |
| [◄◄] [►►] | **Skip** | Press [◄◄, ►►]. <br> DVD-VR Can also skip to the markers. |
| [◄◄] [►►] | **Search** | Press [◄◄, ►►] (up to 5 steps). |
| | **Slow play** | Press [◄◄, ►►] (up to 5 steps) while paused. <br> Press [►] (PLAY) to return to normal play. <br> ● VCD [►►] only <br> ● MPEG4 : Does not work. |
| [1] [2] [3] <br> [4] [5] [6] [≧10] <br> [7] [8] [9] [0] | **Enter number** | DVD-VR DVD-A DVD-V VCD CD <br> e.g. To select 12: <br> [≧10] ➔ [1] ➔ [2] <br><br> WMA MP3 JPEG MPEG4 <br> e.g. To select 123: <br> [1] ➔ [2] ➔ [3] ➔ [ENTER] |

# Playing SD cards

**Do not remove the card or turn off the unit while the card is being read from ("Card Reading…" is on the display) or the unit is using the card. This can corrupt your data.**

● You can use SD Memory Cards with capacities from 8 MB to 2 GB (➜ page 11).
● When you insert a SD card while the unit is on, playback starts automatically.

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

VOLUME
TOP MENU
SD Indicator
AV SELECT

## 1 Insert the card.

❶ **Open the cover.**

OPEN

**Press.**

❷ **Insert the card.**

Cut-off corner

Press on the center of the card until it clicks into place.
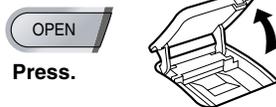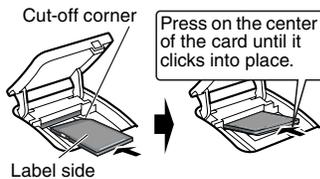
Label side

**Diagram of inserted card**

● If you are using a miniSD™ card, insert it into the miniSD™ card adaptor that comes with the card. Insert and remove this adaptor from the unit.

❸ **Close the cover.**

## 2

►
ON
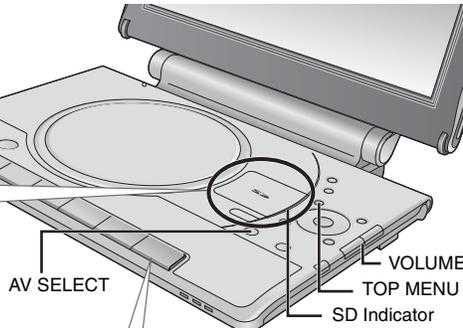
**Press and hold until the power comes on.**
Play begins automatically.

**When "AUX" or "DISC" is displayed, press [AV SELECT] several times until "SD" is displayed.**
(SD Indicator lights while "SD " is selected. To turn the illumination off ➜ page 16, Adjusting the picture quality on the LCD.)

● **SD VIDEO** Adjust the volume.
● When playing a SD card that contain both "Picture" and "Video " content, "Picture" content will be played first.

### ■ To change content

TOP MENU

**Press to display "SD Card Menu".**

○ SD Card Menu

Picture

Video

▲▼ to select and press **ENTER**
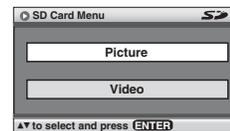
**Press [▲ ▼] to select "Picture" or "Video" and press [ENTER].**
Play begins.

● While stopped, the unit automatically turns off once 15 minutes (after approximately 5 minutes when using the battery pack) have elapsed.
● If you are experiencing problems, refer to troubleshooting guide (➜ page 36).

### ■ Remove the card
❶ **Open the cover.**          ❷ **Press on the center of the card.**          ❸ **Pull it straight out.**

OPEN

**Press.**

# Main unit operations

| | | |
|---|---|---|
| [ ▶ ]<br>ON | **Turn unit on** | Press and hold and the power comes on and play begins automatically. |
| [ ‖ ] | **Pause** | Press **[▶, ON]** to restart play. |
| [ ■ ]<br>– OFF | **Stop** | The position is memorized when the message appears on the screen.<br>● Press **[▶, ON]** to resume. **(Resume play)**<br>Pressing **[■, – OFF]**, removing the card or pressing **[AV SELECT]** while the message appears on the screen cancels the memorized position where play stopped. |
| | **Turn unit off** | Press and hold until "OFF" is displayed. |
| [ ⏮ ] [ ⏭ ] | **Skip** | Press **[⏮, ⏭]**. |
| | **Search** | `SD VIDEO` Press and hold **[⏮, ⏭]** (up to 5 steps). Press **[▶, ON]** to return to normal play. |
| TOP MENU<br>◯ | **SD Card Menu** | ➜ page 23, Playing items in order |
| MENU<br>◯ | **Navigation Menu** | ➜ page 23, Playing from the selected item |
| ◯<br>RETURN | **Return** | Returns to the previous screen. |
| △<br>◁ (ENTER) ▷<br>▽ | **Menu operation** | Press **[▲ ▼ ◀ ▶]** to select an item and press **[ENTER]** to confirm. |
| | **Group skip** | `SD PICTURE`<br>Press **[▲ ▼]**. |

# Remote control operations

| | | |
|---|---|---|
| [ ⏻ ] | **Turn unit on/off** | ● **You cannot turn on the unit with the remote control if the unit is powered by the battery pack.** |
| PLAY<br>[ ▶ ] | **Play** | Press and play begins. |
| [ ⏮ ] [ ⏭ ] | **Skip** | Press **[⏮, ⏭]**. |
| [ ◀◀ ] [ ▶▶ ] | **Search** | `SD VIDEO` Press **[◀◀, ▶▶]** (up to 5 steps). Press **[▶]** (PLAY) to return to normal play. |
| [1] [2] [3]<br>[4] [5] [6] [≧10]<br>[7] [8] [9] [0] | **Enter number** | e.g. To select 123:<br>**[1] ➜ [2] ➜ [3] ➜ [ENTER]** |

# Useful functions

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

**1** MONITOR MODE

**Press once.**

**2**

**Press [▲▼] to select the monitor mode.**

**NORMAL:** Normal (displays in 4:3 video aspect)
**FULL:** Stretches the picture horizontally to fill the screen
**ZOOM:** Stretches the picture vertically and horizontally
**JUST:** Stretches the right and left edges of the picture to fill the screen
**OFF:** No picture
● If you are not using the LCD on this unit, select "OFF" to conserve power. (The **[⏻]** indicator flashes)
● The LCD turns off automatically if you close it.
● **To exit the screen:** Press **[RETURN]**.

