DENON

UNIVERSAL AUDIO / VIDEO PLAYER

DBP-A100

Owner's Manual Manuel de l'Utilisateur Manual del usuario

- * Button illustrations used in this manual for operation explanation are for the Remote Control Unit.
- You can operate the unit using the button of the same name on the front panel of the unit.
- * Les illustrations des boutons présentes dans ce manuel servent à expliquer le fonctionnement de la télécommande.
- Vous pouvez contrôler l'appareil à l'aide du bouton portant le même nom sur la façade de l'appareil.
- * Las ilustraciones de los botones utilizadas en este manual con propósitos de explicación son para la unidad del mando a distancia.
- Puede operar la unidad utilizando el botón del mismo nombre en el panel delantero de la unidad.



GUI Graphical User Interface

English

Use this manual in combination with the operating guide displayed on the GUI screen.

GUI Menu Operation (@page 22)

Français

Utilisez ce manuel en même temps que le guide d'utilisation affiché sur l'écran GUI (Interface graphique).

Fonctionnement du menu de l'interface graphique GUI (@page 22)

Español

Utilice este manual conjuntamente con la guía de uso que aparece en la pantalla GUI.

Uso de los menús GUI (@página 22)

The serial number of this product may be found on the back of the unit. No others have the same serial number as yours. You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft.

Date of Purchase	
Dealer Purchase from	
Dealer Address	
Dealer Phone No.	
Model No.	
Serial No.	

□ SAFETY PRECAUTIONS



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION:

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



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



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

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THIS PRODUCT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

☐ Laser Class (IEC 60825-1:2001)

"CLASS 1 LASER PRODUCT"

IMPOTANT SAFETY INSTRUCTIONS

- Read these instructions.
- 2. Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- 5. Do not use this apparatus near water.
- Clean only with dry cloth.
- 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.
- 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 shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION:

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the unit.
- Observe and follow local regulations regarding battery disposal.
- Do not expose the unit to dripping or splashing fluids.
- Do not place objects filled with liquids, such as vases, on the unit.

ATTENTION:

- La ventilation ne doit pas être gênée en recouvrant les ouvertures de la ventilation avec des objets tels que journaux, rideaux, tissus, etc.
- Aucune flamme nue, par exemple une bougie, ne doit être placée sur l'appareil.
- Veillez à respecter les lois en vigueur lorsque vous jetez les piles usagées.
- L'appareil ne doit pas être exposé à l'eau ou à l'humidité.
- Ne pas poser d'objet contenant du liquide, par exemple un vase, sur l'appareil.

PRECAUCIÓN:

- La ventilación no debe quedar obstruida por haberse cubierto las aperturas con objetos como periódicos, manteles, cortinas, etc.
- No debe colocarse sobre el aparato ninguna fuente inflamable sin protección, como velas encendidas.
- A la hora de deshacerse de las pilas, respete la normativa para el cuidado del medio ambiente.
- No exponer el aparato al goteo o salpicaduras cuando se utilice.
- No colocar sobre el aparato objetos llenos de líquido, como jarros.

CAUTION:

To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.

The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

PRECAUTION:

Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale.

La prise secteur est utilisée pour couper complètement l'alimentation de l'appareil et l'utilisateur doit pouvoir y accéder facilement.

PRECAUCIÓN:

Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared.

El enchufe de la alimentación eléctrica se utiliza para interrumpir por completo el suministro de alimentación eléctrica a la unidad y debe de encontrarse en un lugar al que el usuario tenga fácil acceso.

FCC INFORMATION (For US customers)

1. PRODUCT

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

2. IMPORTANT NOTICE: DO NOT MODIFY THIS **PRODUCT**

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

3. NOTE

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

□ NOTE ON USE / OBSERVATIONS RELATIVES A L'UTILISATION / **NOTAS SOBRE EL USO**



- Avoid high temperatures. Allow for sufficient heat dispersion when
- Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une

installed in a rack

Evite altas temperaturas. Permite la suficiente dispersión del calor cuando está instalado en la consola.

 Handle the power cord carefully. Hold the plug when unplugging the cord.

précaution

cordón de energía.

cordon.

Manipuler le cordon d'alimentation avec

Tenir la prise lors du débranchement du

Maneie el cordón de energía con cuidado.

Sostenga el enchufe cuando desconecte el



- · Keep the unit free from moisture, water, and dust.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Mantenga el equipo libre de humedad, agua y polvo.



- Unplug the power cord when not using the unit for long periods of time.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.



- Do not let foreign objects into the unit. · Ne pas laisser des objets étrangers dans
- l'appareil.
- No deje objetos extraños dentro del eauipo.



- · Do not let insecticides, benzene, and thinner come in contact with the unit.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.

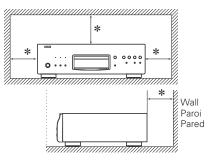


- * (For apparatuses with ventilation holes)
- · Do not obstruct the ventilation holes.
- Ne pas obstruer les trous d'aération.
- No obstruya los orificios de ventilación.



- · Never disassemble or modify the unit in anv wav
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Nunca desarme o modifique el equipo de ninguna manera.

□ CAUTIONS ON INSTALLATION PRÉCAUTIONS D'INSTALLATION **EMPLAZAMIENTO DE LA** INSTALACIÓN



- * For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.
- · More than 0.1 m (4 in.) is recommended.
- Do not place any other equipment on this unit.
- * Pour permettre la dissipation de chaleur requise, n'installez pas cette unité dans un espace confiné tel qu'une bibliothèque ou un endroit similaire.
- Une distance de plus de 0.1 m (4 po) est recommandée
- Ne placez aucun matériel sur cet appareil.
- * Para la dispersión del calor adecuadamente, no instale este equipo en un lugar confinado tal como una librería o unidad similar
- Se recomienda dejar más de 0.1 m (4 pulg.) alrededor.
- · No coloque ningún otro equipo sobre la unidad.

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- La reproduction, la diffusion, la location, le prêt ou la lecture publique de ces disques sont interdits sans le consentement du détenteur des droits d'auteur.
- De acuerdo con las leyes está prohibido reproducir, emitir, alguilar o interpretar discos en público sin la autorización del propietario de los derechos de autor

Features	2
1 Catalos	_

Getting Started

Contents

Accessories2
Cautions on Handling 3
Cautions on Installation 3
About Media ······ 3
Playable Media · · · · 3
Cautions on Using Media6
About the Remote Control7
Inserting the Batteries7
Operating Range of the Remote Control7
Remote Control Settings (Remote Control Side)7
Part Names and Functions 8
Front Panel 8
Display 8
Rear Panel 9
Remote Control

Connections

Preparation 12
Connecting Cables12
1. Home Theater Playback Playing on a Multi-channel System ··· 13
Using an HDMI Cable to Connect to an AV Amp or Television ··· 13
Required Settings for HDMI Connection 13
Connecting to an AV Amp with No HDMI Audio Input 15
Connecting to a Device with an Analog Multi channel
Audio Input Terminal ······ 16
DENON LINK Connection ① Making a Jitter free Connection · 17
DENON LINK Connection ② Making a Normal Connection ······ 17
Connecting to an AV Amp with No HDMI Video Input ······ 17
2. Playing with a Direct Connection to a TV
3. Playing Back 2-Channel Audio · · · · 18
Connecting to a Device with Analog 2 channel Audio Input
Terminals with a Stereo Pin Plug Cable
4. Recording a CD 19
Connecting to a Digital Recording Device19
5. Using BD-LIVE function or updating the software version of
DBP-A100
Connecting to a Network19
Connecting the Power Cord20
Once Connections are Complete20
Turning the Power On20

GUI Menu Setup

Menu Map ·····	21
GUI Menu Operation	22
Examples of GUI Menu Screen Displays ·····	22
Language Setup·····	
HDMI Setup·····	23
Video Setup ······	
Audio Setup ·····	
DENON LINK Setup	
Pure Direct Setup ·····	28
Ratings ·····	29
Network Setup ·····	
Display Setup·····	30
Other Setup	31

Various Settings

Setting the Audio Mode	32
Changing the Playback File Display	32
Making Other Settings	32
Adjusting the Picture Quality (Picture Control)	33

Playback

ntroduction ······ 34	
Before Playing a Disc	
Before Playing an SD Memory Card 34	
bout Playback Information 34	
Information Bar Display 34	
Media Player Display 35	
laying BDs and DVD-Videos 36	
laying Super Audio CDs 37	
laying CDs	
laying DVD-Audio 37	
laying High-Quality Audio (Pure Direct Function) 38	
laying Files 38	
Playing Files 39	
Screen Display During Playback	
Operation During Playback	

perations Enabled During Playback41
Pausing ······· 41
Stopping (Resume Function)41
Skipping to a Desired Chapter/Track/File · · · · 41
Finding Specific Sections with Search Modes 42
Memorizing Locations to Replay
Marker Function) 43
Fast Forward/Fast Reverse43
Playing Images Frame by Frame 43
Slow Forward/Slow Reverse Playback 43
Playing in Random Order (Random Playback) ······ 44
Playing Repeatedly (Repeat Playback) 44
Playing Repeatedly Between Specified Points (A B Repeat) ····· 44
Playing in Your Preferred Order (Program Playback) 45
Switching Audio45
Changing the Subtitles and Subtitle Style
Switching the Angle47
nanging the Brightness of the Display (Dimmer Control) ····· 47
eh control function

HDMI Control Function

Other Information

bout DENON LINK	
bout Advanced AL24 Processing 50	
bout Copyright Protection Technology 50	
rademark Information 50	
anguage Code List 51	
country Code List 52	
xplanation of Terms 53	
ndex	

Troubleshooting -----55

	4
Specifications 57	1
Specifications 5/	4

Features

A Universal Blu-ray Disc player that plays Super Audio CD and DVD-Audio formats

page 3, 4 "Playable Media"

Jitter-free transmission thanks to a fusion of DENON LINK 4th generation and HDMI transmission technology

In addition to multi-channel, digitally balanced transmission of Super Audio CD achieved in 3rd generation, DENON LINK 4th generation provides jitter control functionality during digital signal transmission.(described as 3rd or 4th in the following sentences)

page 17 "DENON LINK Connection ① Making a Jitter-free Connection"

Equipped with Dolby TrueHD, DTS-HD Master Audio decoder

Compatible with Linear PCM 192 kHz (one of the BD audio formats) and multi channel output (6 ch).

page 16 "Connecting to a Device with an Analog Multichannel Audio Input Terminal"

Equipped with Advanced AL24 Processing on all channels to enhance HD audio performance

Detailed picture rendering with minimal distortion; accurate sound location and rich bass.

Achieves playback more faithful to the original sound on all channels

GUI equipped for excellent operability and visibility

page 22 "GUI Menu Operation"

HDMI control ready

page 49 "HDMI Control Function"

Newly developed "S. V. H. Mechanism" with low center of gravity, vibration damping, quietness and high accuracy

Employs 6-block construction to eliminate both electrical and magnetic interference

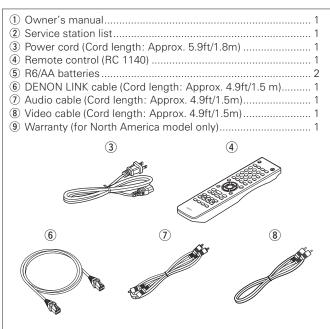
Getting Started

Thank you for purchasing this DENON product. To ensure proper operation, please read this owner's manual carefully before using the product.

After reading the manual be sure to keep it for future reference.

Accessories

Check that the following parts are supplied with the product.



Playback

Cautions on Handling

· Before turning the power switch on

Check once again that all connections are correct and that there are no problems with the connection cables.

• Power is supplied to some of the circuitry even when the unit is set to the standby mode. When leaving home for long periods of time, be sure to unplug the power cord from the power outlet.

• Image persistence (image burn-in)

Do not leave still images of the disc menu, DBP A100 menu, etc., displayed on the TV screen for long periods. This can result in image persistence (image burn in) on the screen.

About Condensation

If the DBP A100 unit is moved from a cold place to a warm place, or installed in a room subject to rapid temperature rise from a heater, etc., condensation may form on parts inside the unit (operating parts and lenses).

If used under this condition, the DBP A100 will not operate correctly and damage may result. If condensation forms on the unit, leave the DBP A100 off for 1 to 2 hours before using it again.

Cautions on using mobile phones

Using a mobile phone near this unit may result in noise. If that occurs, move the mobile phone away from the unit when it is in use.

Moving the unit

Be sure to remove a disc, turn off the power and unplug the power cord from the power outlet. Next, disconnect the connection cables to other system equipment before moving the unit.

About Care

- Wipe the cabinet and control panel clean with a soft cloth.
- Follow the instructions when using a chemical cleaner.
- Benzene, paint thinner or other organic solvents, as well as insecticide, may cause material changes and discoloration if brought into contact with the unit, and should, therefore, not be used.

Proper Ventilation

If the unit is left in a room full of the smoke from cigarettes, etc., for long periods of time, the surface of the optical pickup may get dirty, preventing it from receiving signals inproperly.

• Note that for explanatory purposes the illustrations in these instructions may differ from the actual unit.

About Media

Playable Media

Discs

Playab	le Media	Playable formats/ modes	Playable region codes	Symbols Used in this Owner's Manual
BD Video *1,*2	Biwiay Disc		Discs with	BD
DVD Audio *1	AUDIO			DVD-A
DVD Video *1,*2	DVD VIDEO		Include region	DVD-V
DVD R, DVD+R	DVD			
DVD RW, DVD+RW	DVD-Rewintable DVD-R R W	Video mode, AVCHD format		DVD
Super Audio CD	SUPERAUDIOCD			SA-CD
CD	DIGITAL AUDIO			
CD R	COMPACT COMPACT DISITAL AUDIO Recordable			CD
CD RW	COMPACT COMPACT DIGITAL AUDIO REWritable			

- *1: BD Video/DVD Audio/DVD Video discs may not operate as described in this manual due to menu structure.
- *2: BD players and BD Video discs, and DVD players and DVD Video discs each have their region codes (codes assigned for each region). Playback is not possible if the codes do not match.

About Media

NOTE

- A disc may not be accessible or may play incorrectly due to audio and video interruptions, etc., depending on the recording conditions when recorded with a BD recorder or DVD recorder.
- Unfinalised DVD R/ RW/+R/+RW, and CD R/ RW discs may not play back. Finalize discs before playing.



The following discs will not play back on this unit.

- BD RE Ver1.0 (BD disc with cartridge)
- BD ROM/BD R/BD RE discs containing recorded movie, still image, audio, and/or other, files
- BD R/BD RE in which BDMV/BDAV is recorded
- HD DVD
- DVD RAM
- CDV (Only the audio part can be played)
- CD G (Only the audio signals can be output)
- Non standard CD (CD with copy protection, etc.)
- Unauthorised disc (Pirated disc)
- Disc with recording area less than 55 mm in diameter
- Video Single Disc (VSD) / CVD/ Video CD / Super Video CD / CompactDisc Interactive (CD I) / Photo CDs

SD Memory Cards

Playable cards	Symbols Used in this Owner's Manual	Playable files (Symbols Used in this Owner's Manual)
SD Memory Cards *1 (8 MB ~ 2 GB)		MP3 WMA AAC LPCM
SDHC Memory Cards * 1 (4 GB)	SD	Data recorded for BD BONUS
miniSD Cards *2 (8 MB ~ 2 GB)		VIEW use • See "Files" in "Playable Media" (☞ page 4) for more
microSD Cards *2 (8 MB ~ 2 GB)		information on files.

- *1: This unit supports SD Memory Cards with FAT16 file systems, and SDHC Memory Cards with FAT32 file systems.
- *2: MiniSD cards and microSD cards require adapters.



NOTE

- This unit does not support mini SDHC and micro SDHC Memory Cards.
- Insert or remove your SD Memory Card while the power is in standby. If you insert a SD Memory Card while the power is ON, the SD Memory Card may not be read.
- The SD card used for the Bonus View function must have a capacity of 1GB or greater. Also the SD card must be initialized on the DBP A100 (1287 page 31).

Files

Playable files (Extension)	Playable DVD-R/ -RW/ +R/+RW CD-R/-RW DVD CD	SD Memory Cards	File specification	Symbols Used in this Owner's Manual
MP3 (.mp3)	0	0	Sampling frequency: 44.1 kHz, 48 kHz Bit rate: 64 kbps ~ 320 kbps (144 kbps non compatible) Audio type: MPEG 1 Audio Layer 3	МР3
WMA * (.wma)	0	0	Sampling frequency: 44.1 kHz, 48 kHz Bit rate: 48 kbps ~ 192 kbps Audio type: WMA Version 9	WMA
AAC * (.m4a)	0	0	Sampling frequency: 44.1 kHz, 48 kHz Bit rate: 64 kbps ~ 192 kbps (Variable Bit Rate non compatible) Audio type: AAC	AAC
LPCM (.wav)	0	0	Sampling frequency: 44.1 kHz, 48 kHz Bit length: 16 bit Number of channels: 2 ch	LPCM
JPEG (.jpg/.jpeg)	0	0	Maximum resolution: 4,096 x 4,096 pixels Minimum resolution: 32 × 32 pixels Maximum file size: 12 MB	JPEG
DivX [®] (.avi/.divx)	0	0	Compatible versions: Up to DivX® 6 Maximum size: 2 GB	DivX

*: This unit cannot play files recorded under DRM (Digital Rights Management) other than DivX® files.



- The abovementioned file type may also fail to play back depending on conditions at the time of recording.
- If characters not supported on the menu screen are included in a file name, title, artist name or album title, they will not display correctly
- JPEG images stored in the progressive format cannot be viewed.

About Media

About DivX® Video-on-Demand (VOD)

• When you purchase or rent a DivX® file through the official site of DivX® Video On Demand (VOD) services, a DBP A100 registration code is required. For details, see "DivX® Registration" (Par page 29).

• A DivX® VOD file recorded with a different code from the DBPA100 registration code cannot be played back

 Some DivX® VOD files are restricted. to a certain number of playable times. If your DivX® VOD file has such a limit, the number of playable times is displayed on the DivX® VOD display screen.

Use to select "Yes" if you want to play a file, or to select "No" if you do not want to play it. Then, press (ENTER) to confirm the selection.





NOTE

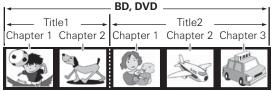
- ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official Divx Certified device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.
- ABOUT DIVX VIDEO ON DEMAND: This DivX Certified® device must be registered in order to play DivX Video on Demand (VOD) content. To generate the registration code, locate the DivX VOD section in the device setup menu. Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD.

About Discs and Files

☐ BD-Video, DVD-Video

BD/DVD Video discs are divided into several large sections (titles) and small sections (chapters). These sections are all allotted numbers, called title numbers and chapter numbers.

[Example]



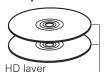
□ Super Audio CD [Type of Super Audio CD]

Single laver disc



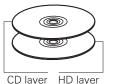
Single layer Super Audio CD with only an HD layer *.

Dual layer disc



Super Audio CD with a double HD layer *, offering extended playing time and high sound quality.

Hvbrid disc

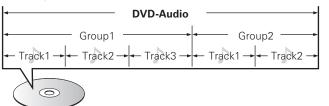


Two layer Super Audio CD with an HD layer * and a CD layer. The signals on the CD layer can be played on a regular CD player.

* : All Super Audio CDs contain an HD (High Density) layer with high density Super Audio CD signals. This layer can contain a stereo channel area, a multi channel area, or both a stereo channel and multi channel area

□ DVD-Audio

DVD Audio discs are divided into several large sections (groups) and small sections (tracks). These sections are all allotted numbers. called group numbers and track numbers.



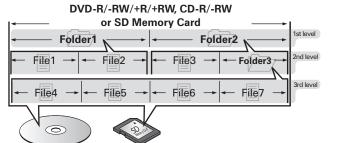
□ CD

CDs are divided into several sections (tracks). These sections are all allotted numbers called track numbers.



☐ File

MP3/WMA/AAC/LPCM/JPEG/DivX® files recorded on DVD R/ RW/+R/+RW, CD R/RW and SD Memory Card are divided into large segments (folders) and small segments (files). Files are stored in folders, and folders can be placed for storage in a hierarchy. The DBP A100 can recognize up to 8 levels of folders.





When writing MP3/WMA/AAC/JPEG/DivX® files on a CD R/ RW disc, set the writing software's format to "ISO9660". The files may not play properly if they are recorded in other formats. For details, refer to the instructions of your writing software.

Setup

About Media

Cautions on Using Media

Inserting a Disc

- Set the disc in the tray label side up.
- Make sure the disc tray is fully open when inserting the disc.
- Place the disc horizontally in the tray, aligned with the tray guide.



If a disc that cannot be played is loaded or the disc is loaded up sidedown, "NO DISC" is displayed on the player's display.