## *Adjusting the picture quality on the LCD*

**1** MONITOR MODE

**Press twice.**

**2**

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

**BRIGHT:** Dims or brightens the picture (−5 to 5)
**COLOUR:** Adjusts the shade of the picture's color (−5 to 5)
**SHARP:** Adjusts the sharpness of the edges of the horizontal lines. (−1 to 2)
**GAMMA:** Adjusts the brightness of dark parts (−1 to 2).
**SD INDICATOR:** Turn ON or OFF the illumination which will appear while "SD" is selected.
● **To exit the screen:** Press **[RETURN]**.

## *Skipping a minute forward (CM SKIP)* DVD-VR DVD-V *(Except +R/+RW)*

CM SKIP

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 still picture part.
-when playing a playlist.

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

**1**

DISPLAY
**During play, press once.**

**2**

① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Play Menu".**
③ **Press [▶] then [▲▼] to select "Repeat".**
④ **Press [▶] then [▲▼] to select the content to be repeated.**
⑤ **Press [ENTER] .**

● To cancel, select "Off" in the procedure 2-④ and press **[ENTER]**.
● **To exit the screen:** Press **[RETURN]**.

☑ **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)* JPEG SD PICTURE MPEG4 *and* SD VIDEO

**1**

DISPLAY
**During play, press once.**

**2**

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 ✳✳**

## *Reviewing titles/programs to play (Advanced Disc Review)*

`DVD-VR` `DVD-V` *(Except +R/+RW)*

**1**

DISPLAY
**Press once.**

**2**

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.

e.g. `DVD-V`

| 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 28, "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**

① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Play Speed".**
③ **Press [▶] 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 20), Advanced Surround (➜ page 18), Multi Re-master (➜ page 20) and Sound Enhancement (➜ page 27, Audio Menu) do not work.
  – Digital output switches to PCM.
  – 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]**.

## *Using the sleep timer (SLEEP)*

This feature turns the unit off after a set time.

SLEEP

**Press to change.**

SLEEP

Lights once the time is set.

SLEEP 30→ SLEEP 60→ SLEEP 120→ SLEEP 180
↑──────────── SLEEP OFF ←────────────┘
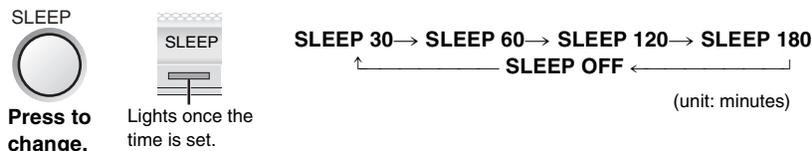
(unit: minutes)

● To check the remaining time, press **[SLEEP]**.
● While stopped, the unit automatically turns off once 15 minutes (after approximately 5 minutes when using the battery pack) have elapsed, irrespective of the SLEEP setting.

ENGLISH

**Useful functions**

RQT8231

*17*

# Useful functions

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

**1**

DISPLAY
**Press once.**

**2**

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 20) is on.
● Do not use in combination with surround effects on other equipment.
● **To exit the screen:** Press **[RETURN]**

## *Enjoying extra bass with headphones (XBS)*
*Only when headphones are connected*

(Right side of the unit) **SOUND XBS** ⟷ **SOUND NORMAL**

⌒ EQ MODE

**SOUND XBS:** Boosts the bass.
**SOUND NORMAL:** Normal sound

**Press to change.**

● Effects will differ depending on the type of music.

## *Using center speaker for dialog*

Convenient for making the dialog easier to hear.

CENTER SPEAKER

**CENTER SPEAKER ON (factory preset)**

↕

**CENTER SPEAKER OFF**
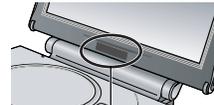
**Press to change.**

Audio playback from here.

## *Changing soundtracks* *Motion pictures*

AUDIO

(Remote control)

**Press to select the soundtrack.**
`DVD-VR` `VCD`
You can use this button to select "L", "R" or "LR".
`DVD-V` (Karaoke discs)
While the menu is displayed,
Press **[◀ ▶]** to select "On" or "Off" of vocals.
Read the disc's instructions for details.

e.g. `DVD-V`

☑ **Menu**

**Audio**      **1**

**Signal type/data**
LPCM/PPCM/⃞⃞ Digital/DTS/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

## *Changing subtitles* *Discs with subtitles*

SUBTITLE

(Remote control)

`DVD-V` `VCD`
**Press to select the subtitle language.**
**To clear/display the subtitles**
Press **[◄ ►]** to select "On" or "Off".
≥On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.

`DVD-VR` (with subtitle on/off information)
**Press to select "On" or "Off".**
≥On or Off only can be selected.
≥Subtitle on/off information cannot be recorded using Panasonic DVD Recorders.

e.g. `DVD-V`

| 🔘 **Menu** |
| --- |
| **Subtitle**　　◄ **Off** ► |

## *Angle select* `DVD-V` *with multiple angles* /*Still picture rotation* `JPEG` `SD` `PICTURE`

ANGLE

(Remote control)

**Press to select the angle or rotate the still picture.**

e.g. `DVD-V`

| 🔘 **Menu** |
| --- |
| **Angle**　　　1/4 |

## *Displaying current playback condition (Quick OSD)*

DISPLAY
**Press twice.**

■ **Basics**

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

| Title | 1 | Chapter | 1 | Time 0 : 00 : 22 |

Playback condition ⟶

Current position

DISPLAY
**Press three times.**

■ **Details**

See page 18 for changing soundtracks
See above for changing subtitles
See above, Angle select for changing angles
Aspect of current playback title

e.g. `DVD-V`

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

ENGLISH

**Useful functions**

# Enjoying higher quality audio and video

## *Reproducing more natural audio (Multi Re-master)*

- **DVD-VR DVD-V** *(recorded with 48 kHz only)* **DVD-A** *(recorded with 44.1 kHz and 48 kHz only)* **VCD CD :** This feature gives you a more natural sound by adding higher frequency signals not recorded on the disc, for example, playing DVD-Video recorded with 48 kHz at 96 kHz.
- **WMA MP3** *(recorded with other than 8 kHz, 16 kHz or 32 kHz)*: reproduces the frequencies lost during recording to give you a sound closer to the original.

**1** DISPLAY
**Press once.**

**2**
① **Press [▲▼] to select "Other Settings".**
② **Press [▶] then [▲▼] to select "Audio Menu".**
③ **Press [▶] then [▲▼] to select "Multi Re-master".**
④ **Press [▶] then [▲▼] to select "1", "2" or "3".**
⑤ **Press [ENTER].**
- **To exit the screen:** Press **[RETURN].**

◉ **Menu**
**Multi Re-master    1**

| Setting | Type of music [ DVD-A  DVD-V  CD  (LPCM/PPCM)] | Effect level **(Other discs)** |
|---|---|---|
| 1 | High tempo (e.g., pop and rock) | Light |
| 2 | Various tempos (e.g., jazz) | Medium |
| 3 | Low tempo (e.g., classical) | Strong |
| Off | Off | Off |

- This feature does not work when H.Bass (➔ below) or Advanced Surround (➔ page 18) is on.
- This feature does not work with **MP3** on DVD-RAM or DVD-R/RW.
- When connecting with a digital optical cable (➔ page 33), the actual output sampling frequency depends on "PCM Digital Output" setting in "Audio" tab (➔ page 29).

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

**1** DISPLAY
**Press once.**

**2**
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].**
- **To exit the screen:** Press **[RETURN].**
- This is effective on 5.1 channel DVD video 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".

◉ **Menu**
**H.Bass    Off**

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

◉ **Menu**
**Picture Mode    Cinema1**

## *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**: Smoothes block noise and reduces the smudging that appears around contrasting sections of the picture.

**1** DISPLAY
**Press once.**

**2**
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)**
- **To exit the screen:** Press **[RETURN].**

⬜ Picture Adjustment
**Depth Enhancer    0**
**MPEG DNR    0**

The above indicated features may not work depending on the disc's recording.
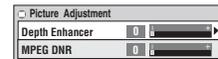
# All group/Program/Random play

DVD-A DVD-V VCD CD WMA MP3 JPEG MPEG4 SD PICTURE SD VIDEO

**PLAYMODE**

While stopped
**Press to change.**

**All group (DVD-A )→ Program play→ Random play**
**└─── Off (Normal play) ◄───┘**

- Disable HighMAT disc play to use random and program play.
  Select "Play as Data Disc" in Other Menu. (➔ page 27).

## *All group play* DVD-A

| All Group Playback |
| --- |
| Press PLAY to start |

PLAY
▶

## *Program play* (up to 32 items)

e.g. DVD-V
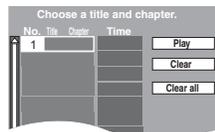
**Choose a title and chapter.**
No. Title Chapter Time
1

Play
Clear
Clear all

**1**
[1] [2] [3]
[4] [5] [6] [≧10]
[7] [8] [9] [0]

**Press to select an item
(Disc ➔ page 13, Enter
number /
SD card ➔ page 15, Enter
number).**

Repeat this step to program
other items.

**2**
PLAY
▶

---

**Selecting all the items (on the disc or in the title or group)**
Press **[ENTER]** and **[▲▼]** to select "ALL", then press **[ENTER]** again to register.

**Changing the program**
Press **[▲▼]** to select an item.
–To change an item, repeat step 1.
–To clear an item, press **[CANCEL]** (or select "Clear" and press **[ENTER]**).

**Clearing the whole program**
Select "Clear all" and press **[ENTER]**. The whole program is also cleared when the unit is turned off,
the disc lid is opened, the card is removed or **[AV SELECT]** is pressed.

## *Random play*

e.g. DVD-V

| Random Playback |
| --- |
| Choose a title.<br>Title 1 |
| ▲▼ [0] – [9] to select PLAY to start |

**1** DVD-A DVD-V WMA MP3 JPEG MPEG4
SD PICTURE SD VIDEO

[1] [2] [3]
[4] [5] [6] [≧10]
[7] [8] [9] [0]

**Press to select an item
(Disc ➔ page 13, Enter
number /
SD card ➔ page 15, Enter
number).**

**2**
PLAY
▶

---

**To exit the all group, program or random mode**
Press **[PLAYMODE]** several times while stopped.

ENGLISH

All group/Program/Random play

# 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 |
|---|---|---|---|
| HIGH MAT | No. | Content title | |
| Playlist | 1 | Few times in summer | |
| Group | 2 | Less and less | |
| Content | 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 | |

▲▼◄► 0 ~ 9 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
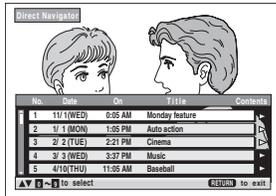
**To play playlists:**

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 | |

▲▼ 0 ~ 9 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 |

▲▼ 0 ~ 9 to select and press ENTER    RETURN to exit

- Only when the disc contains a playlist.

- You can also use the numbered buttons on the remote control (➜ page 13).
- 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

**Press.**

**e.g. CD text**

```
CD Text                              1/23   2:01
Disc Title   : All By Artist
Disc Artist  : Pink Island
Track Title  : Ashley at Prom
Track Artist : SHIPWRECKED

    Ashley at Prom
    City Penguin
    Formula one
    Soccer
    Baseball
    Neanderthal
    Cartoons
    Trilobites
    White Dwarf
    Discovery
▲▼ to select and press ENTER        RETURN to exit
```

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

**2**

ENTER

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

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

# Playing SD cards using menus `SD PICTURE` `SD VIDEO`

## *Playing items in order (SD Card Menu)*

**1** TOP MENU

**Press.**

```
SD Card Menu                         SD

         Picture

         Video

▲▼ to select and press ENTER
```

**2**
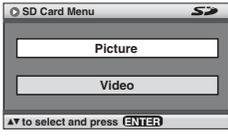
ENTER

**Press [▲▼] to select "Picture" or "Video" and press [ENTER].**

≥ When "No Picture content" or "No Video content" is displayed, press **[TOP MENU]** again to return to the SD Card Menu.

## *Playing from the selected item (Navigation Menu)*

**1** MENU

**Press.**

**SD PICTURE**

```
SD Picture                      Total 9
Group  100  DVD

                              001/001
▲▼◄►  -  to select and press ENTER   RETURN to exit
```

**SD VIDEO**

```
SD Video             MPEG4  0:00:03
          No.  Content
           1   MOL001
           2   MOL002
           3   MOL003
           4   MOL004
           5   MOL005
           6   MOL006
           7   MOL007
2/ 5.2006. 05:42  PM
▲▼  -  to select          RETURN to exit
```

**2**

ENTER

**SD PICTURE**
**Press [▲▼◄►] to select the content and press [ENTER].**

**To select contents in the other group**
① **Press [▲] to select "Group" and press [ENTER].**
② **Press [▲▼] to select the group and press [ENTER].**

③ **Press [▲▼◄►] to select the content and press [ENTER].**

```
SD Picture                      Total 9
DCIM/100CDPFP
                    Group
        No.
    1   100CDPFP
    2   101CDPFP
    3   102CDPFP
    4   103CDPFP
    5   104CDPFP
    6   105CDPFP
    7   106CDPFP
    8   107CDPFP
    9   108CDPFP
◄ Prev      01/06      Next ►
▲▼  -  to select and press ENTER   RETURN to return
```

**SD VIDEO**
**Press [▲▼] to select the content.**

≥ **To show other pages:** Press **[▲▼◄►]** to select "Prev" or "Next" and press **[ENTER]**.
≥ **To exit the screen:** Press **[MENU].**

# Playing data discs `WMA` `MP3` `JPEG` `MPEG4`

- Select "Play as Data Disc" (➜ page 27, Other Menu) in the following cases:
  -To play HighMAT discs without using the HighMAT function.
  -To play `JPEG`, `MP3` or `MPEG4` on DVD-RAM that contain both `DVD-VR` and another format (e.g. `JPEG`).