NOTE

- Only load one disc at a time. Loading two or more discs can damage the unit or scratch the discs.
- Do not use cracked or warped discs or discs that have been repaired with adhesive, etc.
- Do not use discs on which the sticky part of cellophane tape or labels is exposed or on which there are traces of where labels have been removed. Such discs can get caught inside the player and damage it.
- Do not use discs in special shapes, as they may damage the player.





• Do not push the disc tray in by hand when the power is off. Doing so could damage the set.

Inserting an SD Memory Card

- Insert an SD Memory Card in the direction of the arrow into the SD CARD slot with the label facing up.
- Insert the card straight into the SD CARD slot until it clicks.
- To remove the card, push it in and then release to eject.



How to Handle Media

- Do not get fingerprints, oil or dirt on discs.
- Take special care not to scratch discs when removing them from their cases.
- Do not bend or heat discs.
- Do not enlarge the hole in the center.
- Do not write on the labeled (printed) surface with ball point pens, pencils, etc., or stick new labels on discs.
- Condensation may form on discs if they are moved suddenly from a cold place (outdoors for example) to a warm place, but do not try to dry discs with a hairdryer, etc.
- Do not eject a SD Memory Card or turn off the DBP A100 while a card is being played. This may result in malfunction or loss of the card's data.
- Do not attempt to open or modify SD Memory Cards.
- SD Memory Cards and files can be damaged by static electricity.
 Do not touch the metal contacts of an SD Memory Card with your fingers.
- Do not use warped SD Memory Cards.
- After use, be sure to remove any disc or SD Memory Card, and store it in its proper card case, to avoid dust, scratches and deformation.
- Do not store discs in the following places:
- 1.Places exposed to direct sunlight for long periods of time 2.Dusty or humid places
- 3. Places exposed to heat from heaters, etc.

Cleaning Discs

- If there are fingerprints or dirt on a disc, wipe them off before using the disc
- Use a commercially available disc cleaning set or a soft cloth to clean discs.





Gently wipe the disc from the inside towards the outside.

Do not wipe with a circular motion.

NOTE

Do not use record spray, antistatic agents, benzene, thinner or other solvents.

About Copyrights

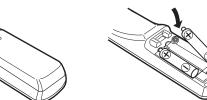
- Unauthorised copying, broadcasting, public performance and lending of discs are prohibited.
- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights.
- This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.
- Portions of this product are protected under copyright law and provided under license by ARIS/SOLANA/4C.

About the Remote Control

Inserting the Batteries

(1) Remove the rear cover.





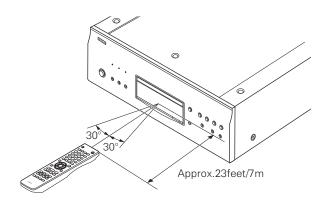
3 Put the rear cover back on.

NOTE

- Use R6/AA batteries in this remote control.
- Replace the batteries with new ones if the set does not operate even when the remote control is operated close to the unit. (The supplied batteries are only for verifying operation.)
- Be sure to insert the batteries in the proper direction, following the "⊕" and "⊖" marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
 - Do not use a new battery with an old one.
 - Do not use two different types of batteries.
 - Do not attempt to charge dry batteries.
 - Do not short circuit, disassemble, heat or dispose of batteries in a fire.
- If the battery fluid leaks, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.
- Remove the batteries from the remote control if it will not be used for a long time.
- Used batteries should be disposed of in accordance with local regulations on battery disposal.

Operating Range of the Remote Control

Operate the remote control while pointing it at the remote sensor.



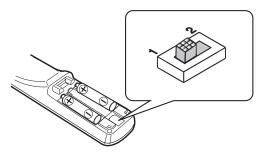
NOTE

The set may function improperly or the remote control may not operate if the remote control sensor is exposed to direct sunlight. strong artificial light from an inverter type fluorescent lamp or infrared light.

Remote Control Settings (Remote Control Side)

Switches when the DBP-A100's remote control operates another DENON BD players in the vicinity.

Set the remote control code simultaneously on the main unit, too. For instructions on setting codes, see GUI menu: "Other Setup" "Remote Control Setting" "Remote ID" (@page 31).



[Remote control code setting]

- Set the remote control code to "1".
- : Set the remote control code to "2".



• If the signal code of the remote control does not match the signal code of the unit, the remote control code set on the unit is shown on the display.

(Example)

If the code setting on the unit is "DENON 1", and the setting on the remote control is "2", "PLAYER 1" is shown on the display.

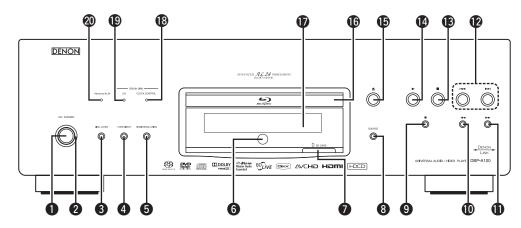
NOTE

- Match the signal code of the remote control with the signal code of the unit. If the remote control code is different, you cannot operate the DBP A100 with the remote control.
- Even if you change the remote control code, set the GUI menu "Other Setup" "Remote Control setting" "Receive Legacy Remocon" (Page 31) to "Off" when operating the DBPA100 with a remote control other than DENON's.

Part Names and Functions

Front Panel

For buttons not explained here, see the page indicated in parentheses ().



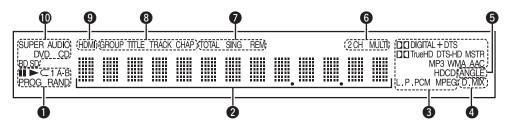
	peration button	
(ON/STA	ANDBY)	(20)
2 Power in	ndicator ·····	(20)
3 DISC LA	YER button ······	(37)
4 PURE DI	RECT button ·····	(38)
🔁 HDMI RE	ESOLUTION but	ton ····· (13)
6 Remote	control sensor	(7)
7 SD CARI	D slot ·····	(6)
3 SOURCE	E button ·····	(34)
9 Pause/S	till button (II) ···	(41, 43)
Tast revo	erse/slow butto	n (◄◄) ······(43)
1 Fast forv	ward/slow butto	on (>>)······(43)

12	Reverse-skip/Forward-skip buttons
	(I ◄◄, ▶► I)······(41)
B	Stop button (■) ·····(41)
14)	Play button (▶) (37)
Ð	Disc tray open/close button (♠)······(34)
16	Disc tray (6)
D	Display (8)
13	CLOCK CONTROL indicator (17, 28)
	Lights when playing BD with DENON LINK 4th (jitter free) connections.
Ð	DENON LINK indicator (50)
20	ADVANCED AL24 indicator ····· (50)
_	



When power is in standby mode, press **4** and **5** to turn the power on.

Display



1 Playback mode indicators

➤ : During Playback

■ : During pause and step by step playback

PROG: During program playback **RAND**: During random playback **←1 A-B**: During repeat playback

2 Information display

Displays various information or playback elapsed time and so on of the disc.

3 Playback format indicators

4 Downmix indicator

Displayed when playing back downmix permitted audio.

5 Angle information indicator

Displayed when a scene on the currently playing disc has been shot at various angles.

6 Audio channel indicators

Displays the number of audio signal channels during playback.

2CH: 2 channel playback **MULTI**: Multi channel playback

7 Time mode indicators

TOTAL: Total time of Super Audio CD and CD **SING**: Elapsed time of title/chapter/track/file

being played

REM: Remaining time of title/chapter/track/file being played

3 Group/Title/Track/Chapter indicators

9 HDMI output indicator

Display when HDMI video or audio signals are being output.



Does not display when the HDMI cable is not correctly connected or when the HDMI connection is not verified.

Media indicators

BD: BD

DVD: DVD Video, DVD R/+R/ RW/+RW

DVD AUDIO: DVD Audio

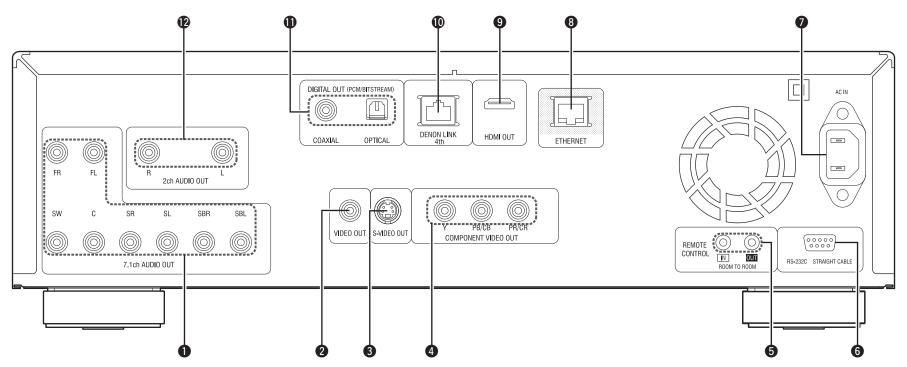
SUPER AUDIO CD: Super Audio CD

CD : CD

SD: SD Memory Card Displays the inserted media.

Rear Panel

For buttons not explained here, see the page indicated in parentheses ().



U	7.1ch AUDIO OUT connectors(16
2	VIDEO OUT connector ······ (18
3	S-VIDEO OUT connector (18
4	COMPONENT VIDEO OUT connectors ····· (18
6	ROOM TO ROOM IN/OUT jacks Extension jack for future use.
6	RS-232C connector Extension connector for future use.
7	AC inlet (AC IN) (20

8	ETHERNET connector (19, 20)
9	HDMI OUT connectors ······ (13)
O	DENON LINK 4th connector ······ (17)
①	DIGITAL OUT OPTICAL/COAXIAL
	connectors(15)

2ch AUDIO OUT connectors(18) For software recorded in multi channel, analog signals that have been down mixed into 2 channels are output.

NOTE

- Do not touch the inner pins of the connectors on the rear panel. Electrostatic discharge may cause permanent damage to the unit.
- Do not put your finger or foreign objects in the fan opening. Doing so could cause injury or unit failure.
- When outputting audio from a DTS HD 7.1 channel source to HDMI or analog 7.1 channel audio, and to 2 channel analog audio, perform the following settings so that the audio is down mixed to the correct 2 channel analog audio output signal as intended by the producer of the source and DTS, Inc.
- In "HDMI Setup", set "Audio Setup" to "2Ch" (@page 23).
- In "Audio Setup", set "7.1ch Audio Out" to "2 Channel" (@page 25).

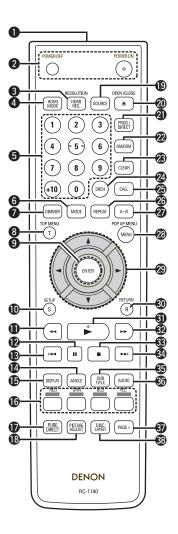
If "Audio Setup" in "HDMI Setup" and "7.1ch Audio Out" in "Audio Setup" are not set to "2Ch" or "2 Channel" respectively, 2 channel analog audio is output using this unit's own downmix.

In this case, the downmix may differ from that intended by the producer of the source and DTS, Inc.

Part Names and Functions

Remote Control

For buttons not explained here, see the page indicated in parentheses ().



Remote control signal transmitter	(7
2 POWER buttons (POWER OFF, POWER ON)	(20
3 HDMI RESOLUTION button (HDMI RES.)	(13
4 HDMI MODE button ·····	(14
5 Number buttons (0 ~ 9, +10)	(35, 36
6 MODE button	(32
7 DIMMER button	(47
3 TOP MENU button (T)	(36
9 ENTER button	(22
SETUP button (S)	(21
1 Fast-reversing button (◄◄)······	(43
Pause/Still button (II) ······	(41, 43
Reverse-skip button (I◄◄)	(41
ANGLE button	(47
DISPLAY button	(34
RED/GRN/BLU/YEL buttons	
PURE DIRECT button	(38
PICTURE ADJUST button	(33
SOURCE button	(34
② Disc tray OPEN/CLOSE button (♠) ·····	(34
PROGRAM/DIRECT button (PROG/DIRECT)	(45
@ RANDOM button	(44
② CLEAR button	(33
SEARCH button (SRCH)	(37
② CALL button	(45

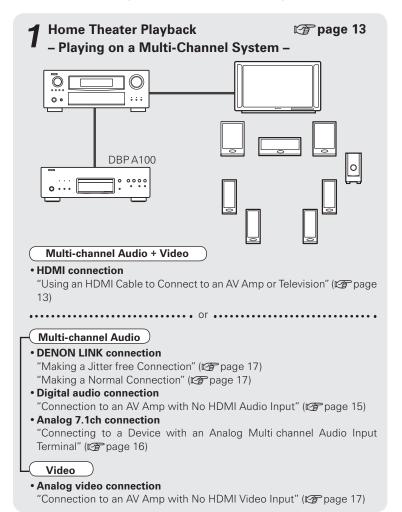
REPEAT button	(44
② A-B button	(44
MENU/POP UP MENU button	(36)
② Cursor buttons (△▽⊲⊳)······	(22
RETURN button (R)	(22
③ Play button (►)	(37
	(43
Stop button (■)·······	(41)
ூ Forward-skip button (▶►I)·····	(41)
SUBTITLE button	(46
AUDIO button	(45, 46
PAGE + button	(38
DISC LAYER button	(37

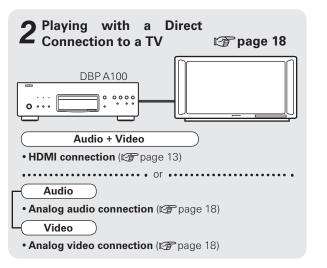


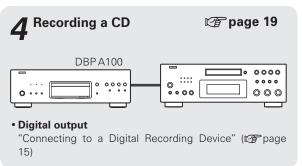
- When power is in standby, press **20** and **31** to turn the power on.
- You can use **(6)** when operating the BD popup menu screen, etc.

Connections

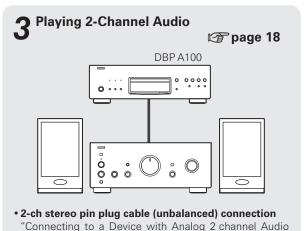
Connect the DBP-A100 as follows before using. Make connections according to the equipment you are connecting. Some DBP-A100 settings may be necessary depending on the connection method. Check each connection item for more information.



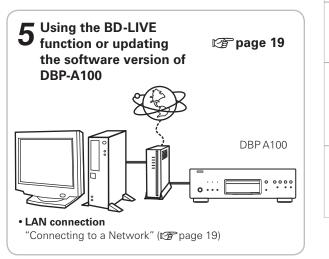








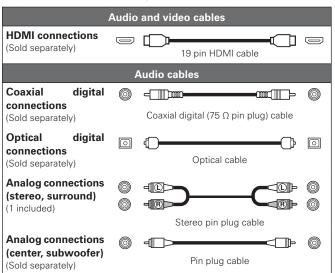
Input Terminal with Stereo Pin Plug Cable" (page 18)

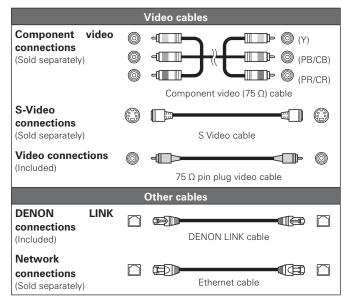


Preparation

Connecting Cables

Prepare cables corresponding to the devices you choose.





NOTE

- Do not plug the power cord into the power outlet until all connections are complete.
- Be sure to read the owner's manuals for connected devices.
- First check the connection channels and then correctly connect the input and output channels.
- Do not bundle the power cord with connection cables. This can result in noise.



- Use only HDMI (High Definition Multimedia Interface) cables that bear the HDMI logo (genuine HDMI product). Using cables without the HDMI logo (non genuine HDMI product) may result in abnormal playback.
- When outputting deep colour or 1080p, etc., we recommend you use a High Speed HDMI cable for enhanced, high quality playback.

1. Home Theater Playback - Playing on a Multi-channel System -

Using an HDMI Cable to Connect to an AV Amp or Television

- When connecting with an HDMI cable, press (HDMI on and set it to "HDMI on".
- Your DBP-A100 automatically detects the audio/video signal supported by the connected HDMI device and outputs the signal. To change the setting, see "HDMI Setup" on the GUI menu (@page 23, 24).

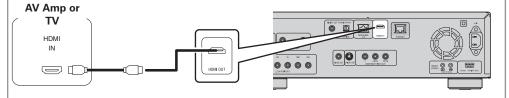
NOTE `

- When you press Moos and set it to "HDMI On", no video signals are output from the component video outputs.
- To disable video or audio output from the HDMI terminal, set the "Video Out" of the "Pure Direct Setup", which outputs high quality analog audio, to "Off". To enable the HDMI signal output, set the Pure Direct mode to one of the following settings:
- Pure Direct mode"Off" or "User Preset 1" or "User Preset 2" (*) ("Playing Back High Quality Audio (Pure Direct Function)" page 38)
- * Do this after setting "Pure Direct Setup" "User Preset 1" or "User Preset 2" "Video Out" on the GUI menu to "On" (PP page 28).

With "HDMI On"

Audio/video signals are output from the HDMI terminal.

When the HDMI video resolution is set to "Auto" as described in "HDMI Video Resolution Settings" (@page 13), the DBPA100 outputs the highest resolution video signal that is supported by the connected equipment.



NOTE

- When audio/video signals are output from the HDMI terminal, no video signals are output from the component terminals.
- When a signal comprising 24 frames per second, such as 1080P24, is output from the HDMI terminal, no video signals are output from the video or S Video outputs.

With "HDMI Off"

Audio/video is not output from the HDMI terminal.

☐ Connection to a device with a DVI-D terminal

If you use a HDMI/DVI D conversion cable (sold separately), HDMI video signals are converted to DVI D signals, enabling connection to a device with a DVI D terminal.

NOTE

- In this case, the audio signal is not output. Make the appropriate audio connections for your devices. (Page 14 ~ 20).
- The video signal will be in RGB format.
- You cannot output to a DVI D device that does not support HDCP (high bandwidth digital content copyright protection system).
- Video may not be output depending on the combination of devices.

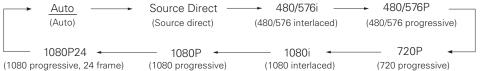
Required Settings for HDMI Connection

Setting HDMI Video Output

- ☐ Make HDMI Output Signal and HDMI Control Function Settings "HDMI Setup" (@page 23, 24)
- ☐ Make the Video Output Signal Setting for the Connected Television "Video Setup" (Pp page 24)

☐ HDMI Video Resolution Settings

• Change the HDMI video resolution by pressing HDMI PRES . Switch the output mode as follows. The default settings is underlined.



- If the HDMI resolution is not set to "Auto", set it to correspond with the resolution of your television. Images will not be projected normally if the television resolution and DBP A100's output resolution do
- Audio and video will be temporarily interrupted if the power of the connected device currently playing is turned off, or the input is switched.
- When you change the HDMI video resolution of the DBP A100, it takes a few seconds up to about 10. seconds for validation between the DBPA100 and the connected device. Audio/video is not output during this period.
- · When outputting deep colour or 1080p, etc., we recommend you use a High Speed HDMI cable for enhanced high quality playback.



When outputting a video signal comprising 24 frames per second from the HDMI terminal, select "1080P24" or "Source Direct" after setting the GUI menu "HDMI Setup" "I/P Direct" (@page 23) to "On".

See overleaf

1. Home Theater Playback Playing on a Multi-channel System

NOTE

- When the HDMI video resolution is set to "1080P24", a HDMI video signal is output from the DBP A100 with a resolution of 1080P and a frame rate of 24 frames per second, regardless of the video signal on the disc being played. Because of this, when playing discs containing video signals recorded with a frame rate of something other than 24 frames per second, the movement of the picture may be unnatural. If this happens, set the HDMI video resolution to something other than "1080P24".
- When the "I/P Direct" (P page 23) setting is "On" and a disc with a frame rate of 24 frames per second is played, no video signals are output from the video or S Video outputs.
- When the "I/P Direct" (Prage 23) setting is "Off", "1080P24" is not displayed.

Setting HDMI Audio Output

- When you press and set "HDMI Setup" "Audio Setup" to "Auto" (** page 23) on the GUI menu, the audio mode is set according to the connected device.
- When you want to set the HDMI audio output to one of your choosing change it according to the following table.
- Refer to the owner's manual of the connected device for HDMI audio input specifications compatible with the connected device.