## *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 | Total 438 |
| Audio | Total 9 |
| Picture | Total 427 |
| Video | Total 2 |
| ▲▼ to select and press ENTER | |

All content → All
WMA/MP3 → Audio
JPEG → Picture
MPEG4 → Video

## *Playing from the selected item (Navigation Menu)*

**1 MENU** Press.

**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  📀 5  📀 1  JPEG  --:--

002 My favorite2\005 Japanese\001 Lady Starfish

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
♪: WMA/MP3
▦: MPEG4

Number currently selected

- **To listen to WMA/MP3 while showing a JPEG image on the screen**
  Select a JPEG 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 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 [◄◄, ►►] 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].**

# Tips for making data discs

| Format | Disc | Extension | Reference |
|---|---|---|---|
| WMA | CD-R/RW | ".WMA"<br>".wma" | ● Compatible compression rate: between 48 kbps and 320 kbps<br>● You cannot play WMA files that are copy protected.<br>● 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<br>DVD-R/RW<br>CD-R/RW | ".MP3"<br>".mp3" | Sampling frequency:<br>DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24, 44.1, and 48 kHz<br>CD-R/RW : 8, 11.02, 12, 16, 22.05, 24, 32, 44.1, and 48 kHz<br>● Compatible compression rate: between 32 kbps and 320 kbps.<br>● This unit is not compatible with ID3 tags. |
| JPEG | DVD-RAM<br>DVD-R/RW<br>CD-R/RW | ".JPG"<br>".jpg"<br>".JPEG"<br>".jpeg" | ● JPEG files taken on a digital camera that conform to DCF Standard Version 1.0 are displayed.<br>– Files that have been altered, edited or saved with computer picture editing software may not be displayed.<br>● 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<br>DVD-R/RW<br>CD-R/RW | ".ASF"<br>".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.<br>● The recording date may differ from that of the actual date. |

● 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 (➜ page 35, Glossary).

**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).
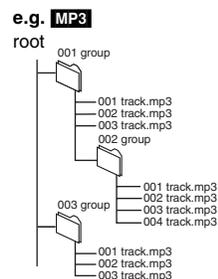
**DVD-RAM**
● Discs must conform to UDF 2.0.

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

# Using On-Screen Menus

**1**

DISPLAY
**Press once.**

**2**

ⓐ **Press [▲ ▼] to select the menu.**
ⓑ **Press [▶] to go to the next menu and [▲ ▼] to set.**
Repeat step ⓑ if necessary.
● Items shown differ depending on the type of software.
● Press **[◀]** to go to the previous menu.
● There are items which you can select using **the numbered buttons** and **[ENTER]** on the remote control.
● 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**<br>● Press **[▲ ▼]** to select and press **[ENTER]**.<br>● Press and hold **[▲ ▼]** to alter faster. |
| **Time** | **To skip incrementally or decrementally (Time Slip for play only)** (Except +R/+RW)<br>1. Press **[ENTER]** twice to show Time Slip indicator.<br>2. Press **[▲ ▼]** to select the time and press **[ENTER]**.<br>●Press and hold **[▲ ▼]** to alter faster.<br>**To start from a specific time (Time Search)** (Except +R/+RW)<br>e.g. Playback from 1 hour 46 minutes and 50 seconds (Enter using the remote control) :<br>**[1] ➜ [4] ➜ [6] ➜ [5] ➜ [0] ➜ [ENTER]**<br>**To change remaining/elapsed time display** |
| **Video** | **To display pixel number** |
| **Audio** | (➜ page 18, Changing soundtracks) |
| | **To display the current bitrate or sampling frequency** |
| **Still Picture** | **To switch still picture** |
| **Thumbnail** | **To show thumbnail images** |
| **Subtitle** | (➜ page 19, Changing subtitles) |
| **Marker (VR)** | **To recall a marker recorded on DVD recorders** |
| **Angle** | (➜ page 19, Angle select) |
| **Rotate Picture** | (➜ page 19, Still picture rotation) |
| **Slideshow** | **To turn on/off slideshow**<br>**To change the slideshow timing ("1 Fast" to "5 Slow")**<br>● When using Slideshow, Skip/Rotate picture may not work correctly depending on the play position. |
| **Other Settings** | **(➜ See below)** |

## *Other Settings*

| | |
|---|---|
| **Play Speed** | (➜ page 17, Changing play speed) |

**Play Menu** (Only when the elapsed play time can be displayed,
JPEG SD PICTURE : The Repeat and Marker functions can be used.)

| | |
|---|---|
| **Repeat** | (➜ page 16, Repeat play) |
| **A-B Repeat** | (➜ page 16) |
| **Marker**<br>Except DVD-VR | **To mark up to 5 positions to play again**<br>**[ENTER]** (The unit is now ready to accept markers.)<br>To mark a position: **[ENTER]** (at the desired point)<br>To mark another position:**[◀ ▶]** to select "✳"➜ **[ENTER]**<br>To recall a marker: **[◀ ▶]** ➜ **[ENTER]**<br>To erase a marker: **[◀ ▶]**➜ **[CANCEL]** (Remote control)<br>● This feature doesn't work during program and random play.<br>● Markers you add clear when you open the disc lid, remove the card, press **[AV SELECT]** or switch the unit to standby. |
| **Advanced Disc Review** | (➜ page 17) |

## Picture Menu

| | |
|---|---|
| **Picture Mode** | (➜ page 20, Cinema1/Cinema2/Depth Enhancer/MPEG DNR) |
| **Transfer Mode (LCD only)** | **Auto1** (normal): Automatically detects the film and video content, and appropriately converts it.<br>**Auto2**: In addition to Auto1, automatically detects film contents with different frame rates and appropriately converts it.<br>**Video**: Select when using Auto1 and Auto2, and the content is distorted.<br>● When the disc lid is opened, the setting will return to Auto1. |

## Audio Menu

| | |
|---|---|
| **H.Bass** | (➜ page 20) |
| **Advanced Surround** | (➜ page 18) |
| **Dialogue Enhancer** | **To make the dialogue in movies easier to hear**<br>**DVD-V** (Dolby Digital, DTS, 3-channel or over, with the dialogue recorded in the center channel)<br>**On ⟷ Off** |
| **Multi Re-master** | (➜ page 20) |
| **Sound Enhancement** | **You can enjoy comfortable, analog-like sound.**<br>**DVD-VR** **DVD-V** (recorded with 48 kHz only)<br>**DVD-A** (recorded with 44.1 kHz and 48 kHz only) **VCD** **CD**<br>**WMA** **MP3** (recorded with other than 8 kHz, 16 kHz or 32 kHz)<br>**On ⟷ Off**<br>● This feature does not work with **MP3** on DVD-RAM or DVD-R/RW.<br>● This does not work when H.Bass (➜ page 20), Advanced Surround (➜ page 18) or Multi Re-master (➜ page 20) is on.<br>● This may not work depending on the disc's recording. |

## Display Menu

| | |
|---|---|
| **Information** | **On ⟷ Off ( JPEG SD PICTURE :Off, Date)** |
| **Subtitle Position** | **0 to -60 (in 2 units)** |
| **Subtitle Brightness** | **Auto, 0 to -7** |
| **Just Fit Zoom** | *Motion pictures*<br>To expand the letterbox picture to fit the screen.<br>Press **[▲ ▼]** to select the preset aspect ratio or "Auto".<br>**DVD-VR** **DVD-V** **VCD**<br>Auto ⟷ 4:3 Standard ⟷ European Vista ⟷ 16:9 Standard<br>⇕<br>Cinemascope2 ⟷ Cinemascope1 ⟷ American Vista<br>● Depending on the disc, the preset aspect ratio may not be displayed.<br>**MPEG4** **SD VIDEO**<br>Standard ⟷ Original<br>⤷ Full ⟵ |
| **Manual Zoom** | *Motion pictures*<br>Press **[▲ ▼]** for fine adjustments. (Press and hold to alter faster.)<br>–from ×1.00 to ×1.60 (in 0.01 units) –from ×1.60 to ×2.00 (in 0.02 units)<br>**MPEG4** **SD VIDEO** only<br>–from ×2.00 to ×4.00 (in 0.05 units)<br>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 28, Changing the player settings) |
| **Play as DVD-Video** or **Play as DVD-Audio** | Select "Play as DVD-Video" to play DVD-Video contents on DVD-Audio. |
| **Play as DVD-VR** **Play as HighMAT** or **Play as Data Disc** | ● Select "Play as Data Disc" to play **JPEG**, **MP3** or **MPEG4** on DVD-RAM that contain both **DVD-VR** and another format (e.g. **JPEG** ) or to play a HighMAT disc without using the HighMAT function. |

# Changing the player settings

● Referring to pages 28 to 29, change as required.
● Underlined items are the factory presets.
**The settings remain intact even if you switch the unit to standby.**

**1** [SETUP]

(Remote control)

**2** [▲]
[◄] [ENTER] [►]
[▼]

(Remote control or main unit)

**Press [▲ ▼ ◄ ►] to select the
menu, item, content and 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
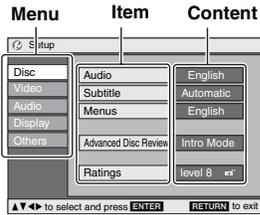
● To return to the previous screen: press **[RETURN]**.
● **To exit the screen:** Press **[RETURN].**
● The menu is also displayed using on-screen menus.
  (➔ page 27, "Setup" in Other Menu)

## "Disc" tab

| Audio | ● English  ● French  ● Spanish |
|---|---|
| | ● Original (The original language designated on the disc is selected) |
| | ● Other✳✳✳✳※ |
| **Subtitle** | ● Automatic [If the language selected for "Audio" is not available, subtitles appear in that language (If available on the disc).] |
| | ● English  ● French  ●Spanish  ●Other✳✳✳✳※ |
| **Menus** | ● English  ● French  ● Spanish  ●Other✳✳✳✳※ |
| **Advanced Disc Review** Select how to review (➔ page 17). | ● Intro Mode: 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) |
| | ● 8 No Limit. |
| | ● 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 29.

## "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. |
| | ● 16:9: 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. | ● Automatic |
| | ● Field: The picture is not blurred, but picture quality is lower. |
| | ● Frame: Overall quality is high, but the picture may appear blurred. |

## "Audio" tab

| PCM Digital Output※ | Check the digital input limitations of the equipment you connect and select the maximum sampling frequency of PCM digital output. | |
|---|---|---|
| | ●Off:         When not connected using a digital optical cable | |
| | ●<u>Up to 48 kHz</u>:   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 | |
| | ●Up to 192 kHz:  When connected to equipment compatible with 176.4 or 192 kHz | |
| | • Signals from copy-protected discs are converted to 48 or 44.1 kHz. | |
| | • Some equipment cannot handle sampling frequencies of 88.2 kHz, even if it can handle 96 kHz. Read your equipment's operating instructions for details. | |
| Dolby Digital※ | ●<u>Bitstream</u><br>●PCM | 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 Digital Surround※ | ●<u>Bitstream</u><br>●PCM | |
| Dynamic Range Compression | ● <u>Off</u><br>● 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). | |

※Only when connected using a digital optical cable (➜ page 33)

## "Display" tab

| Menu Language | ● <u>English</u>    ● Français    ● Español |
|---|---|
| On-Screen Messages | ● <u>On</u>    ● Off |
| Background during Play<br>Select background during JPEG and MPEG4 video playback. | ● <u>Black</u>    ● Gray |

## "Others" tab

| Re-initialize Setting<br>This returns all values in the Setup menus to the default settings. | ● Yes: The password screen is shown if "Ratings" (➜ page 28) 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.<br>● <u>No</u> |
|---|---|

### 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 | |

# 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.
- Please insert the disc or card 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.
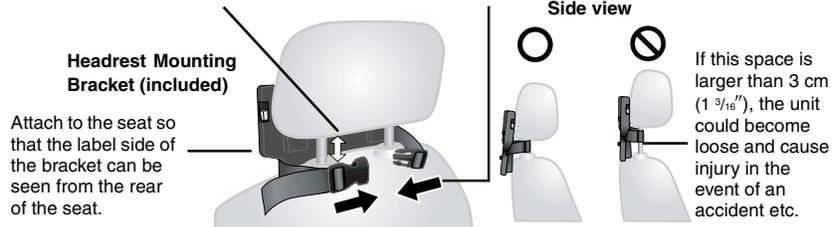
## 2    Attaching the monitor holder.