Device to be connected	Setting items	About output signal and speaker settings
Devices with the following built in decoders • Dolby TrueHD • Dolby Digital Plus • Dolby Digital • DTS HD • DTS	Auto	DBPA100 outputs a bitstream signal that is decoded by the connected device. ** In this case, you cannot make a speaker setting for HDMI audio with the DBPA100. Make the setting with the connected device. ** When outputting Dolby TrueHD or DTS HD audio, press and set "BD Audio Mode" to "HD Audio Output" (LET page 32).
Devices compatible with multi channel HDMI audio input, but not capable of speaker settings for each channel	Multi LPCM BM On	Outputs multi channel Linear PCM audio signals with speaker settings by the DBP A100. **For speaker settings, on the GUI menu, "Audio Setup"
Devices compatible with multi channel HDMI audio input, and capable of speaker settings for each channel	Multi LPCM BM Off	Output of multi channel Linear PCM audio signals from the DBPA100. Make speaker settings with the connected device. **BM: Bass Management (means multi channel speaker setting)
Devices compatible with 2 channel HDMI audio input	2Ch	Downmixed 2 channel Linear PCM audio signals are output from the DBP A100. Make speaker settings with the connected device.
Devices not compatible with HDMI audio signal input	Mute	Audio signal are not output from the DBP A100's HDMI terminal. Only video signals are output from the HDMI terminal. ** Make the audio connections.

☐ Audio signal from the HDMI output terminal

You can change the audio format and playback the number of channels according to the specifications of the device to which the DBP A100's HDMI audio output signals are input. Make settings while checking the specifications of the audio device to be connected as well as the audio format/number of channels stored in media and files for playback.

Media/Files	Audio format	Setting "HDMI Setup" "Audio Setup" (🖅 page 23) on the GUI menu		
		Auto	Multi LPCM BM On/Off	2Ch
	Dolby Digital	Dolby Digital * 1		
	Dolby Digital Plus	Dolby Digital Plus * 1		
BD	Dolby TrueHD	Dolby TrueHD * 1	Multi I PCM	2 ch Downmix
BD	DTS	DTS * 1	- IVIUITI LPCIVI	LPCM
	DTS HD	DTS HD * 1		
	LPCM	Multi LPCM		
AVCHD	Dolby Digital	Dolby Digital		
AVCHD	LPCM	Multi LPCM	Multi LPCM	2 ch Downmix LPCM
	Dolby Digital	Dolby Digital	IVIUITI LPCIVI	
DVD Video	DTS	DTS		
	LPCM, MPEG	2 ch LPCM		
DVD Audio	LPCM, PPCM	Multi LPCM 2 ch Dow		2 ch Downmix
	Multi area	LPCM LPCM		LPCM
Super audio CD * 2	Stereo area	2 ch LPCM		
	CD layer			
DivX®	Dolby Digital	Dolby Digital	Multi LPCM	2 ch Downmix LPCM
	MP3, MP2	2 ch LPCM		
CD, MP3, WMA, AAC, LPCM		Z GII LF GIVI		
DTS CD		DTS	Multi LPCM	2 ch Downmix LPCM

- *1 : Multi LPCM signals are output when "BD Audio Mode" is set to "Mix Audio Output" (Paragraphics page 32). Multi LPCM signals are output when outputting HDMI video signals with resolutions of 480i/576i or 480p/576p.
- *2 : Super Audio CD audio signals are output at 44.1 kHz 16 bit.



Even if "HDMI Setup" "Audio Setup" on the GUI menu is set to "Auto" (@page 23), multilinear PCM or downmixed 2 channel linear PCM signals are output if a device that does not support bitstream is connected.

Copyright protection system

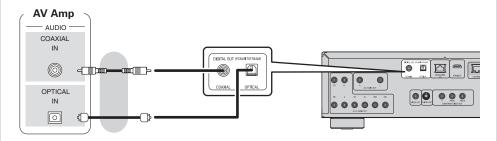
In order to play back digital video and audio such as BD Video or DVD Video via HDMI connection, both the player and TV or the AV Amp need to support the copyright protection system known as HDCP (High bandwidth Digital Content Protection System). HDCP is copyright protection technology comprising data encryption and authentication of the connected AV device. Our DBP A100 supports HDCP.

NOTE

- If a device that does not support HDCP is connected, video and audio are not output correctly. Read the owner's manual of your television or AV Amp for more information.
- The audio signal from the HDMI output terminal (sampling frequency, number of channels, etc.) may be limited by the HDMI audio specifications of the connected device for permissible inputs. For example, if the HDMI audio specification of the connected device is 5.1 channels, 5.1 channel audio will be automatically output even when playing back 7.1 channels on the DBP A100. In this case, analog audio output will also be 5.1 channel.
- Audio signal input may not be supported depending on the HDMI compatible monitor (projector, etc.)
- When the DBP A100 is connected to this kind of device, audio signals are not output from the HDMI terminal.

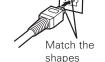
Connecting to an AV Amp with No HDMI Audio Input

When playing back Dolby Digital Plus/Dolby TrueHD/DTS HD audio recorded on a BD disc, the DBP A100 outputs Dolby Digital or DTS bitstream from its digital audio output terminal.



NOTE

- Dolby TrueHD/Dolby Digital Plus/DTS HD audio signals are not output with
- When outputting Dolby TrueHD/Dolby Digital Plus/DTS HD audio signals, do so with an HDMI connection (page 13, "Using an HDMI Cable to Connect to an AV Amp or Television").



- Super Audio CD's DSD signal cannot be output. Also, during CD laver playback, 44.1 kHz/16 bit Linear PCM is output.
- Do not output DTS audio signals to an AV Amp that does not support DTS. Playing back a BD/DVD disc with recorded DTS content can generate noise and even damage your speakers.
- When connecting with an optical transmission cable (sold separately), make sure the plug shape aligns with the socket, and insert fully.

1. Home Theater Playback Playing Back Using Multi-channel System

Audio Signal from the Digital Audio Output (Optical/Coaxial) Terminal

The DBP A100 can convert and output digital audio signal format recorded on various media. Convert the digital audio signal in accordance with the specifications of the device that is to input digital audio output signals from the DBP A100.

Media/Files	Audio format	Setting "Audio Setup" "Digital Out" (ﷺ page 27) o the GUI menu		
iviedia/ Files	Audio format	Bitstream	PCM/ PCM Down Sampling	
	Dolby Digital			
	Dolby Digital Plus	Dolby Digital * 1		
BD	Dolby TrueHD			
שם	DTS	 DTS * 1		
	DTS HD	חוסייו ווייי		
	LPCM	2 ch Downmix LPCM * 1	2 ch Downmix LPCM	
AVCHD	Dolby Digital	Dolby Digital	2 Ch Downmix LPCIVI	
AVCHD	LPCM	2 ch Downmix LPCM		
	Dolby Digital	Dolby Digital		
DVD Video	DTS	DTS	-	
	LPCM, MPEG	2 ch Downmix LPCM		
DVD Audio	LPCM, PPCM	2 Ch Downmix LPCivi		
	Multi area	- Audio is not output		
Super Audio CD	Stereo area	Audio is not output		
	CD layer	2 ch LPCM		
DivX®	Dolby Digital	Dolby Digital	2 ch Downmix LPCM	
DIVX	MP3, MP2			
CD		2 ch LPCM		
MP3, WMA, AAC, LPCM				
DTS CD		DTS	2 ch Downmix LPCM (DTS * 2)	

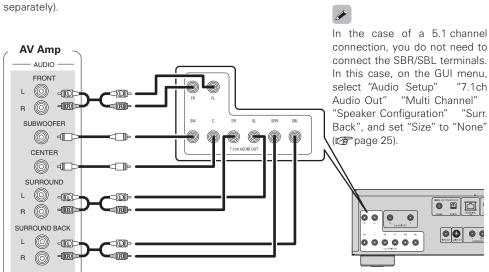
- *1: Bitstream signals are output according to the BD re encode setting when "BD Audio Mode" is set to "Mix Audio Output" (** page 32).
- *2:When "HDMI Setup" "Audio Setup" is set to "Auto" on the GUI menu and bitstream is output from the HDMI, the DTS bitstream is output from the digital audio output (optical/coaxial) as well.



For content with copyright protection, audio signal is down sampled to 48kHz 16bit and output.

Connecting to a Device with an Analog Multi-channel Audio Input Terminal

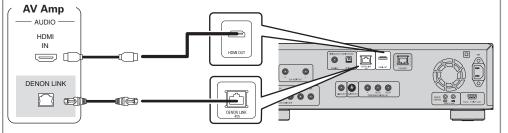
Outputs multi channel audio decoded by the DBPA100. If your audio system has an analog multi channel audio input terminal, connect using audio cable (sold



DENON LINK Connection ① Making a Jitter-free Connection

BD

When you connect the DBP A100 to a DENON LINK 4th compatible AV Amp using a DENON LINK cable and HDMI cable, during BD playback the DBP A100's circuit operates with the AV Amp's master clock signal. (The clock control indicator of the DBP A100 lights.) This enables transmission of high quality digital audio with minimal jitter.



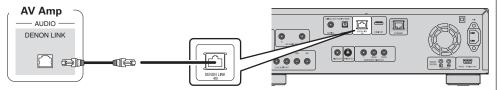
NOTE

- When using DENON LINK 4th functions, press the (HDMI On".
- The jitter free function does not work except during BD playback. In this case, the video signal is output from the HDMI OUT terminal, and the audio signal from the DENON LINK terminal.

DENON LINK Connection 2 Making a Normal Connection

- When connecting to a DENON LINK compatible AV Amp, the multi channel signals of DVD Audio discs, Super Audio CDs, etc., can be transferred as such in digital format.
- The DENON LINK connection requires the version of AV Amp to be connected to match the DBP A100 version. Check the version of the AV Amp, and then on the GUI Menu, set "DENON LINK Setup" "DENON LINK Mode" (EF page 28).

If the DBP A100 and AV Amp versions do not match, audio cannot be output correctly.



NOTE

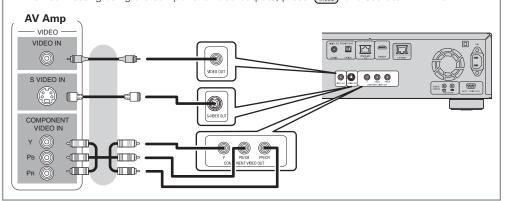
DENON LINK does not support BD audio transmission.



- DENON LINK supports digital transmission up to 24 bit/2 ch at 192/176.4 kHz, and up to 24 bit/6 ch at 96 kHz or less.
- When you have made a DENON LINK connection, the DBP A100's speaker setting becomes invalid. (Make the speaker setting on the connected AV Amp)
- DENON LINK 2nd cannot transmit multi/stereo area audio of a Super Audio CD.

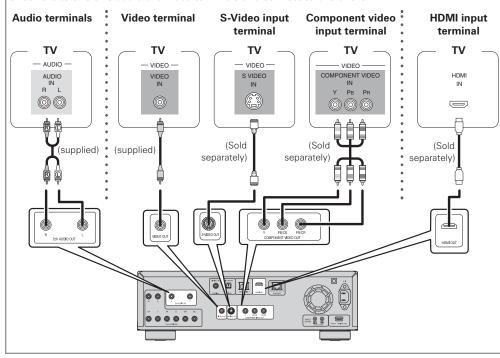
Connecting to an AV Amp with No HDMI Video Input

- Check the video terminals and connect to one of them.
- When connecting using the component video outputs, press HDM and set it to "HDMI Off".



2. Playing with a Direct Connection to a TV

Check the television's audio and video terminals and connect to one of them.



NOTE

Do not connect the DBP A100's video output via a VCR (Video Cassette Recorder). Some media contain copy prohibiting signals, which will disturb the screen image.

When playing an NTSC disc, the DBP A100's video output changes to the NTSC signal format. When playing a PAL disc, the DBP A100's video output changes to the PAL signal format.

☐ When connected to the television's component video input terminal

• The DBP A100's component video output supports 480i/576i/480p/576p/720p/1080i output. Match the output to the corresponding resolution of the connected television by setting on the GUI menu: "Video Setup" "Component Resolution" (@page 24). Images will not be projected normally if the television resolution and DBP A100's output resolution do not match. Copyright protected DVDs are output in 480i/576i or 480p/576p.

NOTE

When you press (HDMI) and set it to "HDMI On", no video signals are output from the component video terminals. When using the component video terminals, set the HDMI mode to "HDMI Off".

☐ When connected to the HDMI input terminal

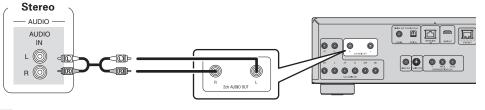
It outputs both digital video and digital audio signals.

See "Required Settings for HDMI Connection" (\mathcal{E} page 13) for HDMI video output and audio output settings.

3. Playing Back 2-Channel Audio

Connecting to a Device with Analog 2-channel Audio Input Terminals with a Stereo Pin Plug Cable

When connecting using the analog 2-channel audio output terminals

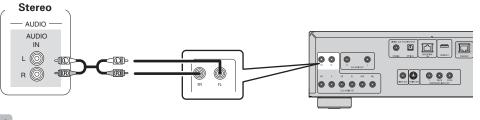




For software recorded in multi channel, an analog signal down mixed to 2 channels is output.

When connecting using the analog 7.1-channel audio output terminals

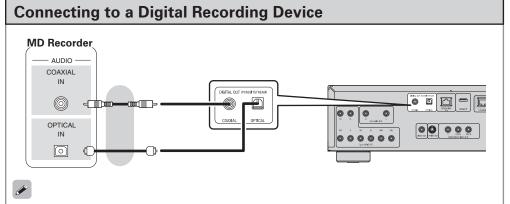
On the GUI menu, select "Audio Setup" "7.1ch Audio Out", and set it to "2 channel" (@page 25).





For software recorded in multi channel, an analog signal down mixed to 2 channels is output.

4. Recording a CD



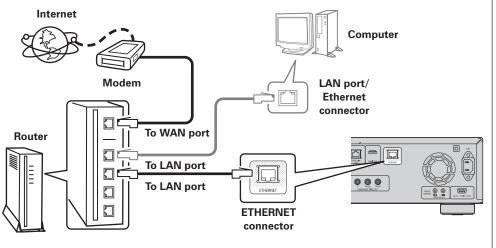
When converting multi channel audio to 2 channel for output, select "Audio Setup" "Digital Out" on the GUI menu and set it to "PCM Down Sampling" (Ppage 27). If you play back DVD or other media with an incorrect configuration, a deafening noise occurs that may damage your speakers.

5. Using BD-LIVE function or updating the software version of DBP-A100

Connecting to a Network

- You can use a disc that offers the BD LIVE function by connecting the unit to the Internet (1287 page 36).
- You can update by downloading the latest firmware from the Internet.

 For more information, on the GUI menu select "Other Setup" "Firmware Update" (** page 31).
- You can also operate this unit from a computer using the Web control function (127 page 47).



• See "Network Setup" (@page 29) on the GUI menu for more information on network settings.

5. Using BD-LIVE function or updating the software version of DBP-A100

System Requirements

☐ Internet Connection via Broadband

■ Modem

A device that connects to the broadband and conducts communications on the Internet. Some modems also incorporate a router.

□ Router

When using the DBP A100, we recommend a router with the following features.

- Built in DHCP (Dynamic Host Configuration Protocol) server.
 This function automatically assigns an IP address on the LAN.
- Built in 100BASE TX switch (built in switching hub compatible with speeds upwards of 100 Mbps)

☐ Ethernet cable (CAT-5 or greater recommended)

- An ethernet cable is not included with the DBP A100.
- Use only shielded STP or ScTP LAN cable which is available at retailer.
- We recommend a shielded straight cable (normal type) for Ethernet connections.

 If you use the flat type or a non shielded cable, the noise may adversely affect other devices.



For Internet connections, use an ISP (Internet Service Provider). Ask your local dealer for details.

NOTE

- Do not connect an ETHERNET connector directly to the LAN port/Ethernet connector on your computer.
- It is necessary to subscribe to an ISP in order to connect to the Internet. If you already have a broadband connection, there is no need to subscribe anew.
- The router you can use varies with the ISP. For more information, contact your ISP or PC dealer.
- DENON assumes no responsibility whatsoever for any communication errors or problems resulting from customer's network environment or connected devices.

□ Other

- The DBP A100 can use the DHCP function to automatically set up the network.
- When setting up your network manually, after subscribing to an ISP, make the settings according to directions in "Network Setup" on the GUI menu (12) page 29).
- If you connect the DBP A100 to a network without a DHCP function, conduct IP address and other settings according to "Network Setup" on the GUI menu (Paragraphy page 29).
- The DBP A100 does not support PPPoE. If you subscribe to a service that is set with PPPoE, a PPPoE compatible router is required.
- When setting up the network manually, consult with your network administrator for the settings to make.

Connecting the Power Cord Connect the included power cord to the DBP A100, and plug it into an AC outlet. To household power outlet (AC 120 V, 60 Hz) Power cord (included) NOTE Be sure to insert the power plug firmly, Incomplete connection results in noise.

Once Connections are Complete

Turning the Power On

Press the unit's or the remote control's .

The power turns on, and the power indicator lights green. "LOADING" appears on the display, and disc information is read.

* The "NO DISC" message is displayed if a disc is not loaded.



(DBP A100)

(Remote control unit)



On the GUI menu, when "Other Setup" "Auto Power Mode" "On" (P page 31), the following states are maintained for about 30 minutes, and then the power is automatically turned to standby.

- Disc not loaded
- Playback has stopped
- Stopped due to resume function

☐ When power is switched to standby

Press either on the unit, or on the remote control.

[Power indicator status in standby mode]

- Power Saving Standby : Off
- Normal Standby : Red
- Quick Start Mode: Red

NOTE

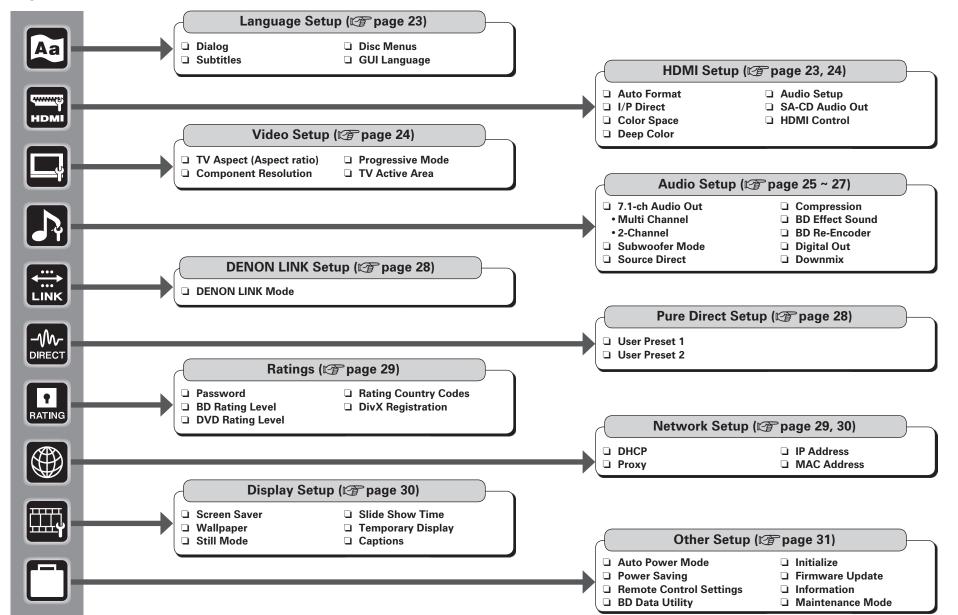
During power standby, a slight amount of power is consumed. To totally cut off the power, remove the power cord from the power outlet.

Playback

GUI Menu Setup

Menu Map

Pressing signal displays the GUI menu. From this menu, you can move to various setting screens.



GUI Menu Operation

1 Press S. The GUI menu is displayed on the TV screen.

2 Press to select the menu to be set or operated.

* To return to the previous item, press or $\binom{1}{6}$.

3 Press to enter a setting.



☐ Exiting the GUI Menu

Press (s) while the GUI menu is displayed.

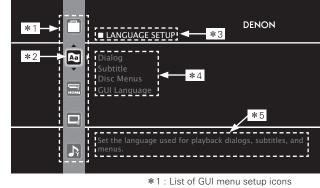
• The GUI menu display disappears.

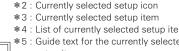
NOTE

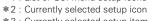
You must use the GUI menu to make settings or operate while a disc or SD Memory Card is not inserted. In cases in which the resume function is activated, you may not make correct settings.

Typical examples are described below.

[Example 1] Menu selection screen (Top menu)



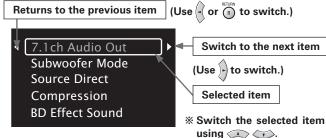




*4: List of currently selected setup items

*5: Guide text for the currently selected setup item





Switch to the next item

[Example 2] Rating-Country Code input screen (with

Enter the country code.

Switch the selected item (Use to switch.)

Selected item

Switch the selected item

DENON

*8: Virtual keyboard

(Use) to switch.)