① Fold the monitor down towards the front of the unit and attach the monitor holder.

**Monitor holder (included)**

② Rotate the monitor backwards so the screen is facing out, and lock into place with the monitor holder.

Check that the monitor is locked into position.

---

**Detaching the monitor**

Press the monitor holder as shown to detach it.

After use, detach the monitor holder from the unit. You can store it in the bracket.

⌐ Label side of the bracket

Check that this part is closed.
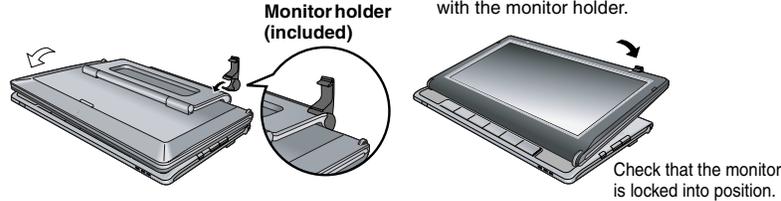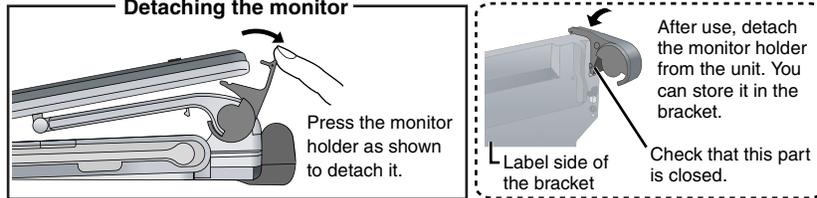
## 3   Attaching the unit to the bracket.

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.

**Enjoying in a car**

Line up the protruding
sections here.
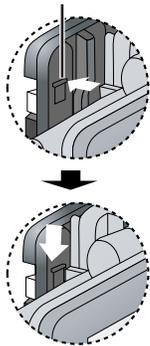
When correctly
attached,
you will hear a
locking sound.

click!
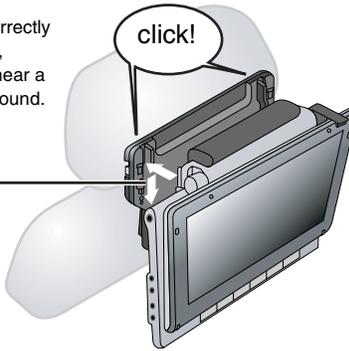
**Diagram of attached bracket**

You can use the monitor in
the open position as shown in
the illustration to the right.
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
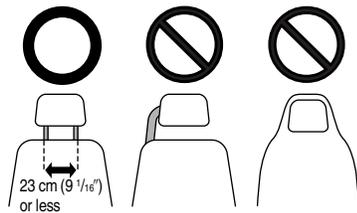
In the event of an accident
etc., the unit could become
loose and cause injury.

**┌─ Releasing the unit from the bracket ─┐**

①

②
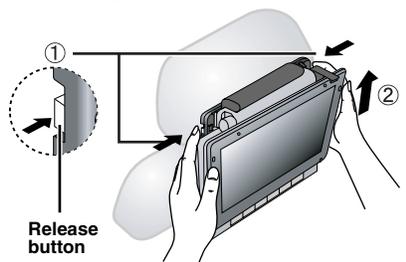
**Release
button**

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.

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# 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.

W
N

**W** (Wide): Set to this position if the plug is loose.
**N** (Narrow) (factory preset): Set to this position for normal use.

**To the cigarette lighter socket**

**DC IN**

**Car DC Adaptor (included)**

DC IN 12 V ⊖—ⓒ—⊕

**Left side of this unit**
Place the unit on a stable surface
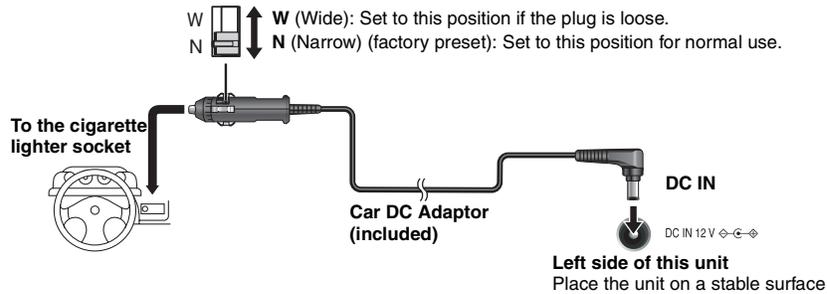
### Replacing the fuse
Replace only with the specified 125 V/250 V, 3 A fuse. Use of any other type can cause fire.

**2 Replace the fuse.** (125 V/250 V, 3 A type)
**3 Close**
**1 Open**
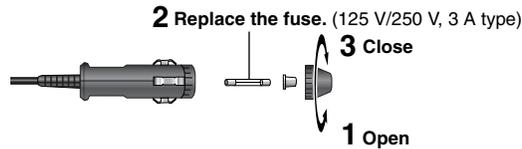
### Cautions

● **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 12, 15) may not work.
● Leave some slack in the cord.
● No responsibility will be taken for damage that occurs due to faulty installation.

(Left side of this unit)

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.

# Using this unit with other equipment

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

## Enjoying with 5.1ch audio

**AV amplifier with Dolby Digital/DTS logo**

**Left side of this unit**

AUDIO /OPT OUT

**Digital optical cable** (not included)
● Do not bend sharply.
● Align and insert.

**OPTICAL IN**

Connect the 6 speakers to the amplifier's 5.1ch audio output terminals.

● Change "PCM Digital Output", "Dolby Digital", and "DTS Digital Surround" (➔ page 29).
● DVD-A Output will be only 2 channels.

## Enjoying with 2ch audio

**Left side of this unit**

AUDIO /OPT OUT ← **Black**

**Audio cable** (not included)

**Amplifier/System component**

**White** → L

**Red** → R

**AUDIO IN**

## Enjoying with a television

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

**Audio/video cable** (included)

**Yellow**

VIDEO AUDIO /OPT OUT ← **Black**

**Left side of this unit**

**Yellow** → **VIDEO IN**

**White** → L

**Red** → R **AUDIO IN**
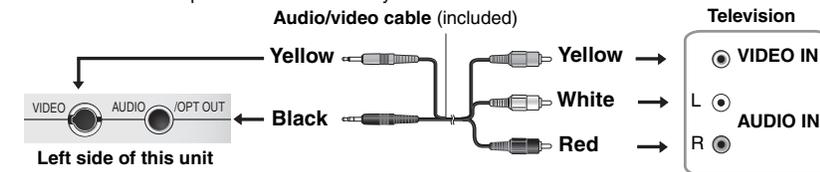
**Television**

● 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**

**Yellow**

VIDEO AUDIO /OPT OUT ← **Black**

**Left side of this unit**

**Yellow** → **VIDEO OUT**

**White** → L

**Red** → R **AUDIO OUT**
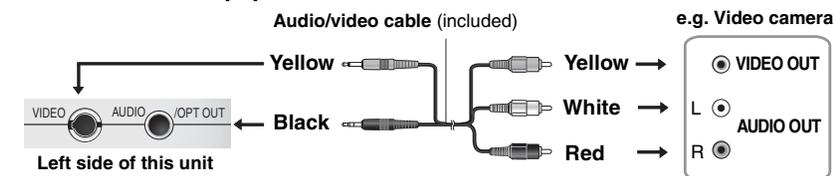
**2    Press [AV SELECT] to switch to "AUX" .**

"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.

Using this unit with other equipment

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# Specifications

**Specifications**

**Operating temperature range:**
+5 to +35 °C (+41 to +95 °F)
**Operating humidity range:**
5 to 85 % RH (no condensation)
**Discs played [8 cm (3 ″) or 12 cm (5 ″)]:**
(1) DVD (DVD-Video, DVD-Audio)
(2) DVD-RAM (DVD-VR, JPEG※4, 6, 7, MP3※2, 6, MPEG4※5, 6)
(3) DVD-R (DVD-Video, DVD-VR, JPEG※4, 6, 7, MP3※2, 6, MPEG4※5, 6)
(4) DVD-R DL (DVD-Video, DVD-VR)
(5) DVD-RW (DVD-Video, DVD-VR, JPEG※4, 6, 7, MP3※2, 6, MPEG4※5, 6)
(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, HighMAT Level 2 (Audio and Image)]

**Signal system:** NTSC
**LCD screen:** 11″ a-Si, TFT wide-screen LCD
**Composite-video output/input:**
Output/input level: 1 Vp-p (75 Ω)
Output/input terminal: φ 3.5 mm 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 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)
● DVD-Audio:
4 Hz to 88 kHz (192 kHz sampling)
● CD audio: 4 Hz to 20 kHz
(2) S/N ratio:
● CD audio: 115 dB
(3) Dynamic range:
● DVD (linear audio): 98 dB
● CD audio: 97 dB
(4) Total harmonic distortion:
● CD audio: 0.008 %
**Digital audio output:**
Optical digital output: Mini optical terminal
Number of terminals: 1 system
(also used for audio output/input)
**SD Playback**※8, 10, 11 **:**
Picture Playback: JPEG※7, 9, 12
Video Playback: MPEG4※5, 9
**Headphone output:**
Output: φ 3.5 mm stereo mini jack
Number of terminals: 2 systems
**Pickup:**
Wave length: 662 nm/785 nm (DVD/CD)
Laser power: CLASS II/CLASS I (DVD/CD)

**Power supply:** DC 12 V (DC IN terminal)/
DC 7.2 V (Exclusive battery terminal)
**Power consumption** (using included AC adaptor)**:**
23 W (Unit only: 20 W)
**Power consumption in Standby mode**
**(using included AC adaptor):**
approx. 0.3 W
**Power consumption in Recharge mode**
**(using included AC adaptor):**
13 W
**AC adaptor:**
**Power source:** AC 110 to 240 V, 50/60 Hz
**Power consumption:** 36 W
**DC output:** 12 V, 2A
**Car DC Adaptor:**
**DC output:** 12 V, 2 A
(Vehicle with 12 V battery only)
**Battery pack** (lithium ion)
**CGR-H713** (included):
Voltage: 7.2 V
Capacity: 6750 mAh
**Dimensions** (W×D×H)
(excluding protrusions and battery):
287.6 mm×216.0 mm×50.3※ mm
(11 21/64″×8 33/64″×2″)
※30.5 mm (1 13/64″) at lowest point
[D=238.5 mm (9 25/64″) including battery]
[H=55.3 mm (2 3/16″) including battery]
**Mass** (including battery)**:** 1985 g (70.01 oz )
(without battery)**:** 1638 g (57.77 oz )

**Note**
Specifications are subject to change without notice.
Mass and dimensions are approximate.
● Useable capacity will be less (SD Memory Card).

※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 Useable memory capacities: 8 MB, 16 MB, 32 MB, 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB
※9 Total maximum number of recognizable picture and video files and folders
Picture: 4000 files and 398 folders
Video: 4000 files and 398 folders
※10 SD card formatted with equipment conforming to SD File System specifications Ver. 1.01 such as Panasonic SD multi cameras or DVD recorders (Conforming to FAT 12 standard and FAT 16 standard)
※11 miniSD™ card is supported. (miniSD™ adaptor is required.)
※12 Conforming to SD Picture specifications
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)

# Frequently asked questions

Reference pages are shown in parentheses.

| | |
|---|---|
| **What kind of equipment is necessary to enjoy 5.1ch audio?** | Connect to an AV amplifier (that has 5.1ch audio output terminals) displaying the Dolby Digital/DTS logo. **(33)**<br>**DVD-A**: This unit plays DVD-Audio in 2 channels. You cannot play multi channel surround sound. |
| **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.<br>Please obey the rules and/or instructions indicated by the hospital or airline. |
| **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. |

# Glossary

**Down-mixing**

This is a process of remixing the multi-channel audio (surround sound) on some discs into two channels. When you want to listen to the audio on a DVD with a 5.1 channel digital surround track through your television speakers, the down-mixed audio will be output.
Some DVD-Audio prevent down-mixing of all or part of their contents. When playing such discs, or such parts of the disc, audio will not be output properly.

**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 video output for the LCD.

Film: Recorded at 24 or 30 frames per second.
Generally appropriate for motion picture films.
Video: Recorded at 30 frames/60 fields per second. Generally appropriate for TV drama programs or animation.

**MPEG4**

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

**Packet Writing**

"Packet Writing" is one method of data recording used. Very small amounts of data referred to as "Packets" are divided into very small units and written as "Packets". Music CDs cannot be created with this method.

**Sampling frequency**

Sampling is the process of converting the heights of sound wave (analog signal) samples taken at set periods into digits (digital encoding). Sampling frequency is the number of samples taken per second, so larger numbers mean more faithful reproduction of the original sound.