(Use to switch.)

*9: Operation button guide

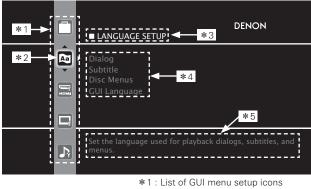
virtual keyboard)

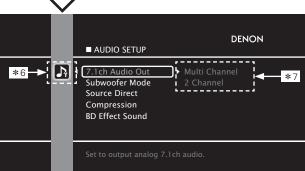
Examples of GUI Menu Screen Displays

Press to select "

and then press 🕽.

(Or press (ENTER).)





- *6: Selected setup icon
- *7: Options of the selected setup item



Text colors of selected items of the GUI menu are as follows:

- White: These items can be selected.
- Gray: These items cannot be selected.



Language Setup

Default settings are underlined.

Sets the language used for playback dialogs, subtitles, and menus.

Setting items	Setting contents
Dialog Sets the dialog used to play BDs or DVDs.	Original: Plays the dialog selected at the top in the language menu stored in the disc. English/French/Spanish/German/Japanese/Italian/Swedish/Dutch/Russian/Chinese/Korean/Danish/Finnish/Norwegian/Icelandic/Hungarian/Romanian/Turkish/Greek/Irish/Portuguese/Polish/Czech/Slovak/Bulgarian Others: Enter the language code.
Subtitle Sets the subtitle language used to play BDs or DVDs.	Off: No subtitles displayed English/French/Spanish/German/Japanese/Italian/Swedish/Dutch/ Russian/Chinese/Korean/Danish/Finnish/Norwegian/Icelandic/ Hungarian/Romanian/Turkish/Greek/Irish/Portuguese/Polish/Czech/ Slovak/Bulgarian Others: Enter the language code.
Disc Menus Sets the language used for BD or DVD menus.	English/French/Spanish/German/Japanese/Italian/Swedish/Dutch/Russian/Chinese/Korean/Danish/Finnish/Norwegian/Icelandic/Hungarian/Romanian/Turkish/Greek/Irish/Portuguese/Polish/Czech/Slovak/Bulgarian Others: Enter the language code.
GUI Language Sets the GUI language.	English/Français/Español/Deutsch/Italiano/Svenska/Nederlands/日本語

NOTE

The setting may not be active depending on the disc.



If "Other" is selected for "Dialog", "Subtitle" or "Disc Menus", refer to the "Language Code List" (@page 51), and use the number buttons \bigcirc \sim \bigcirc to input the language code, then press \bigcirc to set.



HDMI Setup

Default settings are underlined.

Sets the HDMI output signal or HDMI control function

Setting items	Setting contents
	Max Res.: Outputs data using the maximum resolution that can be handled by the connected TV. Panel Res.: Outputs data using the maximum resolution of the panel of the connected TV. If the TV does not support 1080P24, video is output in 1080P format.
I/P Direct Sets whether the I/P converter converts 24P frames.	Off: Converts 1080 progressive 24 frames to 60 frames. On: Outputs 1080 progressive 24 frames without conversion. NOTE When "I/P Direct" is set to "On" and some discs are played, no video signal is output from the video and S Video terminals.
Color Space Sets the video signal system to be output from HDMI.	YCbCr: Outputs in the YCbCr video format. RGB Normal: Outputs using the RGB video system (16 (black) to 235 (white)). RGB Enhanced: Outputs using the RGB video system (0 (black) to 255 (white)).
Deep Color Sets the HDMI terminal to output Deep Color. Expands the color depth (number of used colors) of the HDMI video signal, enabling playback with more natural colors and free of streaking.	Auto: Deep Color is automatically output when the connected HDMI device supports Deep Color. Off: No Deep Color output.
Audio Setup Sets the audio signal system to be output from HDMI.	[Auto]: Automatically selects and outputs signals that can be input to the connected HDMI device. The bitstream signal takes priority. [Multi LPCM BM On]: Decoded Linear PCM multi channel signal is output by the DBPA100. Speaker settings are enabled. (BM: Bass Management) For settings, on the GUI menu, refer to, "Audio Setup" "7.1 ch Audio Out" (12) page 25, 26).
	 Speaker Configuration: Sets the speaker configuration used for playback. Automatically sets channel components and characteristics according to the settings. Channel Level: Sets the volume of the test tone to be the same when

it is output from each speaker.

speaker.

:Makes the setting

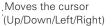
See overleaf















• Distance : Sets the distance between the listening position and each

HDMI Setup

Setting items	Setting contents
Audio Setup	[Multi LPCM BM Off]: Decoded Linear PCM multi channel signal is output by the DBPA100. This setting is not made in speaker settings. (BM: Bass Management)
	[2Ch]: Outputs the downmixed 2 channel LPCM signal.
	[Mute]: Does not output audio from HDMI.
SA-CD Audio Out Sets to output the stereo/ multi area audio of Super Audio CD to the HDMI terminal.	On: Super Audio CD audio is output. Off: Super Audio CD audio is not output. The Super Audio CD audio signal is a 44.1 kHz/16 bit Linear PCM output.
HDMI Control Can operate the unit in conjunction with an HDMI	 (Control) Off: Disables the HDMI control function. On: Links with the device connected to HDMI.
control supported device.	 Power Off Control On: Turns the DBP A100's power to standby through linkage to the TV. Off: Does not turn the DBP A100's power to standby through linkage to the TV. For the HDMI control function to operate, it is necessary for the DBP A100 or HDMI compatible TV connected to the DBP A100 to have an HDMI connection. Refer to "HDMI Control Function" (௺ page 449) for more information on HDMI control functions. The HDMI control function from the connected device is enabled when, on the GUI menu, "DENON LINK Setup" "DENON LINK Mode" is set to "4th" (௺ page 28). After the "HDMI Control" setting has been changed, always turn off the power to the connected equipment and then turn it back on.

NOTE

If you set "DENON LINK Setup" "DENON LINK Mode" on the GUI menu to "4th", you will no longer be able to change the "HDMI Control" "Control" setting. To change the setting, switch the "DENON LINK Mode" to a setting other than "4th" first and then change the setting.



Video Setup

Default settings are underlined.

Set the video output signal according to the connected TV.

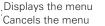
Setting items	Setting contents	
TV Aspect (Aspect ratio) Set the screen type and display mode of the TV.	16:9 Squeeze Auto: Outputs to a wide screen TV. For 4:3 video, displays in the center of the screen without changing the aspect ratio. * 1 WIDE (16:9): Outputs to a wide screen TV. 4:3 PS: Outputs to a 4:3 TV. For wide video, trim the left and right side o the image and display in 4:3 aspect ratio. * 2 4:3 LB: Outputs to a 4:3 TV. Displays all of the wide video.	
Component Resolution *3 Sets the component output resolution.		
Progressive Mode Sets an appropriate progressive conversion mode for the source video material.	Auto: Detects the type of video material and automatically switches the mode. Normally, this setting is used. Video1: Suitable for playing video material discs. Video2: Suitable for playing video material discs or 30 frame film material discs.	
TV Active Area Sets the horizontal display range when the analog video output resolution is 480i/576i.	Full: Setting when a home use monitor is connected. Normal: This setting is used when video synchronization is disturbed on a professional use monitor. This is not available for HDMI output.	

- *1: This has no effect on the video and S Video outputs.
- *2 : Depending on the video content, even though you set it to 4:3 PS (Pan Scan), the content may be output in 4:3 LB (Letter Box).
- *3: When video is output from the HDMI terminal, no video signal is output from the component terminals.

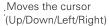


















Audio Setup

Set the speaker or audio to be output.

Setting related to each channel setting and other audio in the case of outputting analog audio signals decoded by the DBP-A100.

Setting items

7.1ch Audio Out

Makes the audio setting for output of analog 7.1 channel audio to a multi channel amplifier. To set "7.1ch Audio Out", set "HDMI Setup" "Audio Setup" on the GUI menu to "2Ch" or "Mute" (P page 24).

NOTE

You cannot select "None" or "No" for "HDMI Setup" Audio Setup" "Multi LPCM BM On" "Speaker Configuration" (page 23, 24) on the GUI menu.

Setting contents

Multi Channel

Set the speaker configuration, channel level and distance for multi channel playback.

2 Channel

Outputs multi channel downmixed audio from the front speaker output terminals (FL/FR) of the 7.1 channel audio output terminals. Make this setting when outputting to a TV and 2 channel amplifier.

NOTE

The 7.1 channel audio output terminals only outputs to FL/FR when you make this setting.

☐ Speaker Configuration : Sets the speaker configuration.

(Front): Sets the front speaker size.

- Large: For use with large speakers that can adequately play back low
- Small: For use with small speakers that cannot adequately play back low frequencies.

[Center]: Sets the presence and size of the center speaker.

- Large : For use with large speakers that can adequately play back low frequencies.
- Small: For use with small speakers that cannot adequately play back low frequencies.
- None: Select when no center speaker is connected.

(Subwoofer): Sets the presence of a subwoofer.

- Yes: Use a subwoofer.
- No: Select when a subwoofer is not connected.

Cancels the menu

(Surround): Sets the presence and size of the surround speakers.

- Large: For use with large speakers that can adequately play back low frequencies.
- Small: For use with small speakers that cannot adequately play back low frequencies.
- None: Select when surround speakers are not connected.

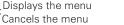
Setting items	Setting contents		
7.1ch Audio Out	[Surr. Back]: Sets the presence, size and number of surround back speakers. • Size: Sets the surround back speaker size. Large: For use with large speakers that can adequately play back low frequencies. Small: For use with small speakers that cannot adequately play back low frequencies. None: Select when no surround back speakers are connected. • Number: Sets the number of surround back speakers. 1 spkr: Use only one surround back speaker. Surround back audio is output from the surround back L terminal. 2 spkrs: Use two surround back speakers.		
	[Crossover Freq.]: Sets the upper limit of the low frequency signal output from the subwoofer. • 40Hz/60Hz/80Hz/90Hz/100Hz/110Hz/120Hz/150Hz/200Hz/250Hz : Keeps the output level below the set frequency to avoid overloading the specified low frequency performance of your subwoofer. Sets one of these frequencies according to the low frequency output capabilities of your speakers. • Advanced: Sets the low frequency signals to be output from the signals of the respective speakers to the subwoofer. Front, Center, Surround, Surr. Back 40Hz/60Hz/80Hz/90Hz/100Hz/110Hz/120Hz/150Hz/200Hz/250Hz		

Default settings are underlined.

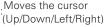
See overleaf















80Hz/90Hz/100Hz/110Hz/120Hz/150Hz/200Hz/250Hz

(repage 25), you can select "LFE" or "LFE+Main".

When, on the GUI menu, "Audio Setup" "7.1ch Audio Out" "Multi

Channel" "Speaker Configuration" "Subwoofer" is set to "Yes"

LFE / LFE+Main

Audio Setup

Audio Setup	
Setting items	Setting contents
7.1-ch Audio Out	 NOTE Select "Large" or "Small" not according to the physical size of the speaker but according to the low frequency reproduction capabilities based on the frequency set at "Crossover Freq.". On the GUI menu, if the "Audio Setup" "7.1 ch Audio Out" "Multi Channel" "Speaker Configuration" item setting is changed, other settings are automatically changed as well. [Example]
	If you set "Front" to "Small", "Subwoofer" is set to "Yes" and "Large" cannot be selected for "Center", "Surround" and "Surr. Back". • Audio signal (sampling frequency, number of channels) from the HDMI output terminal may be restricted by the specification of the HDMI audio that can be input by the device on the other side. [Example]
	If the HDMI audio specification of the device on the other side is 5.1 channel, even when DBPA100 plays back in 7.1 channel, 5.1 channel audio is output automatically. In that case, the analog audio output becomes 5.1 channel output as well.
	☐ Channel Level : Sets the volume of the test tone to be the same when output from each speaker.
	 [Mode]: Select a test tone output method. Auto: Automatically switches the test tone output speaker. Manual: Manually switches the test tone output speaker.
	[Start] : Begins outputting the test tone. Front L / Center / Front R / Surround R / Surr. Back R / Surr. Back L / Surround L / Subwoofer
	※ When the test tone output stops, press ® .
	 [SW +10dB]: Increases the subwoofer output level by 10 dB. * Off: Does not change the subwoofer output level. On: Increases the subwoofer output level by +10 dB. *: "SW +10dB" cannot be set for "HDMI Setup" "Audio Setup" "Multi LPCM BM On" "Channel Level" on the GUI menu.
	[Default]: Resets all channel level settings to factory default. • No: Does not Reset.

Setting items	Setting contents
7.1ch Audio Out	☐ Distance : Sets the distance between the listening position and each speaker.
	[Feet] or [Meters]: Set the unit of distance.
	[Step] : Set the minimum variable width of the distance. 1ft, 0.1ft, 0.1m, 0.01m
	[Default]: Reset all distance settings to factory default.
	Front L / Front R / Center / Subwoofer / Surround L / Surround R / Surr. Back L / Surr. Back R : Select the speaker you want to set, and set the distance. Set the value that is closest to the measured distance. 0 ~ 60ft or 0 ~ 18m
	 Default settings: Front/Center/Subwoofer: 12 feet (3.6 meters) Surround/Surr. Back: 10 feet (3.0 meters) Set the difference in the distance betweem the speakers to less than 20 feet (6.0 meters).
	NOTE When "BD Audio Mode" is set to "HD Audio Output" (P page 32), the "Distance" setting is disabled during DTS HD 192kHz audio playback.
Subwoofer Mode Sets the type of low frequency signal to be output from the subwoofer.	LFE : Adds the low frequency signal of the channel for which the speaker size is set to "small" to the subwoofer signal and outputs it. LFE+Main : Adds the low frequency signal of all channels to the subwoofer signal and outputs it.



• Yes: Resets.



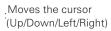




.Displays the menu

Cancels the menu







Audio Setup

Setting items	Setting contents
Source Direct Disables the speaker and subwoofer settings and outputs the disc audio as is. NOTE Set to within the playback frequency band of the amplifier you will use: "On" at "50 kHz" or "100 kHz". Settings outside the frequency band can result in damage to your amplifier and even fire.	CD, outputs up to 50 kHz audio signals. On: 100kHz: Outputs the disc content as is. When playing Super Audio CD, outputs up to 100 kHz audio signals. • Setting "On: 50 kHz" or "On: 100 kHz" enables full range playback on all channels recommended for DTS. (Note that this results in a 5 dB increase in subwoofer volume, and a 15 dB increase with Super Audio CDs). This also allows you to play back the 6 channel source of
times when you cannot play	Off: Dynamic Range compression is not applied. Low: Sets minimum dynamic range compression.
BD Effect Sound Sets for a clicking and other sound outputs during BD popup menu operation.	On: Outputs BD effect sound. Off: Does not output BD effect sound.

Setting items	Setting contents
BD Re-Encoder Sets the format during output of the BD's Mix Audio signal from the digital output terminal.	Auto: Outputs the primary audio (main audio) in the same type of audio format. Dolby Digital/Dolby Digital Plus/Dolby TrueHD are output as Dolby Digital, DTS/DTS HD are output as DTS and Linear PCM is output as Linear PCM. Dolby Digital:Outputs to the digital audio output terminal (optical/coaxial) with Dolby Digital. DTS: Outputs to the digital audio output terminal (optical/coaxial) with DTS. Valid when "BD Audio Mode" is set to "Mix Audio Output" (Prage page 32).
Digital Out Sets the audio signal of digital audio output. For more information on each audio signal, refer to "Audio Signal from the Digital Audio Output (Optical/Coaxial) Terminal" (Par page 17).	Bitstream: Outputs a bitstream signal. Converts Dolby TrueHD, Dolby Digital Plus to Dolby Digital, and DTS HD to DTS for output. PCM: Outputs the downmixed audio signal to 2 ch LPCM. PCM Down Sampling: Converts sampling frequency audio greater than 48 kHz to a 48 kHz 2 ch LPCM audio output signal. ◆ When outputting CD, etc. to a digital recording device, such as a CD recorder, convert to PCM or PCM down sampling. ◆ When a disc with recorded Linear PCM or PPCM (Packed PCM) is played back, this outputs Linear PCM regardless of the setting.
Downmix Sets the method used to convert a multi channel audio signal to a 2 channel signal.	Lt/Rt: Signals are converted to Dolby Surround compatible 2 channel audio signals for output. This setting is valid for DTS HD, DTS Digital Surround, Dolby Digital Plus and Dolby Digital audio signals. (If the connected AV Amp is Dolby Pro Logic compatible, the AV Amp plays back using surround audio.) Stereo: Outputs by converting to 2 ch (stereo) audio. NOTE In order to enable the "Lt/Rt" setting when playing back BD, set "BD Audio Mode" to "HD Audio Output" (Pp page 32).













DENON LINK Setup

Default settings are underlined.

• To play DENON LINK 4th signals, connect to a DENON LINK 4th compatible AV Amp using an HDMI and a DENON LINK cable. • For information on the 4th setting of the AV Amp, see the owner's

Set the audio signal to be output from the DENON LINK terminal.

	·
Setting items	Setting contents
DENON LINK Mode Sets the audio output of DENON LINK.	[Off]: Does not use DENON LINK. [2nd]: Outputs digital audio using DENON LINK 2nd. [3rd]: Outputs digital audio using DENON LINK 3rd. [4th]: Outputs digital audio using DENON LINK 4th. Compatible with jitter free connections. For more information, refer to "DENON LINK Connection ① Making a Jitter free Connection" (☞ page 17).
	 HDMI: Improves HDMI digital signal jitter. When set to "4th", the HDMI control function becomes available from the connected device. When "4th" is set and jitter free connection is set up, audio affected by the jitter free function is output from the HDMI terminal during BD playback. When playing back media other than that, the video signal is output from the HDMI terminal and the audio signal is output from the DENON LINK terminal, respectively.

☐ Signals Compatible with DENON LINK Setting and Transmission

manual of the AV Amp.

The DENON LINK setting for the DENON LINK version of the connected AV Amp is as follows:

		Media					
DENON LINK version of AV Amp	The DENON LINK setting of the DBP-A100	BD (During jitter-free connection)	DVD- Video	DVD- Audio	Super audio CD	CD	SD
2nd Generation ("2nd" displayed near terminal)	"2nd"	×	0	0	×	0	0
3rd Generation ("3rd" displayed near terminal)	"3rd"	×	0	0	0	0	0
4th Generation ("4th" displayed near terminal)	"4th"	0	0	0	0	0	0

NOTE

With DENON LINK connections, no audio signals other than those of BD are output from the HDMI

(When "DENON LINK Mode" is set to "2nd" and "HDMI Setup" "SA CD Audio Out" (@page 24) is set to "On", the audio signals of Super Audio CD are output from the HDMI terminal.)



Pure Direct Setup

Default settings are underlined.

Makes settings for digital audio and video output modes during Pure Direct mode, as well as for display messages. Two types of setting can be made.

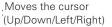
Setting items	Setting contents
User Preset 1/	[Digital Out]: Sets whether to output signals to the digital audio output
User Preset 2	terminal.
Sets the operating mode	• On: Enables digital audio output.
for "User Preset 1" or "User	Off: Disables digital audio output.
Preset 2" selected by	[Video Out]: Sets the option of video output.
Setting each of these items	• On: Enables video output.
to "Off" enables output of	• Off: Disables video output. This setting also disables audio output from
high quality analog signals	the HDMI terminal.
free of interference from	[Display]: Set the option for front panel display.
their associated circuits.	• <u>On</u> : Turns on the display.
	Off: Turns off the display.
	For more information, see "Playing Back High quality Audio (Pure Direct
	Function)" (@page 38).

















Ratings

Default settings are underlined.

Set BD or DVD parental lock or display DivX[®] registration codes.

Setting items	Setting contents
Password Sets the password for changing the parental control level and parental control country code of BD and DVD.	Change: Changes the password. Use (1) ~ (3) to enter a password and then press (2000) to finalize it. The default setting is "0000".
BD Rating Level Sets the parental level for playing BD.	Level 0 ~ 254 : Sets the age allowed to play back media. Restricts playback of discs with relevant parental control. No Limit : Does not restrict playing of BDs.
DVD Rating Level Sets the parental level for playing DVDs.	Level1 ~ 8 : Sets the parental level for playing DVDs. Lock All : Restricts playing of all DVDs. No Limit : Does not restrict playing of DVDs.
Rating Country Code Sets the standard country parental control. Applies the parental level of the set country.	Argentina / Australia / Austria / Belgium / Brazil / Canada / Chile / China/ Denmark / Finland / France / Germany / Hong Kong / India / Indonesia / Italy / Japan / Korea, Republic of / Malaysia / Mexico / Netherlands /New Zealand / Norway / Pakistan / Philippines / Portugal / Russian Federation / Singapore / Spain / Switzerland / Sweden / Taiwan / Thailand / United Kingdom / United States / Colombia / Greece / Ireland / Luxembourg / Poland Others: Input the country code. Refer to "Country Code List" (@page 52) and use on the virtual keyboard to input the country code.
DivX Registration Displays the DivX [®] registration code.	Show Code : Displays the DivX [®] registration code



Network Setup

Default settings are underlined.