**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-LX110** _____

SERIAL NUMBER _____

ENGLISH

**Frequently asked questions / Glossary**

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# 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 the "Customer Services Directory" on page 41 if you reside in the U.S.A., or refer to the "Product information" on page 41 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.

| | |
|---|---|
| **No power.** | ● Check connections to the AC adaptor or battery pack. **(8)**<br>● **You cannot turn on the unit with the remote control if the unit is powered by the battery pack.**<br>● 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.<br>● The sleep timer functioned. **(17)** |
| **Cannot charge or the [CHG] indicator fails to light.** | ● The battery pack can only be recharged when the unit is off.<br>● The charging time increases when the temperature is too hot or too cold, and charging may not be possible under some circumstances.<br>● 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). |
| **Difficulty inserting the plug or the plug is loose when connecting Car DC Adaptor.** | ● Set the plug switch to "N" (Narrow) or "W" (Wide) to adjust the plug size depending on the type of socket. **(32)** |

## No operation

| | |
|---|---|
| **No response when any buttons pressed.** | ● This unit cannot play discs or cards other than the ones listed in these operating instructions. **(10, 11)**<br>● 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.<br>● Condensation has formed: Wait 1 to 2 hours for it to evaporate.<br>● Please insert the disc or the card correctly. **(12, 14)** |
| **No response when remote control buttons pressed.** | ● Check that the battery is installed correctly. **(7)**<br>● The battery is depleted: Replace it with new one. **(7)**<br>● Point the remote control at the remote control sensor and operate. **(7)** |
| **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. |
| **The contents of the SD card cannot be read.** | ● The card format is not compatible with the unit. (The contents on the card may be damaged.) Format using a Panasonic SD multi camera, DVD recorder or similar device in FAT 12 system or FAT 16 system based on SD Memory Card specifications. **(11)**<br>● The card contains a folder structure and/or file extensions that are not compatible with this unit. |

## Specific operation impossible or incorrect

| | |
|---|---|
| **It takes time before play starts.** MP3 | ● 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. |
| **The program and random play functions do not work.** DVD-V | ● These functions do not work with some DVD-Videos. |
| **Menu doesn't appear.** VCD with playback control | ● Press [■, – OFF] twice and then press [▶, ON]. |

## Specific operation impossible or incorrect

| | |
|---|---|
| The on-screen menu shows "2" as a soundtrack option when [AUDIO] is pressed, but the audio does not change. **DVD-A** | • This is normal on DVD-Audio. Even if a second soundtrack isn't recorded, two numbers will normally be shown. |
| Play restarts from the beginning of the track when soundtrack is changed. **DVD-A** | • This is normal on tracks with still pictures or audio-only tracks. |
| Subtitle position is wrong. | • Adjust the position. ("Subtitle Position" in Display Menu) **(27)** |
| No subtitles. | • Display the subtitles. **(19)** |
| The subtitles overlap closed captions recorded on discs. | • Clear the subtitles. **(19)** |
| 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. |
| Play doesn't start. | • This unit may not play WMA and MPEG4 that contains still picture data.<br>• 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.<br>• Picture quality may worsen or some frames may be skipped when viewing **MPEG4** or **SD VIDEO**, but this is normal. |
| No picture on the LCD. | • Check connections. **(8)**<br>• Select a monitor mode other than "OFF" (No picture). **(16, Selecting how to show 4:3 aspect pictures on the LCD)**. |
| The LCD is dark. | • Adjust the brightness. **(16)** |
| 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. **(33)**<br>• Check that the television is on.<br>• Check that the input mode on the television is correct.<br>• Check the settings in "Video—TV Aspect". **(28)**<br>• Turn off the zooming feature on your television if you are using Zoom. **(27)**<br>• Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder. **(33)**<br>• Use the television to change the aspect.<br>• Adjust "Just Fit Zoom" in Display Menu. **(27)** |
| Menu not displayed correctly. | • Restore the zoom ratio to ×1.00. **(27)**<br>• Set "Subtitle Position" in Display Menu to "0". **(27)** |
| Auto zoom function does not work well. | • Turn off the zooming feature on your television.<br>• Use the other preset aspect ratios or manual adjustment. **(27)**<br>• Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc or card. |

## Sound incorrect

| | |
|---|---|
| No sound from the unit's speakers. | • The speaker is off if the LCD is closed or headphones are connected.<br>• Turn up the volume. **(12, 14)** |
| Sound distorted. | • Select "Off" in "Advanced Surround". **(18)**<br>• Move unit away from mobile phones.<br>• Noise may occur when playing WMA or MPEG4 files.<br>• The disc may have restrictions on the method of audio output. With some multi-channel discs, audio will not be output properly. Refer to the disc's jacket for more information. **DVD-A** |

(Continued on the next page)

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Troubleshooting guide

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# Troubleshooting guide

## Sound incorrect

| | |
|---|---|
| **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 Digital Surround" in "Audio" tab. **(29)** |
| **Effects do not work.** | ● None of the audio effects work when the unit is connected through the digital optical cable and is outputting bitstream signals. **(33)**<br>● Some audio effects do not work or have less effect with some discs.<br>● H.Bass, Advanced Surround, Multi Re-master and Sound Enhancement do not work if you have changed the play speed. |
| **No sound from center speaker.** | ● Press **[CENTER SPEAKER]. (18)** |
| **No sound from other speakers.** | ● Check all connections and settings. **(33)** |
| **No sound when you change the play speed.** | ● There may be a pause in sound. This is not a malfunction. |
| **5.1 ch audio does not work.** | ● Output is 2 channels if you have changed the play speed.<br>● This unit plays DVD-Audio in 2 channels. |

## Recording

| | |
|---|---|
| **Cannot record to digital recording equipment. (Incorrect sound recorded.)** | ● You cannot record WMA/MP3.<br>● You cannot record DVDs that have protection preventing digital recording.<br>● You cannot record DVDs if the recording equipment cannot handle signals with a sampling frequency of 48 kHz.<br>● Make the following settings:<br>  – Advanced Surround:                Off **(18)**<br>  – PCM Digital Output:        Up to 48 kHz **(29)**<br>  – Dolby Digital/DTS Digital Surround:    PCM **(29)** |

## Displays

| | |
|---|---|
| "⃠" | ● The operation is prohibited by the unit, disc or card. |
| **No On-Screen display.** | ● Select "On" for "On-Screen Messages" in "Display" tab. **(29)** |
| **"Check the disc."**<br>**"U11"** | ● Clean the disc. **(6)**<br>● You inserted a disc that has not been finalized. **(10)** |
| " 🔋 **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 □□"**<br>**□□ 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.<br>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. **(25)** |

## [⏻] 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 monitor mode is set to "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. |

# 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.

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Limited Warranty (ONLY FOR CANADA)

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# 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.pasc.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 Services Company
20421 84th Avenue South, Kent, WA 98032
(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

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

## Service in Puerto Rico

*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*

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# 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.

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