Settings for connecting to the Internet.

You can use a disc which offers BD-LIVE functions by connecting the unit to the Internet

To obtain update support for your DBP-A100, you can download the latest firmware from

Follow the instructions in "Connecting to the Network" (@page 19) to make network

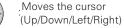
Setting items	Setting contents
DHCP Sets how to perform network configuration, automatically or manually.	[On]: Automatically configures the network via the DHCP function. [Off]: When connecting to a network that lacks the DHCP function, manually configure the following network settings. Consult with the ISP or your network administrator for what settings to make. Use (1) ~ (1) to enter values and then press (1) to finalize them.
Since the factory default setting is "On", you do not need to set items such as the IP address if the DHCP server of the broadband router is set to "Enable". Configure a proxy server if necessary.	Place IP Address (BD-LIVE, Update): Manually configure the IP address for BD LIVE or Firmware Updates. IP Address (Control): This is a configuration for future extensions. Usually it is not necessary to configure this. Subnet Mask: If a xDSL modem or terminal adaptor is directly connected to the DBP A100, enter the subnet mask provided by the ISP, usually in a document. Usually, "255.255.255.0" is set. Default Gateway: If the device is connected to a gateway (router), enter its IP address. Primary DNS: Enter the primary DNS. Secondary DNS: Enter the secondary DNS.
Proxy Setting for connecting to the Internet via a proxy server.	[Off] Does not use a proxy server. [On (Address)] Set to connect to the Internet via a proxy server. Use the address to specify the proxy server. Use (1) ~ (9) to enter the address and then press (1) to finalize it.
	• Port: Use ① ~ ⑨ to enter the port number and then press to finalize it. [On (Name)] Set to connect to the Internet via a proxy server. Specify the proxy server using the domain name. Input the domain name with the virtual keyboard, using ④ • • • • • • • • • • • • • • • • • •
	• Port: Use (1) ~ (9) to enter the port number and then press (1) to finalize it.













:Makes the setting

29

Network Setup	
Setting items	Setting contents
IP Address	BD-LIVE, Firmware Update: Displays the IP address for BD LIVE or Firmware Updates. Control: Displays the IP address for future extensions.
MAC Address	BD-LIVE, Firmware Update: Displays the MAC address for BD LIVE or Firmware Updates. Control: Displays the MAC address for future extensions.



Display Setup

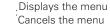
Default settings are underlined.

Settings for display-related items.

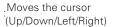
Setting items	Setting contents		
Screen Saver Sets the screensaver.	Off: Does not use the screensaver. On: The screensaver function activates when stop or pause status continues for about three minutes. The screensaver function also activates during playback of a CD, Super Audio CD or audio file when no operations are performed for about three minutes.		
	Picture: Displays the DENON logo. Black: Sets the background to black. Gray: Sets the background to gray. Blue: Sets the background to blue.		
Still Mode Sets image quality when paused.	Automatic: Displays automatically using "Field" or "Frame" according to the still image information. Field: Set when there is a blurred image when "Automatic" image display is set. Frame: Set to display non moving images in high resolution.		
Slide Show Time Sets the display time of JPEG files.	3 ~ 5 ~ 100sec : This sets how long to display each frame of a JPEG file during slideshow playback.		
Temporary Display When the display is set to "Off" by the Dimmer Control (Page 47) or Pure Direct Function (Page 38), this sets it to temporarily display operations received.	Off: Does not temporarily display operations. On: Temporarily displays operations.		
Captions This setting outputs a subtitles signal to a closed caption decoder (sold separately).	Off: Does not output the closed caption (subtitle) signal. On: Outputs the closed caption (subtitle) signal.		















:Returns to previous menu



Other Setup

Sets other items.

Setting items	Setting contents
Auto Power Mode This setting automatically sets the power to standby.	Off: Does not use the auto power mode. On: This setting automatically sets the power to standby if any of the following states continues for approximately 30 minutes. • Disc not loaded • Playback stopped • Stopped due to the resume function
Power Saving Sets to power saving mode during standby.	Power Saving Standby: This is the lowest power consumption mode. During standby, operations are not accepted via HDMI control or RS 232C. Power indicator status in standby mode: Off Normal Standby: During standby, operations are accepted via RS 232C. Power consumption is slightly higher at this time. Power indicator status in standby mode: Red Quick Start Mode: Start up time is faster but power consumption during standby is higher. Operations are accepted via HDMI Control and RS 232C. Power indicator status in standby mode: Red
Remote Control Setting (Main unit side) Sets the remote control.	[Remote ID] Switches the DBP A100's remote control ID code when other DENON BD Players are in the vicinity. • DENON 1: Set the switch in the remote control battery compartment to "1" as well ("Remote Control Settings (Remote Control Side)" □ page 7). • DENON 2: Set the switch in the remote control battery compartment to "2" as well ("Remote Control Settings (Remote Control Side)" □ page 7). [Receive Existing Remote Control] Set whether or not to accept remote control signals of a DENON DVD player or other device. • On: Accepts • Off: Does not accept
BD Data Utility Erases data on SD Memory Card, and initializes cards.	BD Data Erase: Erases both internal memory and SD Memory Card storage. Initialize SD Card: Initializes the SD card to be used for the Bonus View and BD LIVE functions. NOTE Insert or remove a SD Memory Card while the power is in standby. If the SD Memory Card is inserted when the power is switched on, there are occasions where the card cannot be read, or the BD cannot be played. The SD card used for the Bonus View function must have a capacity of 1GB or greater. Also the SD card must be initialized on the DBP A100. This operation will delete all the data. Do not perform this operation when an SD card containing MP3 or JPEG data is inserted. Remove the disc from the disc tray when carrying out "BD Data Erase" or "Initialize SD Card".

Setting items	Setting contents	
Initialize All settings including audio mode and picture quality are set to default settings.	Cancel: Does not initialize. OK: Executes initialization.	
Firmware Update Updates the firmware of the unit via the Internet.	Check for Update: Checks if a newer version of firmware exists. You can also check approximately how long it will take to complete an update. Start: Starts firmware update. When updating starts, the power indicator lights red and the GUI screen shuts down. While updating, a rough estimate of remaining time is indicated on the display. When updating is complete the power indicator lights green and the normal status is resumed.	
Information Displays the license for the IPA font used by this product.	[Font License] Japanese (Original): Displays in Japanese. The font used in this product's GUI menu screen conforms to IPA font specifications. See the following URL for the IPA font license agreement. http://ipafont.ipa.go.jp/enduser_license.html	
Maintenance Mode Use when receiving maintenance from a DENON service engineer or custom installer	NOTE Only use this function if so instructed by a DENON service person or installer.	

Default settings are underlined.

Cautions on "Firmware Update"

- In order to use these functions, you must have the correct system requirements and settings for a broadband Internet connection (@page 19, 29).
- Do not turn off the power until updating is complete.
- Information regarding the "Firmware Update" function will be announced on the DENON web site each time related plans are decided.
- Even with a broadband connection to the Internet, approximately 1 hour is required to complete the updating procedure.

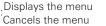
Once updating starts, you cannot perform normal operations on the DBPA100 until updating is complete. Also, settings of the GUI menu of DBP A100 and/or image adjustment settings may be

• If a disc is in the tray, remove it before performing "Firmware Update".

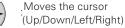
:Makes the setting















Various Settings

You can set the audio mode and switch the kind of files to play.

You can make various mode settings during playback. The setting menu is displayed at the top of the screen.

Press MODE.
Displays a menu of items that can be set.

Vertical Stretch Off

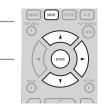
BD Audio Mode Mix Audio Output

File filter All

* The display content changes depending on the media being played.

2 Select a setting item using , and then press or .

3 Use to select a setting and use to change the setting.



Setting the Audio Mode Default settings are underlined.

Setting items	Setting contents
BD Audio Mode Switches the BD audio olayback mode.	HD Audio Output: Can view by outputting high quality signals such as Dolby TrueHD, Dolby Digital Plus, or DTS HD as its high sound quality bitstream. Cannot listen to interactive or secondary audio. Mix Audio Output: Outputs a mix of primary audio/interactive audio/
	secondary audio.
	When "BD Audio Mode" is set to "Mix Audio Output", DTS HD 192kHz audio is decoded to 96kHz.

Changing the Playback File Display Default settings are underlined. Default settings are underlined.

Setting items	Setting contents			
File filter	All: Plays MP3/WMA/AAC/LPCM/JPEG/DivX® files.			
Selects the file formats you				
wish to play from among the				
files mixed on a disc.	Video : Plays DivX [®] files.			
	Audio & Picture: Plays MP3/WMA/AAC/LPCM/JPEG files.			
	This operation is effective only when playback is stopped.			

Making Other Settings Default settings are underlined.		
Setting items	Setting contents	
Secondary Video (PIP)	Off: Does not display Secondary Video(Picture In picture). 1/X ★: Displays the first Secondary Video. 2/X ★: Displays the second Secondary Video. X/X ★: Displays the X th Secondary Video. ★:"X" is the number of Secondary Videos recorded and differs depending on the disc ("Playing Bonus View" page 36)	
Audio/Video Sync Corrects displaced video audio playback timing.	HDMI / Component: Audio output is synchronized to the video output from the HDMI terminal or component terminals. S-VIdeo /Video: Audio output is synchronized to the video output from the S Video or Video terminals.	
Audio Delay Adjust While viewing video, manually adjust the time to delay audio output.	① ~ 200msec: Use this to adjust the audio output delay time manually.	
Vertical Stretch Extends the cinemascope size video vertically.	Off: Displays the source video signal without modification. This should normally be set to "Off". On: Set when viewing cinemascope size video with a combination of projector and anamorphic lens. Extends the image vertically so that the top and bottom black portions disappear.	

This has no effect with the video and S Video outputs.

Adjusting the Picture Quality (Picture Control)

You can adjust the picture quality to your liking. You can store up to a maximum of 5 values in memory.

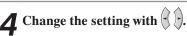
Press Picture The currently set status is displayed.

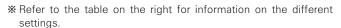
Select the memory number you want ("Memory 1" ∼ **4** "Memory 5") with \Leftrightarrow , and then press (BITB).



Select the item(s) you wish to change with 🖎 🝑.







□ To Finalize Picture Adjustments

Press with the picture adjusted.

☐ When Outputting Standard Picture Quality without **Using Picture Adjustment**

Press (B) and (L) to select "Standard" and then press (EMB)



The picture adjustment settings are retained in memory even after the power is turned off.

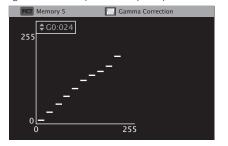
Setting items	Setting contents	Default
DNR Reduces noise in the entire picture.	0 ~ +3	0
Contrast Adjusts picture contrast.	-6 ~ +6	0
Brightness Adjusts picture brightness.	0 ~ +12	0
Enhancer *3 Strengthens the contours of the picture.	0 ~ +11	0
Gamma Correction * 1 Adjusts video brightness in detail.	G0 ~ 9	G0 = 24 / G1 = 32 G2 = 48 / G3 = 64 G4 = 80 / G5 = 96 G6 = 128 / G7 = 160 G8 = 192 / G9 = 224
*1,3 Adjusts picture sharpness for the medium frequency range.	-6 ~ +6	0
Sharpness (high range) *3 Adjusts picture sharpness for the higher frequency range.	6 ~ +6	0
Hue (color tone) *4 Adjusts the green and red color balance.	6 ~ +6	0
White Level Adjusts the white level.	5 ~ +5	0
Black Level *3 Adjusts the black level.	5 ~ +5	0
Chroma Level Adjusts the color density.	6 ~ +6	0
Setup Level * 2 Adjusts the black areas of the image.	0 IRE 7.5 IRE	7.5 IRE
H.Position *3 Adjusts the left/right position.	7 ~ +7	0
V.Position *3 Adjusts the top/bottom position.	7 ~ +7	0

- * 1:This is not available for HDMI output.
- *2:Effective only for the 480i video signal from the video output terminal, S video output terminal, and component video output terminal.
- *3:This has no effect with the video and S Video outputs.
- *4:This has no effect with the video and S Video outputs when playing PAL

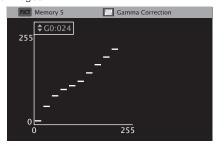
Gamma Correction

When you select "Gamma Correction", and then press (ENTER), you can change the setting with

In the example of the graph below, the horizontal axis shows the brightness level of the pictured recorded on the disc. The vertical axis shows the brightness of the picture output by the DBP A100.



• When the brighter areas on the disc side are adjusted to be output darker, the normally hard to see bright parts become clearly discernible images.



• When the darker areas on the disc side are adjusted to be output brighter, the normally hard to see dark parts become clearly discernible images.

☐ Resuming Initial Values after Gamma Correction

Press (CLEAR) while the graph is displayed.



Playback

Playing Discs

- ☐ Playing BD and DVD-Videos (12 page 36)
- ☐ Playing Super Audio CDs (12 page 37)
- ☐ Playing CDs (@ page 37)
- ☐ Playing DVD-Audio (@ page 37, 38)
- ☐ Playing High-Quality Audio (@ page 38)

Playing Files

☐ Playing Files (@page 38 ~ 40)

Operations Enabled During Playback (page 41)

Web control function (tell page 47,48)

NOTE

- The symbol "o" (prohibited mark) may appear on the top right of the TV screen during an operation. This means that the operation being conducted is prohibited.
- Depending on the disc, certain operations may not be as described in this manual. Check each disc owner's manual for more information.
- During playback of a 2 layered disc, pictures may stop momentarily. This happens when the 1st layer switches to the 2nd layer. This is not a malfunction.

Introduction

Before Playing a Disc

1 Turn on the power of the amplifier and TV. Set the TV and amplifier source to DBP A100 input.

2 Turn the DBP-A100 on.

*When you wish to play a bonus view, before turning the DBP A100 on insert a SD Memory Card that has at least 1GB and has been initialized by DBP A100.

3 Press Source to set the playback media mode to "DISC MODE".

Insert a disc. OPEN/CLOSE

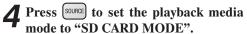
- Press 📤 to open/close the disc tray.
- Insert the disc with the side you want to play face down.

Before Playing an SD Memory Card

1 Turn on the power of the amplifier and TV. Set the TV and amplifier source to DBP A100 input.

2 Insert a SD Memory Card.
Insert the SD Memory Card in the direction indicated by the arrow with the label side up (★★ page 6, 8).

3 Turn the DBP-A100 on.







The playback media mode setting remains in memory, even when the power is set to standby.

About Playback Information

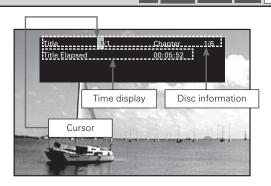
The displayed playback information toggles between the information bar and the media player screen each time INSPLAY is pressed.

To close the display, press INSPLAY until it goes away.



** Displayed content differs depending on the media being played. Also, the information displayed while playing and stopped differs.

Information Bar Display BD DVD-A DVD-V DVD DivX



* Displayed inside the frame at the top of the screen. (See the next page.)

☐ Disc Information Display

• Title Title being played/total number of titles Chapter Chapter being played/total number of

chapters

Group being played/total number of Group

aroups

Track being played/total number of tracks Track

□ Time Display

- Title Elapsed
- Title Remain
- Chapter Elapsed
- Chapter Remain
- Group Elapsed
- Group Remain
- Track Elapsed
- Track Remain

☐ HDMI Output Signal Display

 Video Info Video output signal format/resolution

 Audio Info Audio format being output

 Max Channel Number of audio channels that the

connected device can receive

Searching with the Information Bar

When you enter a number to find in the orange cursor area, that location is found. You can search in four modes, "Title", "Chapter", "Group" and "Track search".

1 Use to move the cursor to the item that you wish to find.

2 Use ① ~ ③ and ④ to enter a value.

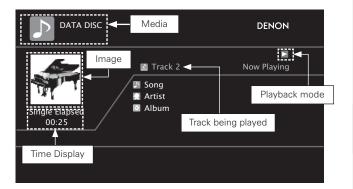
3 Press or The search is executed and playback begins.

* If the input number information is not on the disc, the current playback display reappears.









☐ Disc Information Display



About Playback Information

• D Title

Artist name

• Album title



For information on the time display and the HDMI output signal display, see "Information Bar Display" (@page 34).

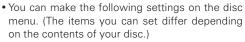
Playing BDs and DVD-Videos

Playback preparation ("Before Playing a Disc" page 34).

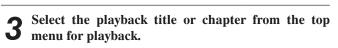
2 Make the various settings for playback on the disc menu.







- · Subtitle language
- · Audio language
- · Audio format etc.
- $\bullet \ \, \text{During DVD Video playback, press} \underbrace{\overset{\text{\tiny{TOPMENU}}}{\bullet}}_{\bullet} \text{or} \underbrace{\overset{\text{\tiny{ROPU-MENU}}}{\bullet}}_{\bullet} \text{to display the menu.} \\$
- If the menu continues, press to get to the next part.







[Example] Disc menu



[Example] Popup menu

Title 1 Top menu Chapter 2 Chapter 3 Chapter 4 Chapter 5 Chapter 6

(Example) Top menu



With BD, depending on the disc, you can select title and chapter from the popup menu.

☐ Playing Bonus Views

Press Mode to select the secondary video display you wish to play.

BD DVD-V

Off \longrightarrow 1/X \longrightarrow 2/X \longrightarrow X/X

[Selectable item]

Off: Does not display Secondary Video.

1/X * : Displays the first Secondary Video .

2/X * : Displays the second Secondary Video.

X/X * : Displays the X th Secondary Video.

*: "X" is the number of Secondary Videos recorded and differs depending on the disc.



(Example) Bonus view

NOTE

- Insert or remove a SD Memory Card while the power is in standby.
 If you insert a SD Memory Card while the power is ON, the SD Memory Card may not be read.
- The SD card used for the BD LIVE and Bonus View Functions must have a capacity of 1GB or greater. Also the SD card must be initialized on the DBP A100 (12) page 31).
- To use BD LIVE functions, connect the DBP A100 to the Internet and make the settings described below, as necessary:
- Depending on your network environment, it may take time to connect to the network or connection may not be possible.
- Remove the write protection of the SD Memory card.

or to display the menu. • The functions that can be used wit

- The functions that can be used with BD LIVE differ from disc to disc. For details on the functions and how to operate them, see the individual disc's on screen displays and explanations.
- An SD card must be loaded in the DBPA100 in order to save downloaded contents for using BD LIVE functions. Use an SD card with a capacity of 1 GB or greater. Also, the SD card must be formatted on the DBPA100.
- Do not remove the SD card from the DBPA100 while playing a BD LIVE compatible disc.

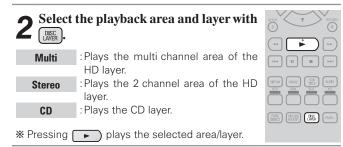
☐ Playing BD-Videos Compatible with Bonus View

- With a disc that is compatible with bonus view (picture in picture), in addition to the main video (primary video) stored on the disc, you can play back the video director's commentary and simultaneously ongoing sub story, as well as sub video such as alternative camera angles (secondary video).
- Some BD discs use SD cards as the recording memory for Bonus View playback. With the DBP A100 is in standby, insert the SD Memory Card before playing the disc.
- The playback method, etc., is determined by the disc, and varies depending on the disc. Refer to the operation guide of the relevant disc.

Playing Super Audio CDs

SA-CD

Playback preparation ("Before Playing a Disc" **Page 34).**



☐ When Viewing the Text or Playback Time Display See "Media Player Display" (page 35).



- If you play a disc that does not have the area or layer you selected, choose the playback area or layer to play in the order "Multi", "Stereo", "CD".
- The area/layer selected with (DISC) remains in the memory even when the power is turned off.

Playing CDs



Playback preparation ("Before Playing a Disc" **愛 page 34).**



☐ When Viewing the Playback Time Display See "Media Player Display" (page 35).

Playing DVD-Audio

DVD-A

1 2 3 1

4 5 6

7 8 9 CLEAR

(10) (0) (00)

Playback preparation ("Before Playing a Disc" page 34).

Select the part to play with (DISC AVER).

Audio : Plays the audio part. Video : Plays the video part.

☐ If a top menu is available, select the playback group and track from the top menu, and then play the disc.



☐ When Viewing the Text or Playback Time Display See "Information Bar Display" (Propage 34).

Changing the Group/Track

◄ While stopped or during playback, select the search mode with (SRCH).

The search mode is displayed in the top right of the screen.

* The search mode changes each time you press (see)

Group search mode

→ Track search mode

△ Select the playback group and track from the top menu, and then play the disc.



Plays the group or track of the pressed number. * See "Looking for Specific Sections with the Search Modes" (R page 42) for instructions on inputting numbers.





The search mode selected with this operation is memorized until the unit goes into standby or the disc tray is opened.

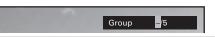
Playing DVD-Audio

Playing Bonus Group

DVD Audio discs may have a bonus group that can be played after entering a password.

While stopped, select "Group" with (SRCI).

♠ Enter the bonus group number with **2** (1) ~ (9), (±10).



3 Using 0 ~ 9 enter the 4-digit password, and then press (ENTER) Playback will begin from the 1st track of the

* The password may also be entered on the menu screen by following the on screen instructions.



☐ If you enter the wrong password

Press (CLEAR) to erase the input number and then enter the correct number.



Selecting Still Images

selected group.

When a DVD Audio disc has still images on it, you can choose the image to display.

Press PAGE. during playback.

The next still image is displayed.



Playing High-Quality Audio (Pure Direct Function)



This enables you to play high quality audio by stopping the video signal, etc., output, and outputting the analog audio signal only.

Press while stopped and then select the pure direct mode.



This turns off the digital signal output, video signal output and display on the display screen. User Preset 1 Operates with the registered pure direct setting.

: This turns off the pure direct function.



User Preset 2

- You cannot use I while the GUI menu is displayed.
- With Pure Direct on and the main unit display set to off, indicators other than power are turned off.

("Pure Direct Setup" page 28)

• The pure direct setting returns to "Off" when the DBPA100 is put in standby mode.

Playing Files

□ About the File Display

Limits to the number of folders and files that can be displayed by the DBP A100 are as follows.

(The limited number includes the root folder.)

- Number of folder directory levels ------8 levels
- Number of folders 999
- Number characters per
- · File name, Folder name······32
- · Artist name, title, etc.····· 60
- * Text longer than one line is scroll displayed.
- * If characters not supported on the menu screen are included in a file name, title, artist name or album title, they are not displayed correctly.



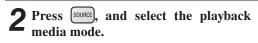
All Track Mode



About folder and file displays

☐ File Browser Screen

Turn the DBP-A100 on.



DISC MODE : Plays discs

SD CARD MODE: Plays SD memory cards

△ Load media.

The file browser screen will appear.

- * See "Inserting a Disc" and "Inserting an SD Memory Card" (Page 6) for how to load media
- * If file browser screen does not appear, press

Select the folder of the data to be played and press (ENTER).





5 Press PROG/ to select a playback mode.





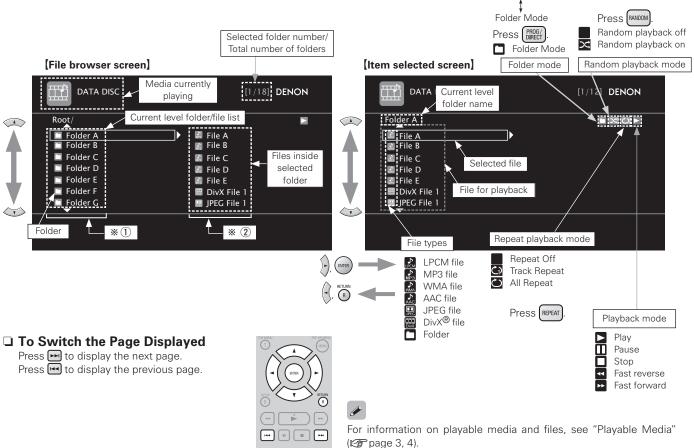
Folder Mode Plays back files in the selected folder. The folder icon is displayed in the playback mode indicator.

6 Selecting and playing files.





Operation during playback differs depending on the file being played. See "Operation During Playback" (Propage 40).

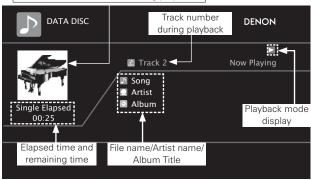


File Playback

Screen Display During Playback

Display during Playback of Audio Files

Displays the JPEG image data of cover art, etc., recorded on the file being played.



NOTE

The display of JPEG image data of cover art, etc., recorded on the file being played is enabled when playing MP3 and AAC audio files.

Display of DivX® Files and JPEG Files

Displays video being played.



Displays still image being played



Operation During Playback

Audio file and DivX® file operation

MP3 WMA AAC LPCM DivX

□ Playback in Any Order (Random Playback)

Press RANDOM while stopped and then press or .

☐ Playing Back Repeatedly (Repeat Playback)

Press REPEAT to select the repeat playback mode.





Playing JPEG Files (Still Image)

Slide show playback of JPEG still image files stored on CD R/RW, DVD R/RW/+R/+RW disc and SD Memory Card.

Press while the file browser screen is displayed.

A thumbnail screen will appear.

** Pressing while the thumbnail screen is displayed returns you to the file browser screen.



2 Use to select still images.





- Set the image display time on the GUI menu with: "Display Setup" "Slide Show Time" (ﷺ page 30).
- With a large image file, the image may display for longer than the set time.

☐ Changing the Still Image being Played

• Before playback or display of next image.

□ Pausing the Display

Press .

• To cancel pause, press

☐ Changing the Still Image Orientation





☐ Returning to the Thumbnail Display Screen



Operations Enabled During Playback

Operations Enabled During Playback

- ☐ Pausing (@page 41)
- ☐ Stopping (Resume Function) (@ page 41)
- ☐ Skipping to a Desired Chapter/Track/File (@ page
- ☐ Finding Specific Sections with Search Modes (P page 42)
- ☐ Memorizing Locations to Replay (Marker Function) (@page 43)
- ☐ Fast-Forward/Fast-Reverse (☐ page 43)
- ☐ Playing Images Frame by Frame (☐ page 43)
- ☐ Slow Forward/Slow Reverse Playback (愛 page
- ☐ Playback in Random Order (Random Playback) (@ page 44)
- ☐ Playing Back Repeatedly (Repeat Playback) (@ page 44)
- ☐ Repeat Playback between Specified Points (A-B Repeat) (Pp page 44)
- ☐ Playing Back in your Preferred Order (Program Playback) (page 45)
- ☐ Switching Audio (@page 45, 46)
- ☐ Changing the Subtitles and Subtitle Style (page 46)
- ☐ Switching the Angle (@page 47)
- ☐ Changing the Brightness of the Display (Dimmer Control) (page 47)





Press during playback.

The "II" indicator will light on the display.

* Resume normal playback by pressing



If the video is blurred while paused, stop playback and press (s), then, on the GUI menu, change "Display Setup" "Still Mode" "Field" (@page



HDMI HDMI SOURCE

A

Stopping (Resume Function)



Press during playback.

Playback stops.

□ About the Resume Function



memorized.

• The "▶" indicator flashes on the display. To resume play from the stop position, press while stopped.

☐ To Cancel the Resume Function

Perform one of the following operations.

- Press while stopped.
- Open the disc tray.
- Change the playback media mode with
- Remove the SD Memory Card.



- The resume function does not work with menu playback or BD J (Blu ray Disc Java) compatible discs.
- The resume function remains valid even when the standby mode is set. With DivX® files, however, the resume function is cancelled even when the standby mode is set.
- The resume function is cancelled when the power is cut off by unplugging the power cord.

Skipping to a Desired Chapter/Track/File



During playback, press or .

- Playback begins from the start of the chapter/ track/file being played.
- Playback begins from the start of the next chapter/track/file.
- * Continue pressing and skip to the chapter/track/file by the number of times pressed.



Skipping to the start of a title or group may be prohibited, depending on the disc.



Operations Enabled During Playback

Finding Specific Sections with Search Modes



During playback, press (so) and then select the search

The search mode setting bar is displayed at the top of the

• The search mode changes each time the button is pressed.

About Marker Search

Search mode

Time search

Track search

Group search

Chapter search Title search

Marker search *

Plays back from your selected marker number.

BD

DVD-V

DVD

 \bigcirc

 \bigcirc

[Search mode-compatible media and files]

SA-CD

CD

 \bigcirc

DivX

MP3

LPCM

AAC

WMA

JPEG

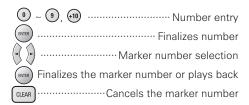
DVD-A



- When the entry mode for chapter/title/track/ group search continues for about 5 seconds with no operation, it is cancelled.
- When the power is set to standby or the disc is removed, the set marker is deleted.

⚠ Enter search conditions or make **L** settings on the search mode setting bar.

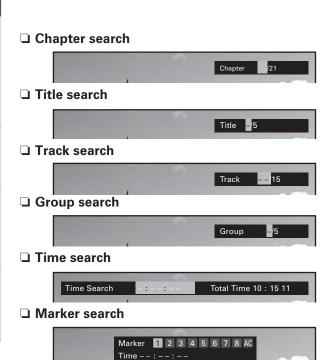
Once an entry is finalized, it searches for the specified location.







- *: Depending on number of recorded songs or chapters, you may not need to use the "ENTER" button.
- The search modes do not operate during program or random playback. Use , playback. Use , playback. Use , playback.
- Time search works with title and track playback time. It is not does not work with chapter playback time.
- Search modes may not operate with some discs.





Operations Enabled During Playback ☐ To Play Back Memorized Locations

Memorizing Locations to Replay (Marker Function)

BD DVD-V DVD-A DVD SD DivX

You can attach a marker to a location you want to view or hear again, so that playback begins at that location.

During playback, press , and then select "Marker".

The search mode setting bar is displayed at the top of the



Use () to select a number.

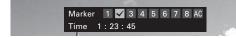


* Numbers you have already set will be displayed as " 🗸 ".

at the location you want to memorize.

The location is registered for the selected marker number.

* The elapsed playing time at the set location is displayed.



Use (()) to select the marker number, then press

□ To erase markers

Select the number you want to erase, and then press CLEAR

□ To erase all markers

Select "AC" and press (ENTER)



(+10) (0) (SROH) [CALL

| H | H | H | H |

- Subtitles may not appear depending on the locations you have
- The markers you have set will be erased if you turn the power to standby or eject the disc.
- The marker function does not operate across titles and groups.
- Marker search can only be performed during playback.

Fast-Forward/Fast-Reverse BD DVD-A DVD-V DVD SA-CD CD SD MP3 WMA AAC LPCM DivX

During playback, press • or •.

- The fast forward/fast reverse speed changes each time the button is pressed.
- The speed varies with the disc and file.
- * Resume normal playback by pressing



- You cannot fast forward/fast reverse across files or tracks during program or random playback.
- Fast forward/fast reverse may be disabled with some DivX® files.
- Audio is not output during fast forward/fast reverse of a BD or DVD.



BD DVD-V DivX

Press while paused.

The disc advances frame by frame each time the button is pressed.



* Resume normal playback by pressing



- Frame by frame reverse playback is not available with the DBP A100.
- If the video is shaky during frame by frame playback, stop playback, press (s), then on the GUI menu, change "Display Setup" "Still Mode" "Field" (P page 30).



Slow-Forward/Slow-Reverse Playback



Press 🕶 🖻 while paused.

The speed changes each time the button is



- * The speed of slow reverse playback does not
- * Resume normal playback by pressing



- Audio is not output during slow forward/slow reverse playback.
- If the video is blurred during slow forward/slow reverse playback, stop playback and press , then on the GUI menu, change "Display Setup" "Still Mode" "Field" (P page 30).



Playing in Random Order (Random Playback)

SA-CD CD SD MP3 WMA AAC LPCM DivX

1 Press RANDOW while stopped. The "RAND" lights on the display

The "RAND" lights on the display and "Random Mode" is displayed on the screen.

2 Press ro play.



☐ Resuming Normal Playback

Press RANDOM while stopped.



Random playback may not be available with some discs.



Press REPEAT during playback.

The repeat mode icon is displayed at the top of the screen.

• The repeat mode changes each time the button is pressed.



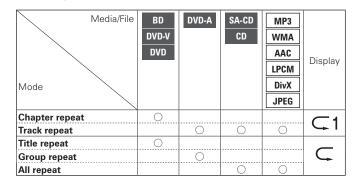
2 Press REPEAT to select the repeat mode.

** To resume normal playback, press (REPEAT), and select "Repeat Off".



About Repeat Modes

The available repeat modes vary depending on the disc or file you are playing.





- Some repeat modes may not be accessible depending on some discs. With some discs, even when set to repeat playback, the disc may not return to the start of title or chapter, and may advance to the next scene.
- Repeat playback is not available during A B repeat playback.

Playing Repeatedly Between Specified Points (A-B Repeat)

BD DVD-A DVD-V DVD SA-CD CD SD DivX

1 During playback, press A-B at the desired starting point (A).

The "A" indicator will light on the display.

* To cancel the starting point (A), press CLEAR

Press A-B again at the desired ending point (B).

The "B" indicator will light on the display, and A B repeat playback will start.



** To resume normal playback, press (A-B), and select "Repeat Off".



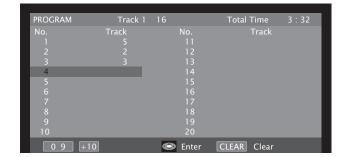
- You cannot skip a title/file with A B repeat.
- If you perform a search operation during A B repeat playback, A B repeat playback is cancelled.
- A B repeat playback may not be available with some scenes.
- A B repeat playback of MP3/WMA/AAC/JPEG/LPCM files is not available.
- A B repeat playback is not available during repeat playback.
- A B repeat playback may not be available with some DivX® files.

Playing in Your Preferred Order (Program Playback) SA-CD CD

You can program up to a maximum of 20 tracks.

Press PROG/ while stopped during stop.

The "PROG" indicator lights on the display, and the program setting screen appears.



4 5 6

7 8 9 CLEAR

♠ Enter the track numbers you want Leto program on the program setting (1 2 3) screen.



3 Press . Playback begins in the programmed order.

☐ Checking the Program Contents

Press <a> during playback.

The program setting screen will appear.



You can also check the contents of the program on the unit's display. Press CALL while stopped.

☐ Erasing Programmed Tracks One by One

Press CLEAR during stop.

☐ Erasing All Programming





With discs and files that have multiple audio track recording, you can change the audio during playback.

With BD, you can set playback to sub-track audio, such as interactive audio and commentary audio, etc., with "Secondary".

Switching a BD's Primary Audio/Secondary Audio

During playback of Primary Audio/Secondary Audio title, press AUDIO.

The audio number currently being played is displayed.



Press , select "Primary" or **Secondary**", and then press (ENTER).



- * If multiple audio items are recorded, "the current audio number/number of recorded audio items" is displayed.
- *When "BD Audio Mode" is set to "HD Audio Output" (Prage 32), "Secondary" audio is not output.

Select your desired audio language with 🕮 🖜.







DISPLAY AVOLE SUB AUCIO

- Depending on the disc, audio switching may be restricted to operation of the disc menu. In this case, switch the audio on the disc menu.
- Be sure to set "BD Audio Mode" to "Mix Audio Output" (@page 32) for playing back secondary audio.
- Depending on the BD, even if picture in picture playback is set to "Off", Secondary Audio only may be output.



Operations Enabled During Playback

Audio Switching (Media Other than BD)

Press (Auto) during playback.

The audio number currently being played is displayed.

(Example) DVD



2 Use to select audio

The setup screen disappears.

[Example] DVD Video



Press AUDIO.

- With DVD R/RW with bilingual soundtrack recording, you can switch between "Main" (main audio) and "Sub" (secondary audio) or "Main/Sub" (main audio + secondary audio).
- In CD audio mode, you can switch to "Stereo", "L ch" (left channel) or "R ch" (right channel).
- With a DivX® file, "MP3" or "Dolby Digital" audio formats and the number of recorded audio modes are displayed. " " appears for audio other than these.
- With DTS CD (5.1 music disc), you cannot switch audio modes.

Changing the Subtitles and Subtitle Style BD DVD-V SD DivX

During playback of a disc or file with recorded subtitles, you can switch the subtitles on/off as well as the subtitle language. With BD, you can change the style of displayed subtitles.

Switching a BD's Primary Subtitle/Secondary Subtitle and Subtitle Style

Press during playback. The subtitle number currently being played is displayed.



With \(\to \) select "Primary", "Secondary" and "Style", and then press (ENTER).



3 Use to select your desired subtitle language and subtitle style.



A Press . The setup screen disappears.

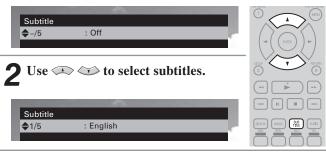


- If a disc does not include subtitles and/or subtitle style, "Not Available" is displayed.
- Depending on the disc, subtitle switching may be restricted to operation of the disc menu. In this case, switch the subtitles on the disc menu.

Selecting DVD-Video and DivX® File Subtitles

Press during playback.

The subtitle number currently being played is displayed.





H44 | | | | | | | | | | | | | | |

DESPLAY ANGLE SUB

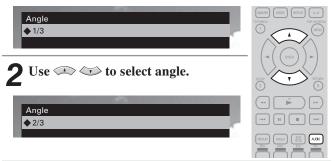
With a DivX^{\circledR} file, the currently playing subtitle number and number of recorded subtitles are displayed; the language option is not displayed.

Operations Enabled During Playback

Switching the Angle BD DVD-V

During playback of a BD or DVD-Video recorded with several camera angles, you can change the angle.

Press ANGLE during playback. The angle number currently being played is displayed.



Press ANGLE.
The setup s The setup screen disappears.

NOTE

Angle changing may be restricted, depending on the disc.

Changing the Brightness of the Display (Dimmer Control)

Press DIMMER

The brightness changes each time the button is pressed.







Even when "Off" is selected, the status of operations that are performed appears momentarily on the display if "Display Setup" "Temporary Display" on the GUI menu is set to "On" (@page 30).

Web control function

DBPA100 has "Web control function" support that allows you to operate DBP A100 via LAN from your PC. PDA. iPod® touch, and iPhone®

Operating DBP-A100 using a PC browser

- Connect DBP A100 to the network. ("Connecting to the Network"
- Please use the Internet Explorer or FireFox browser.

Preparation

Press on the remote control to display the GUI menu.

Check the IP address of DBP-A100. (page 30)

- Select "Network Setup" from the GUI menu and then select "IP Address".
- The address displayed for "Control" is the IP address of DBP

♠ Enter the DBP-A100 IP address in browser's address **L** box.

- For example, if the IP address of DBP A100 is "192.168.11.217", enter http://192.168.11.217.
- The top menu appears on the PC screen.

NOTE

If you set "DHCP" in "Network Setup" of the GUI menu to "On", the IP address of DBP A100 will change every time DBP A100 is connected. Check the IP address, whenever you use the Web control function. (Pp page 30)



3 Click the menu you want to operate.



Plaver Control

You can perform basic operations of DBPA100 from a PC screen using the "Player Control" menu. Each operation button on this screen functions in the same way as the buttons on DBP A100 and remote control.



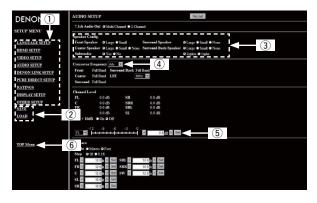
- 1) Shortcut key to each menu.
- 2 Click when you update to the latest information.
- 3 Click to add a setting to "Favorites".
- 4 To turn on power using the ON button of a PC browser, set "Power Saving" in "Other Setup" of the GUI menu to "Quick Start Mode". (Pp page 31)

Web control function

Setup Menu

You can perform various settings of DBPA100 on the Setup Menu screen.

For further information about setting items, see "GUI Menu Setup" on page 221.



- ① Click the menu from which you want to make settings.
- The display on the right becomes each setting screen.
- ② "SAVE": Click to save settings. The settings are saved on your PC. "LOAD": Click to recall settings.
- 3 Click the setting item.
- ④ Click "▼" and select from the displayed items.
- ⑤ Enter values or click "¬" or "¬" to make the setting. Click "Set" to set the values.
- (6) Click to return to the top menu.

PDA Menu

You can perform basic operations of DBP A100 from a PDA using the PDA Menu screen.

Player
Func.



Buttons for switching Buttons for switching the displayed screens the displayed screens

Operating DBP-A100 using the iPod browser

- You can perform basic operations of DBP A100 using network ready iPod products such as iPhone® and iPod® touch.
- Before starting the operation, connect DBP A100 to the network. ("Connecting to the Network" * page 19).

iPhone® and iPod® touch is a trademark or registered trademark of Apple Inc. in the U.S. and other countries.

Preparation

Press on the remote control to display the GUI menu.

Check the IP address of DBP-A100. (ppage 30)
Select "Network Setup" from the GUI menu and then select "IP

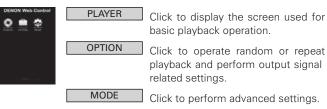
The address displayed for "Control" is the IP address of DBP A100.

2 Enter the DBP-A100 IP address in browser's address box.

- For example, if the IP address of DBP A100 is "192.168.11.217", enter http://192.168.11.217.
- The top menu appears on the PC screen.

NOTE

If you set "DHCP" in "Network Setup" of the GUI menu to "On", the IP address of DBP A100 will change every time DBP A100 is connected. Check the IP address, whenever you use the Web control function. (F) page 30)





- For details on setting items, see the Owner's Manual.
- To switch to another mode while the operation screen of each mode is being displayed, use the iPod browser's back button "◄" to return to the top menu.

Operaation the iPod menu screen

□ PLAYER

□ OPTION

□ MODE







- "Switching audio" (四 page 45) - "Switching subtitles and subtitle style"

(**☞** page 46)

"Switching the angle" (T page 47)

HDMI Control Functions

When you make HDMI connections with a TV or AV Amp compatible with DBP A100 and HDMI control functions, you can perform the following operations by setting up the HDMI control functions of each device.

- □ TV or AV Amp power is turned on by operating the DBP-A100 and functions change with DBP-A100 input.
- ☐ Turning off the TV's power turns the DBP-A100's power to standby.
- □ Operating the DBP-A100 via the TV's remote control.

(When the TV's remote control has player operation buttons)

NOTE

- The HDMI control function controls operations of a TV that is compatible with the HDMI control function. Make sure that the TV and HDMI are connected when you perform HDMI control.
- Some functions may not operate depending on the connected TV or AV Amp. Check the owner's manual of each device for details beforehand.
- When "Other Setup" "Power Saving" on the GUI menu is set to "Power Saving Standby" or "Normal Standby" (Papage 31), the player's power cannot be turned on using the HDMI control function.
- When "HDMI Setup" "HDMI Control" "Power Off Control" on the GUI menu is set to "Off" (Papage 24), the DBP A100 does not go to standby even if the connected device is in the standby mode.
- When "DENON LINK Setup" "DENON LINK Mode" on the GUI menu is set to "4th", the HDMI control function is enabled for the connected devices.

◄ Set the HDMI control function to "On".

On the GUI menu, set "HDMI Setup" "HDMI Control" (F) page 24).

- **7** Turn on all the equipment connected by HDMI cable.
- **3** Set the HDMI control function for all equipment connected by HDMI cable.

On the GUI menu, set the DBPA100 with "HDMI Setup" "HDMI Control" (Page 24).

- ** Please refer to the owner's manuals of connected devices for how to make settings.
- * Carry out Steps 2 and 3 if any of the equipment was unplugged.
- **4** To ensure that the DBP-A100's HDMI video output is projected on the TV screen, change the input function of the TV and AV Amp.
- **5** When you turn the TV's power to standby, check that the power of the DBP-A100 and AV Amp also goes on standby.



If the HDMI control function does not operate properly, check the following points.

- Is the TV or AV Amp compatible with the HDMI control function?
- Are the HDMI control function settings of all equipment correct?
 (Step 3)
- After setting, did you add another HDMI device connection or make any changes in the connections? If so make the settings again.

Specifications

Other Information

About DENON LINK

DENON LINK is a unique digital, balanced transfer type of interface developed by DENON. It offers high speed, high quality transfer of digital audio data with low signal loss. It can be used with DENON AV Amp equipped with a special DENON LINK connector via a single cable to enable playback with high sound quality. It allows digital transfer of the 192 kHz/24 bit 2 channel digital signals of DVD Audio discs, PCM multi channel signals, etc. Full spec digital transfer of the audio contents of Super Audio CD is possible by connecting a player equipped for DENON LINK 3rd Generation.

During processing of DENON LINK, the DENON LINK indicator of the display lights.

DENON LINK 4th uses the clock of the AV Amp connected by DENON LINK to achieve HDMI signal transfer with little jitter when playing BD.

About Advanced AL24 Processing

"Advanced AL24 Processing" installed in the analog output dramatically improves the information volume on the time axis with independent speed signal detection and processing technology for the PCM signal playback system. In addition to data expansion to 24 bit, it conducts natural interpolation processing with no loss of original data by digital upsampling. The "Advanced AL24" indicator lights on the front panel when Advanced AL24 Processing is in operation.

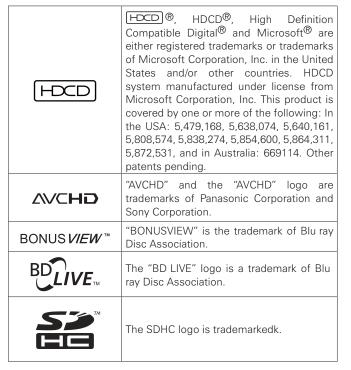
About Copyright Protection Technology

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

Trademark Information

This product uses the following technologies:

•	
Blu-ray Disc	"Blu ray Disc" and "" are trademarks.
DVD	is a trademark of the DVD Format / Logo licensing Corporation.
нәті	HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
Java POWERED	Java and all other trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and/or other countries.
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	DivX®, DivX Certified®, and associated logos are registered trademarks of DivX, Inc. and are used under license.



Language Code List

	Language	Code
A	Abkhazian	4748
•	Afar	4747
	Afrikaans	4752
	Albanian	6563
	Amharic	4759
	Arabic	4764
	Armenian	5471
	Assamese	4765
	Aymara	4771
	Azerbaijani	4772
В	Bashkir	4847
_	Basque	5167
	Bengali;Bangla	4860
	Bhutani	5072
	Bihari	4854
	Bislama	4855
	Breton	4864
	Bulgarian	4853
	Burmese	5971
	Belarusian	4851
С	Cambodian	5759
C	Catalan	4947
	Chinese	7254
	Corsican	4961
	Croatian	5464
	Czech	4965
D	Danish	5047
_	Dutch	6058
F	English	5160
_	Esperanto	5161
	Estonian	5166
F	Faroese	5261
•	Fiji	5256
	Finnish	5255
	French	5264
	Frisian	5271
G	Galician	5358
_	Georgian	5747
	German	5051
	Greek	5158
	Greenlandic	5758
	Guarani	5360
	Gujarati	5367
н	Hausa	5447
	Hebrew	5569
	Hindi	5455
	Hungarian	5467
	-	

	Language	Code
1	Icelandic	5565
	Indonesian	5560
	Interlingua	5547
	Interlingue	5551
	Inupiak	5557
	Irish	5347
	Italian	5566
J	Japanese	5647
	Javanese	5669
K	Kannada	5760
	Kashmiri	5765
	Kazakh	5757
	Kinyarwanda	6469
	Kirghiz	5771
	Kirundi	6460
	Korean	5761
	Kurdish	5767
L	Laothian	5861
	Latin	5847
	Latvian; Lettish	5868
	Lingala	5860
	Lithuanian	5866
M	Macedonian	5957
	Malagasy	5953
	Malay	5965
	Malayalam	5958
	Maltese	5966
	Maori	5955
	Marathi	5964
	Moldavian	5961
	Mongolian	5960
N	Nauru	6047
	Nepali	6051
	Norwegian	6061
0	Occitan	6149
	Oriya	6164
	Oromo (Afan)	6159
Ρ	Punjabi	6247
	Pashto; Pushto	6265
	Persian	5247
	Polish	6258
	Portuguese	6266
Q	Quechua	6367
R	Rhaeto Romance	6459
	Romanian	6461
	Russian	6467

	Language	Code
S	Samoan	6559
	Sangho	6553
	Sanskrit	6547
	Scots Gaelic	5350
	Serbian	6564
	Serbo Croatian	6554
	Sesotho	6566
	Setswana	6660
	Shona	6560
	Sindhi	6550
	Singhalese	6555
	Siswat	6565
	Slovak	6557
	Slovenian	6558
	Somali	6561
	Spanish	5165
	Sundanese	6567
	Swahili	6569
	Swedish	6568
Т	Tagalog	6658
	Tajik	6653
	Tamil	6647
	Tatar	6666
	Telugu	6651
	Thai	6654
	Tibetan	4861
	Tigrinya	6655
	Tonga	6661
	Tsonga	6665
	Turkish	6664
	Turkmen	6657
	Twi	6669
U	Ukrainian	6757
	Urdu	6764
	Uzbek	6772
V	Vietnamese	6855
	Volapuk	6861
W	Welsh	4971
	Wolof	6961
	Xhosa	7054
Υ	Yiddish	5655
	Yoruba	7161
Z	Zulu	7267

Country Code List

	Country	Code
Α	AFGHANISTAN	AF
	ÅLAND ISLANDS	AX
	ALBANIA	AL
	ALGERIA	DZ
	AMERICAN SAMOA	AS
	ANDORRA	AD
	ANGOLA	AO
	ANGUILLA	Al
	ANTARCTICA	AQ
	ANTIGUA AND BARBUDA	AG
	ARMENIA	AM
	ARUBA	AW
	AZERBAIJAN	ΑZ
В	BAHAMAS	BS
	BAHRAIN	ВН
	BANGLADESH	BD
	BARBADOS	BB
	BELARUS	BY
	BELIZE	BZ
	BENIN	BJ
	BERMUDA	BM
	BHUTAN	BT
	BOLIVIA	ВО
	BOSNIA AND HERZEGOVINA	BA
	BOTSWANA	BW
	BOUVET ISLAND	BV
	BRITISH INDIAN OCEAN	10
	TERRITORY BRUNEI DARUSSALAM	BN
	BULGARIA	BG
	BURKINA FASO	BF
	BURUNDI	BI
С	CAMBODIA	KH
•	CAMEROON	CM
	CAPE VERDE	CV
	CAYMAN ISLANDS	KY
	CENTRAL AFRICAN	CF.
	REPUBLIC	CF
	CHAD	TD
	CHRISTMAS ISLAND	CX
	COCOS (KEELING) ISLANDS	CC
	COMOROS	KM
	CONGO	CG
	CONGO, THE DEMOCRATIC	CD
	REPUBLIC OF THE	
	COOK ISLANDS	CK
	COSTA RICA	CR
	CÔTE D'IVOIRE	CI
	CROATIA	HR

	Country	Code
	CUBA	CU
	CYPRUS	CY
	CZECH REPUBLIC	CZ
D	DJIBOUTI	DJ
	DOMINICA	DM
	DOMINICAN REPUBLIC	DO
Е	ECUADOR	EC
	EGYPT	EG
	EL SALVADOR	SV
	EQUATORIAL GUINEA	GQ
	ERITREA	ER
	ESTONIA	EE
	ETHIOPIA	ET
F	FALKLAND ISLANDS (MALVINAS)	FK
	FAROE ISLANDS	FO
	FIJI	FJ
	FRENCH GUIANA	GF
	FRENCH POLYNESIA	PF
	FRENCH SOUTHERN	TF
_	TERRITORIES	
G	GABON	GA
	GAMBIA	GM
	GEORGIA	GE
	GHANA	GH
	GIBRALTAR	GI
	GREENLAND	GL
	GRENADA	GD
	GUADELOUPE	GP
	GUAM	GU GT
	GUERNICEY	GG
	GUERNSEY GUINEA	GN
	GUINEA BISSAU	GW
	GUYANA	GY
Н	HAITI	HT
	HEARD ISLAND AND	
	MCDONALD ISLANDS	HM
	HOLY SEE (VATICAN CITY STATE)	VA
	HONDURAS	HN
	HUNGARY	HU
I	ICELAND	IS
	IRAN, ISLAMIC REPUBLIC OF	IR
	IRAQ	IQ
	ISLE OF MAN	IM
	ISRAEL	IL
J	JAMAICA	JM
	JERSEY	JE

	Country	Code
	JORDAN	JO
K	KAZAKHSTAN	KZ
	KENYA	KE
	KIRIBATI	KI
	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP
	KUWAIT	KW
	KYRGYZSTAN	KG
ī	LAO PEOPLE'S	
_	DEMOCRATIC REPUBLIC	LA
	LATVIA	LV
	LEBANON	LB
	LESOTHO	LS
	LIBERIA	LR
	LIBYAN ARAB JAMAHIRIYA	LY
	LIECHTENSTEIN	LI
	LITHUANIA	LT
M	MACAO	MO
	MACEDONIA, THE FORMER	MK
	YUGOSLAV REPUBLIC OF	
	MADAGASCAR	MG
	MALAWI	MW
	MALDIVES	MV
	MALI	ML
	MALTA	MT
	MARSHALL ISLANDS	MH MQ
	MARTINIQUE	
	MAURITANIA	MR MU
	MAURITIUS	YT
	MAYOTTE MICRONESIA, FEDERATED	11
	STATES OF	FM
	MOLDOVA	MD
	MONACO	MC
	MONGOLIA	MN
	MONTENEGRO	ME
	MONTSERRAT	MS
	MOROCCO	MA
	MOZAMBIQUE	MZ
	MYANMAR	MM
N	NAMIBIA	NA
	NAURU	NR
	NEPAL	NP
	NETHERLANDS ANTILLES	AN
	NEW CALEDONIA	NC
	NICARAGUA	NI
	NIGER	NE
	NIGERIA	NG
	NIUE	NU
	-	-

	Country	Code
	NORFOLK ISLAND	NF
	NORTHERN MARIANA	MP
_	ISLANDS	
0	OMAN	OM
Р	PALAU PALESTINIAN TERRITORY.	PW
	OCCUPIED	PS
	PANAMA	PA
	PAPUA NEW GUINEA	PG
	PARAGUAY	PY
	PERU	PE
	PITCAIRN	PN
	PUERTO RICO	PR
Q	QATAR	QA
R	RÉUNION	RE
	ROMANIA	RO
	RWANDA	RW
S	SAINT BARTHÉLEMY	BL
	SAINT HELENA	SH
	SAINT KITTS AND NEVIS	KN
	SAINT LUCIA	LC
	SAINT MARTIN	MF
	SAINT PIERRE AND MIQUELON	PM
	SAINT VINCENT AND THE GRENADINES	VC
	SAMOA	WS
	SAN MARINO	SM
	SAO TOME AND PRINCIPE	ST
	SAUDI ARABIA	SA
	SENEGAL	SN
	SERBIA	RS
	SEYCHELLES	SC
	SIERRA LEONE	SL
	SLOVAKIA	SK
	SLOVENIA	SI
	SOLOMON ISLANDS	SB
	SOMALIA	SO
	SOUTH AFRICA SOUTH GEORGIA AND	ZA
	THE SOUTH SANDWICH ISLANDS	GS
	SRI LANKA	LK
	SUDAN	SD
	SURINAME	SR
	SVALBARD AND JAN MAYEN	SJ
	SWAZILAND	SZ

SYRIAN ARAB REPUBLIC

	Country	Code
Т	TAJIKISTAN	TJ
	TANZANIA, UNITED	TZ
	REPUBLIC OF	T1
	TIMOR LESTE	TL
	TOGO	TG
	TOKELAU	TK
	TONGA	TO
	TRINIDAD AND TOBAGO	TT
	TUNISIA	TN
	TURKEY	TR
	TURKMENISTAN	TM
	TURKS AND CAICOS ISLANDS	TC
	TUVALU	TV
U	UGANDA	UG
•	UKRAINE	UA
	UNITED ARAB EMIRATES	AE
	UNITED STATES MINOR	UM
	OUTLYING ISLANDS	UIVI
	URUGUAY	UY
	UZBEKISTAN	UZ
٧	VANUATU	VU
	VATICAN CITY STATE	VA
	VENEZUELA	VE
	VIET NAM	VN
	VIRGIN ISLANDS, BRITISH	VG
	VIRGIN ISLANDS, U.S.	VI
W	WALLIS AND FUTUNA	WF
	WESTERN SAHARA	EH
Υ	YEMEN	ΥE
Z	ZAMBIA	ZM
	ZIMBABWE	ZW

Setup

Explanation of Terms

Numerics

4:3 letterbox

When a wide (16:9) disc is played on the DBP A100 while connected to a 4:3 TV, this function displays the image with a black area at the top and bottom.

4:3 pan-and-scan

When a wide (16:9) disc is played on the DBP A100 while connected to a 4:3 TV, this function cuts the left and right of the displayed image to the 4:3 size according to the disc's control information.

Α

Anamorphic lens

This lens enlarges the 16:9 image to a 2.35:1 image when projecting the image with a projector.

Aspect ratio

This is the length and width ratio of the TV screen. The conventional TV screen's ratio is 4:3 and a wide screen TV's screen ratio is 16:9.

В

BD-J (Java)

BD Videos offer fun software with more interactive functions (games) that use Java applications.

BD-LIVE

The DBPA100 can be connected to the Internet to enjoy a number of features, including additional contents such as special videos or subtitles, network games, etc.

Bit rate

This is the amount of video or audio data recorded on a disc that is read in one second.

Blu-ray disc

This is a one sided, one layer disc with 25GB capacity for recording high vision video movie and games.

Bonus View

Special images for BD Videos. It includes comments from the movie director, simultaneously developing sub stories, and images from different angles.

С

Chapter

This is a break intended by the producer, who organizes the titles of BD or DVD Videos. The chapter search function searches for the beginning of this break.

D

Deep Color

This technology allows expression of more colors than the conventional 8 bit and can reproduce more natural colors without any color streaking.

DHCP (Dynamic Host Configuration Protocol)

This mechanism automatically performs network configurations, such as IP addressing for network devices, including DBP A100, PCs, and broadband routers.

Dolby Digital (5.1-ch Surround)

This is a stereophonic effect developed by Dolby Laboratories. This is a maximum of 5.1 channels, independent multi channel audio system.

Dolby Digital Plus

This is an extended version of Dolby Digital and is a high sound quality, digital audio technology adopted as an optional audio for Blu ray discs.

Dolby TrueHD

This lossless coding technology is adopted as an optional audio for Blu ray disc and supports 7.1 channels.

Downmix

This function converts the number of channels of surround audio to less channels for playback.

DTS

This is an abbreviation of Digital Theater System, which is a digital audio system developed by DTS. When playing audio on this system while connected to a device such as a DTS amplifier, accurate sound field position and realistic sound effects can be obtained, making you feel like you are in a movie theater.

DTS-HD

This audio technology provides an enhanced functionality and a higher quality of sound than conventional DTS and is adopted as an optional audio for Blu ray disc. This technology supports multi channel, high data transfer speed, high sampling frequency, and lossless audio playback. A maximum of 7.1 channels are supported on Blu ray discs.

Dynamic range

The difference between the maximum, undistorted sound level and the minimum sound level that is discernible above the noise emitted by the device.

F

Finalizing

This process enables BD/DVD/CD discs recorded with a recorder to be played by other players.

HDCP

When transmitting digital signals between devices, this copyright protection technology encrypts the signals to prevent content from being copied without authorization.

HDMI

This is an abbreviation of High Definition Multimedia Interface, which is an AV digital interface that can be connected to a TV or amplifier. Video signal and audio signal can be connected with 1 cable.

Interlacing (interlaced scanning)

This conventional method used to project images on a TV displays 1 frame of image in half and half, respectively as 2 fields.

Interactive audio

This is audio recorded in the titles of BD Videos, such as clicking sounds made during operations.

LEE

This is an abbreviation of Low Frequency Effect, which is an output channel that emphasizes low frequency effect sounds. Surround audio is intensified by outputting 20Hz to 120Hz deep bass.

Linear PCM

This is an uncompressed PCM (Pulse Code Modulation) signal. This is the same system as the CD audio but uses 192kHz, 96kHz, and 48kHz sampling frequencies on BD or DVD and provides higher sound quality than CDs.

M

MPEG

This is an abbreviation of Moving Picture Experts Group, which is an international standard of the moving picture audio compression method. Images on BDs and DVDs are recorded using this method.

Р

Picture-in-picture

This BD Video function allows you to view scenes, such as the making of or commentary on the movie, in the secondary video while viewing the main story in the primary video.

Popup menu

This type of menu is recorded with BD software. While playing back a BD, this menu can be displayed on the front of the screen and can be operated.

Primary audio

This audio signal is recorded in the main story in BD Video.

Progressive (sequential scanning)

This is a system for scanning the video signal that displays 1 frame of video as one image. Compared to the interlace system, this system provides images with less flickering and bleeding.

n

Rating

Depending on the age of the viewer, this function restricts the playing of BD Videos or DVD Videos. DBP A100 can be set to restrict viewing in 0 to 254 levels for BD Videos, and 1 to 8 levels for DVD Videos.

Region code

This code indicates the country or region where the BD or DVD Video can be played back.

S

Secondary audio

This is audio content, such as the director's comments, and other data recorded in the bonus view of BD Video.

-

Title

This is the unit of content that consists of chapters of BD or DVD Videos. Some BDs or DVD Videos may include multiple titles.

Index

range page
Adjusting the Picture Quality 33 Advanced AL24 Processing 48 Analog 7.1ch Connection 16 Analog Audio Connection 18 Audio Format 14, 16 Audio Mode 32 Audio Setup 25 Auto Power Mode 31
₽ B page
BD 3, 53 BD Video 3, 5 BD LIVE 36, 53 Bonus View 36, 53 Brightness of the Display 47
range C page
Cables Used for Connections 12 CD 3, 5 CD R/RW 3, 5 Channel Level 23, 25 Chapter 5, 51 Component Resolution 22 Component Video Output 18 Country Code 52
r∰ D page
Deep Color 23, 53 DENON LINK 17, 28, 50 Digital Audio Connection 19 Digital Audio Output 27 DivX® 4,5 Dolby Digital 14, 16, 51 Dolby Digital Plus 14, 16, 51 Dolby TrueHD 14, 16, 51 Downmix 27, 51 DTS 14, 16, 51 DTS HD 14, 16, 51 DVD Audio 3, 5 DVD R/ RW/+R/+RW 3, 5 DVI D Terminal 13 Dynamic Range 27, 51

	е
ile Browser Screen	93
ℱ G page	
iroup ·····	5
愛H pago IDCP······15, 53	3
D Layer	3 3 7 3
∕ TI page	
nformation Bar Display	4
 ℱJ page	
Table 1 itter free Connection 1 PEG	7
PEG page	7 4 e
itter free Connection 1	7 4 e 1 3 3 3
itter free Connection 1 PEG page anguage Code 5 anguage Setup 2 etter Box 24, 5 FE 26, 5 inear PCM(LPCM) 14, 16, 5	7 4 e 1 3 3 3 3 3
itter free Connection 1 PEG page anguage Code 5 anguage Setup 2 etter Box 24, 5 FE 26, 5 inear PCM(LPCM) 14, 16, 5 PCM 14, 16, 5	7 4 e 1 3 3 3 3 3 e 1 3 1 6
### PEG Connection ### PEG	7 4 e 1 3 3 3 3 3 e 1 3 1 6 4

 ℱP	oag	јe
an Scan	6, 5 3 3 3 3 3 3	53 86 87 86 87 88 87 88 87 88
æR p	ag	јe
ating	3, 5 3 4	53 31 ·7 14
 ₹S	ag	јe
creen Saver D Memory Card earch Mode econdary Audio etting HDMI Audio Output etting HDMI Video Output ource Direct peaker Configuration ubtitle uper Audio CD	··4, ····5 ····1 ····2 3, 2	53 14 13 27 25
ℱ T	ag	јe
ime Display	5, 5	53 ·5
 ≇V r	ag	јe
ertical Stretch·····ideo Setup·····	3	32 24
ℱW	oag	je
Veb control ·····		

Troubleshooting

If a problem occurs, firstly check the following:

- 1. Are the connections correct?
- 2. Is the set being operated as described in the owner's manual?
- 3. Are other components operating properly?

If this unit does not operate properly, check the items listed in the table below. If the problem continues there may be a malfunction.

In this case, disconnect the power immediately and contact your retail outlet.

Symptom	Cause / Countermeasure	Page
Power does not turn on.	Check if the power cord is properly connected. Plug the power supply cord into the power outlet. The safety protection device may be activated. Unplug the power cord once, and wait for 5 10 seconds and then plug it in again.	20
	• The safety function puts the DBP A100 into the standby status when the fan stops. Check the back of the set to see if something is keeping the fan from rotating.	3, 9
Unable to play back BD LIVE / bonus view.	Does the SD Memory Card have more than 1GB of available space?	4, 36
3.52, 33.33, 13.11	Has the SD Memory Card been initialized by the DBP A100? Was the SD Memory Card inserted while the power of the unit was on. (Insert the SD Memory Card while the DBP A100 is in the standby status.) Remove the write protection of the SD Memory Card.	31 4, 36
No picture appears.	Switch the TV's input setting to the external input connected to the player.	
	• Is the Pure Direct function set to "On"? Set it to "Off". Also, is "Pure Direct Setup" "Video Out" on the GUI menu set to "Off" at the "User Preset 1" or "User Preset 2" setting? Set it to "On".	28, 38
	Is the HDMI mode set to "HDMI On"? In this case, video signals are output from the video, S Video and HDMI terminals, but not from the component terminals.	13
	Check the connection of the video/S Video/component video cable.	18
	Is the GUI menu "HDMI Setup" "I/P Direct" set to "On"? If so, no video signals are output from the video and S Video terminals during playback of certain discs.	23
	Does the "Video Setup" "Component Resolution" setting on the GUI menu match the connected device's resolution? Set it so that it matches.	24

Symptom	Cause / Countermeasure	Page
Video and audio are not output via the HDMI connection.	Check the connection of the HDMI cable. Is the "HDMI" indicator on the display of the DBP A100 lit? Is the Pure Direct function set to "On"? Set it to "Off".	13 8
	Also, is "Pure Direct Setup" "Video Out" on the GUI menu set to "Off" at the "User Preset 1" or "User Preset 2" setting? Set it to "On".	28, 38
	• Is the HDMI mode set to "HDMI Off"? If so, video signals are output from the video and S Video terminals, but not from the HDMI terminal.	13
	Check whether the connected display device or other device supports HDCP. This unit will not output a video signal unless the other device supports HDCP. See the owner's manual of your TV, AV Amp, etc.	15
	Check that the setting of the HDMI video resolution supports the resolution of the connected device. When set to "Auto", DBP A100 makes the setting automatically.	13
HD audio is not output.	Set "BD Audio Mode" to "HD Audio Output".	32
The picture is not displayed or is disrupted. The picture of a BD Video or DVD Video disc is in black and white.	The picture may be slightly disturbed right after fast forwarding or reversing. This is not a malfunction. Connect the DBP A100's video/S Video/component video output either directly to the TV or to the TV via the AV Amp. Do not connect via a VCR, (video cassette recorder). Some discs include copy prohibit signals, and when such discs are played via a VCR the copy guard system may disrupt the picture.	18
	 Is a disc that is not compatible with the player or a disc with a different region number loaded? (This player supports region code "A" for BD Video discs, "1" or "ALL" for DVD Video discs.) 	3
	• Is the GUI menu "HDMI Setup" "I/P Direct" set to "On"? If so, no video signals are output from the video and S Video terminals during playback of certain discs.	23

Symptom	Cause / Countermeasure	Page
No sound or the sound is hard to hear.	Check the audio connections of connected devices and speakers. Is the power connected audio devices turned on? Is the input selection set to the input to which the DBP A100 is connected? Is the audio output properly selected?	11 ~ 20 13 ~ 20
The picture freezes momentarily during playback.	 If a disc is scratched or contaminated with fingerprints, the disc may not play correctly. Clean the disc or replace with a non scratched disc. There may be a problem with the data recorded on the disc. 	6
Playback does not start even when ► is pressed, or starts but stops immediately.	for 1 to 2 hours with the power off.) • When the disc is scratched or contaminated with fingerprints, the disc may not play correctly. Clean the disc or replace with a non scratched disc.	6
	 Is the disc loaded upside down? Load the disc properly, with the side to be played face down. Is an unplayable disc loaded? 	6 3, 4
Subtitles are not displayed.	Subtitles cannot be displayed for BD Video, DVD Video or DivX [®] files that do not contain subtitles. Is the subtitle setting "Off"? Use the disc menu or to set the subtitles to display.	46 23
My SD Memory Card cannot be read.	The format of the card does not match this unit or the card is not compatible. Is the playback media mode set to "SD CARD MODE"? Select "SD CARD MODE" with SURREL.	31 34
No return to start up screen when a disc is removed.	• There may be an internal error. Set the power to standby, wait awhile, then turn the power back on.	
The set cannot be operated with the remote control.	 Aim the remote control directly at the infrared sensor window on the front of the unit. Operate within a distance of 7 meters from the remote control sensor. 	7
	 Remove any obstacles. Replace the batteries with new ones. Insert the batteries in the proper direction, checking the ⊕ and ⊖ marks. 	7 7
	Match the signal code of the remote control to the signal code of the unit.	7

Symptom	Cause / Countermeasure	Page
The unit is operated by the remote control of an other DENON product.	• The unit is designed to be operated by the remote controls of other DENON products.	7, 31
	• To avoid the unit being operated by the remote controls of other devices, set "Other Setup" "Remote Control Setting" "Receive Legacy Remocon" to "Off" on the GUI menu.	31
Buttons do not work or the unit stops responding.	 Operations may not be permitted by the disc. The safety protection device may be activated. Unplug the power cord once, and wait for 5 10 seconds and then plug it in again. Refer to the instructions of the disc. 	
A playable disc is not read.	• The pickup lens may be dirty. Before requesting servicing, try cleaning the laser pickup with a commercially available lens cleaner. (Do not use a cleaner with a brush because it may damage the lens.)	
The camera angle does not switch.	• If the multiple angles are not recorded in a BD Video or DVD Video, the camera angle cannot be switched. Also, multiple angles may only be recorded for specific scenes.	47
Playback does not start when a title is selected.	Playback may be prohibited by the viewing restriction setting. Check the "Ratings" setting on the GUI menu.	29
I have forgotten the password for the rating level.	• On the GUI menu, perform the "Other Setup" "Initialize" procedure.	31



- Some functions may not be used under certain operating conditions, but this is not failure of the unit. Read the description in this Owner's Manual for details on correct operations.
- The volume may differ from disc to disc. This is due to the differences in how the signals are recorded on the disc and is not a malfunction.
- During programmed playback, it is not possible to perform random playback or to start playback from a desired track or file.
- Some functions are prohibited on some discs.

Specifications

□ Audio performance

Video output :

Component video output:

Signal format:

NTSC

Applicable discs / memory cards: (1) BD Video discs:

12 cm, 1 side, 1 layer; 12 cm, 1 side, 2 layers

(2) DVD Video / DVD Audio discs:

12 cm, 1 side, 1 layer; 12 cm, 1 side, 2 layers / 12 cm, 2 sides, 2 layers (1 side, 1 layer) 8 cm, 1 side, 1 layer; 8 cm, 1 side, 2 layers / 8 cm, 2 sides, 2 layers (1 side, 1 layer)

(3) Super Audio CDs:

12 cm, 1 layer / 12 cm, 2 layer / 12 cm, Hybrid

(4) Compact Discs (CD DA): 12 cm, / 8 cm, discs

(5) Memory cards:

SD Memory Card / SDHC Memory Card / miniSD Card /

microSD Card

S-Video output : Y output level: $1Vp p (75 \Omega)$

Coutput level: 0.286 Vpp

Output terminal: S Video, 1 set Output level: 1Vp p (75 Ω)

Output terminal: Pin jack, 1 set Y output level: $1Vp p (75 \Omega)$

Pb/Cb output level / Pr/Cr output level : 0.648 Vp p (75 Ω)

Output terminal: Pin jack, 1 set

HDMI output: Output terminal: 19 pin HDMI terminals, 1 set

HDMI ver. 1.3a

(Deep Colour, Dolby Digital Plus, Dolby TrueHD, DTS HD)

Analog audio output : Output level: 2 Vrms (10 kΩ)

> 2 channels output terminal: Pin jack, 1 set 7.1 channels output terminal: Pin jack, 1 set

Audio output characteristics : (1) Frequency response

(1) BD (Multi linear PCM) : 2Hz ~ 22kHz (48kHz sampling)

: 2Hz ~ 44kHz (96kHz sampling) : 2Hz ~ 88kHz (192kHz sampling)

(2) DVD (Multi linear PCM): 2Hz ~ 22kHz (48kHz sampling)

: 2Hz ~ 44kHz (96kHz sampling) : 2Hz ~ 88kHz (192kHz sampling)

: 2Hz ~ 100kHz (3) Super Audio CD (4) CD : 2Hz ~ 20kHz

(2) S/N ratio: 125dB

(3) Total harmonic distortion: 1kHz 0.0008%

(4) Dynamic range: 110dB

Digital audio output: Optical digital output: Optical connector, 1 set

Coaxial digital output: Pin jack, 1 set

□ General

Power supply: AC 120 V. 60 Hz

Power consumption: 55 W

• When in Power Saving Standby: 0.3 W (Prower Saving")

> • When in Normal Standby: 0.8 W · When in Quick Start Mode:

20 ~ 35 W (Changes according to connection status, etc.)

434 (W) x 137 (H) x 383 (D) mm (17 3/32" x 5 25/64" x 15 5/64") Maximum external dimensions :

Weight: 11.3 kg (24 lbs)

☐ Remote control unit (RC-1140)

Remote control type: Infrared pulse

Batteries: R6/AA Type (two batteries)

Maximum external dimensions : 58 (W) x 230 (H) x 37 (D) mm (2 9/32" x 9 1/16" x 1 29/64") Weight: 205 g (Approx. 7.2 oz) (included batteries)

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Jean loup Gailly Mark Adler

iloup@gzip.org madler@alumni.caltech.edu

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The Independent JPEG Group's JPEG software README for release 6b of 27 Mar 1998

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Serious users of this software (particularly those incorporating it into larger programs) should contact IJG at jpeg info@uunet.uu.net to be added to our electronic mailing list. Mailing list members are notified of updates and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG Group.

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DOCUMENTATION ROADMAP

This file contains the following sections:

OVERVIEW General description of JPEG and

the IJG software.

LEGAL ISSUES Copyright, lack of warranty,

terms of distribution.

REFERENCES Where to learn more about

JPEG.

ARCHIVE LOCATIONS Where to find newer versions of

this software

RELATED SOFTWARE
FILE FORMAT WARS
TO DO

Other stuff you should get.
Software *not* to get.
Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:

install.doc How to configure and install the

IJG software.

usage.doc Usage instructions for cjpeg,

djpeg, jpegtran, rdjpgcom, and

wrjpgcom.

*.1 Unix style man pages for programs (same info as usage.

doc).

wizard.doc Advanced usage instructions for

JPEG wizards only.

change.log Version to version change

hiahliahts.

Programmer and internal documentation:

libjpeg.doc How to use the JPEG library in

your own programs.

example.c Sample code for calling the

JPEG library.

structure.doc Overview of the JPEG library's

internal structure.

filelist.doc Road map of IJG files.

coderules.doc Coding style rules please read

if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

OVERVIEW

This package contains C software to implement JPEG image compression and decompression. JPEG (pronounced "jay peg") is a standardized compression method for full color and gray scale images. JPEG is intended for compressing "real world" scenes; line drawings, cartoons and other non realistic images are not its strong suit. JPEG is lossy, meaning that the output image is not exactly identical to the input image. Hence you must not use JPEG if you have to have identical output bits. However, on typical photographic images, very good compression levels can be obtained with no visible change, and remarkably high compression levels are possible if you can tolerate a low quality image. For more details, see the references, or just experiment with various compression settings.

This software implements JPEG baseline, extended sequential, and progressive

compression processes. Provision is made for supporting all variants of these

processes, although some uncommon parameter settings aren't implemented yet.

For legal reasons, we are not distributing code for the arithmetic coding

variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting

the hierarchical or lossless processes defined in the standard

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats

The library is intended to be reused in other applications. In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

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ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf.

It is copyright by the Free Software Foundation but is freely distributable.

The same holds for its supporting scripts (config. guess, config.sub, Itconfig, Itmain.sh). Another support script, install sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software.

(Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.)

So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files.

To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that

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We highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is

Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30 44.

(Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in "The Data Compression Book" by Mark Nelson and Jean loup Gailly, published by M&T Books (New York), 2nd ed. 1996, ISBN 1 55851 434 1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C code but don't know much about data compression in general. The book's JPEG sample code is far from industrial strength, but when you are ready to look at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published by Van Nostrand Reinhold, 1993, ISBN 0442012721. Price US\$59.95.638 pp.

The book includes the complete text of the ISO JPEG standards (DIS 10918 1 and draft DIS 10918 2).

This is by far the most complete exposition of JPEG in existence, and we highly recommend it.

The JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.)

In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642 4900, or from Global Engineering Documents at (800) 854 7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging \$95 for Part 1 and \$47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918 1, ITU T T.81. Part 2 is titled "Digital Compression and Coding of Continuous tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918 2, ITU T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918 3 and ITUT T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department C Cube Microsystems, Inc. 1778 McCarthy Blvd. Milpitas, CA 95035 phone (408) 944 6300, fax (408) 944 6314 A PostScript version of this document is available by FTP at ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz. There is also a plain text version at ftp://ftp.uu.net/graphics/ipeg/ifif.txt. gz, but it is missing the figures.

The TIFF 6.0 file format specification can be obtained by FTP from ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz. The JPEG incorporation scheme found in the TIFF 6.0 spec of 3 June 92 has a number of serious problems.

IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6).

Instead, we recommend the JPEG design proposed by TIFF Technical Note #2 (Compression tag 7). Copies of this Note can be obtained from ftp.sqi.com or from ftp:// ftp.uu.net/graphics/ipeg/. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design.

Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/ JPEG per the Note. libtiff is available from ftp://ftp.sqi. com/graphics/tiff/.

ARCHIVE LOCATIONS

The "official" archive site for this software is ftp.uu.net (Internet address 192.48.96.9). The most recent released version can always be found there in directory graphics/ jpeg. This particular version will be archived as ftp://ftp. uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz.

If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only ftp.uu.net is guaranteed to have the latest official version.

You can also obtain this software in DOS compatible "zip" archive format from the SimTel archives (ftp://ftp.simtel. net/pub/simtelnet/msdos/graphics/), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the ftp.uu.net release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups comp.graphics.misc. news.answers. and other groups.

It is available on the World Wide Web at http://www.fags. org/fags/ipeg fag/ and other news.answers archive sites. including the official news.answers archive at rtfm.mit. edu: ftp://rtfm.mit.edu/pub/usenet/news.answers/ipeq faa/.

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send usenet/news.answers/jpeg faq/part1 send usenet/news.answers/jpeg fag/part2

RELATED SOFTWARE

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBMPLUS software, which provides many useful operations on PPM format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cipeg/dipeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites, notably ftp://wuarchive.wustl.edu/graphics/graphics/ packages/NetPBM/.

Unfortunately PBMPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford.

is available from ftp://havefun.stanford.edu/pub/ipeg/. This program is designed for research and experimentation rather than production use: it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

FILE FORMAT WARS

Some JPEG programs produce files that are not compatible with our library.

The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read. (For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation.

We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format

SPIFF is interoperable with JFIF in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether SPIFF will supersede JFIF or whether JFIF will remain the defacto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not

(In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist.

We have little or no sympathy for the existence of these formats. Indeed, one of the original reasons for developing this free software was to help force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO

The major thrust for v7 will probably be improvement of visual quality.

The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing. "poor man's variable quantization", and other means of improving quality vs file size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions principally, variable quantization and the SPIFF file format.

As always, speeding things up is of great interest. Please send bug reports, offers of help, etc. to jpeg info@ uunet.uu.net.

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A "png get copyright" function is available, for convenient use in "about" boxes and the like: printf("%s",png_get copyright(NULL)); Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar. ipg (88x31) and "pngnow.png" (98x31).

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Glenn Randers Pehrson glennrp@users.sourceforge.net August 15, 2004

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Thanks to Kevin Coffman and the CITI group at the University of Michigan for providing patches for implementing RPCSEC_GSS authentication in the RPC library.

Thanks to Derrick Schommer for reporting multiple memory leaks.

Thanks to Quanah Gibson Mount of Stanford University for helping exercise the thread support code.

Thanks to Michael Tautschnig for reporting the heap buffer overflow in the password history mechanism. [MITKRB5 SA 2004 004]

Thanks to Wyllys Ingersoll for finding a buffer size problem in the RPCSEC_GSS implementation.

Thanks to the members of the Kerberos V5 development team at MIT, both past and present: Danilo Almeida, Jeffrey Altman, Jay Berkenbilt, Richard Basch, Mitch Berger, John Carr, Don Davis, Alexandra Ellwood, Nancy Gilman, Matt Hancher, Sam Hartman, Paul Hill, Marc Horowitz, Eva Jacobus, Miroslav Jurisic, Barry Jaspan, Geoffrey King, John Kohl, Peter Litwack, Scott McGuire, Kevin Mitchell, Cliff Neuman, Paul Park, Ezra Peisach, Chris Provenzano, Ken Raeburn, Jon Rochlis, Jeff Schiller, Jen Selby, Brad Thompson, Harry Tsai, Ted Ts'o, Marshall Vale, Tom Yu.

Very special thanks go to Marshall Vale, our departing team leader.

Over the past few years, Marshall has been extremely valuable to us as mentor, advisor, manager, and friend. Marshall's devotion as a champion of Kerberos has helped our team immensely through many trials and hardships. We will miss him tremendously, and we wish him the best in his future endeavors.

☐ Exhibit-U

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