

# dreamio

# Home Entertainment Projector **EH-DM3**



# **User's Guide**













# Notations used in this guide

CAUTION	Indicates content that may cause the unit damage or malfunction.	
TIP	Indicates additional information and points that may be useful to know regarding a topic.	
<u> </u>	Indicates a page where useful information regarding a topic can be found.	
<b>0</b> 1	Indicates operating methods and the order of operations.  The procedure indicated should be carried out in order of the numbered steps.	
(4)	Indicates remote control or main unit buttons.	
"(Menu name)"	Indicates menu items and messages that are displayed on screen. Example: "Brightness"	
DVD Video DVD Video	Depending on the type of disc, the functions and operations which can be performed may be different.  These marks inform you of the type of disc being used.  DVD Video CD Data CD Audio CD MP3/WMA JPEG DIVX Ext.Vid. Comp.  DVD Video CD Data CD Audio CD MP3/WMA JPEG DIVX Ext.Vid.Comp.	

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# **Safety Instructions**

All safety and operating instructions should be read before using the unit. After you have read all instructions, save this information for later reference.

The documentation and the unit use graphical symbols to show how to use the unit safely.

Please understand and respect these caution symbols in order to avoid injury to persons or property.

<b>⚠</b> Warning	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
<b>⚠</b> Caution	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

#### **Explanation of symbols**

Symbols indicating an action that must not be done







Do not disassemble



touch

Do not use in wet wet areas



Do not place on an unstable surface

Symbols indicating an action that should be done





Instructions

the plug from the outlet

# Important safety instructions

Follow these safety instructions when setting up and using the projector:

- · Read these instructions.
- · Keep these instructions.
- · Heed all warnings.
- · Follow all instructions.
- 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.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 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 grounding 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.
- Only use attachments/accessories specified by the manufacturer.
- 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.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged
  in any way, such as the 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.

# 🔨 Warning

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



Unplug the unit from the outlet and refer all repairs to qualified service personnel under the following conditions:



the plug from the outlet

- If smoke, unusual smells or unusual noises come from the unit.
- If liquid or foreign objects get inside the unit.
- If the unit has been dropped or the case has been damaged.

Continuing to use under these conditions may result in fire or electric shock.

Do not try to repair this unit yourself. Refer all repairs to qualified service personnel.

Place the unit near a outlet where the plug can be easily unplugged.

Never open any covers on the projector except as specifically explained in the User's Guide. Never attempt to disassemble or modify the projector (including consumables). Refer all repairs to qualified service personnel.



disassemble

Electrical voltages inside the unit can cause severe injury.

Do not expose the unit to water, rain, or extensive humidity.



Do not use in wet areas

Use only the type of power source indicated on the unit. Use of a power source other than the specified may result in fire or electric shock. If you are not sure of the power available, consult your dealer or local electricity company.



Check the specifications of the power cable. Using an inappropriate power cable could result in fire or electric shock.



The power cable supplied with the unit is intended to comply with power supply requirements for the country of purchase. If using within the country of purchase, do not use any power cable other than the one supplied with the unit. If using the unit overseas, check the power supply voltage, outlet shape and electrical rating of the unit that conform to the local standards, and purchase a proper power cable in the country.

Take the following precautions when handling the plug.

Failure to comply with these precautions could result in fire or electric shock.



- Do not overload outlets, extension cables or multi-socket devices.
- Do not insert the plug into the outlet with dust present.
- Insert the plug firmly into the outlet.
- Do not handle the plug with wet hands.
- Do not pull the power cable when disconnecting the plug. Always be sure to hold the plug when disconnecting it.

Do not use the power cable that is damaged. Fire or electric shock may result.

- Do not modify the power cable.
- Do not place heavy objects on top of the power cable.
- Do not bend, twist or pull the power cable excessively.
- Keep the power cable away from hot electrical appliances.

If the power cable becomes damaged (such as the wires becoming exposed or broken), contact your dealer for a replacement.

If there is an electrical storm, do not touch the plug, otherwise you may receive an electric shock.





# **Marning**

Do not place containers with liquids, water or chemicals on top of the unit.

If the containers spill and the contents get inside the unit, fire or electric shock may result.



Do no wet

Never look into the unit lens when the lamp is switched on as the bright light can damage your eyes.



Do not do

Never push metallic or flammable objects or any other foreign materials through the air intake or air exhaust vents, fire or electric shock may result.



A mercury lamp with high internal pressure is used as the unit's light source. Be sure to observe the instructions below.



Instructions

If the following points are not observed, injury or poisoning may result.

- Do not disassemble or damage the lamp or subject it to any impacts.
- The gases inside mercury lamps contain mercury vapor. If the lamp breaks, ventilate the room to prevent the gases that are released from being inhaled or coming into contact with the eyes or mouth.
- Do not bring your face close to the unit while it is in use.

If the lamp breaks and gases or fragments of broken glass from the lamp are inhaled or get into the eyes or mouth, or if any other ill effects are noticed, immediately seek medical advice.

Do not leave the unit or the remote control with batteries inside a vehicle with the windows closed, in places where they will be exposed to direct sunlight, or in other places that may become extremely



Thermal deformation or technical malfunction may occur, which could result in fire.

Do not do

Do not use sprays containing a flammable gas to remove dirt or dust which is adhering to parts such as the lens or filter of the projector.



Because the lamp inside the projector becomes very hot during use, the gases may ignite and result in a fire.

Do not do

Do not use the projector in places where flammable gases or explosive gases may be present in the atmosphere.



Because the lamp inside the projector becomes very hot during use, the gases may ignite and result in a fire.

Do not do

# Caution

#### **Class 1 LASER Product**

Do not open the top cover. There are no user serviceable parts inside the unit.



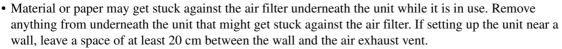
Do not use the unit in places where there are lots of humidity or dust, near cooking or heating appliances, or in places where it may come into contact with smoke or steam. Do not use or store this unit outdoors for an extended length of time.

Fire or electric shock may result.



Do not do

Do not block the slots and opening in the unit case. They provide ventilation and prevent the unit from overheating.





- Ensure there is at least 10 cm between the air intake vent and any walls, and so on.
- Do not place the unit on a sofa, rug, or other soft surface, or in a closed-in cabinet unless proper ventilation is provided.

Do not place the unit on an unstable cart, stand, or table.

The unit might fall down or tip over, and injury may result.



on an unstable surface

Do not stand on the unit or place heavy objects on it.

The unit might collapse or fall down, and injury may result.



Do not do

Do not place anything that can become warped or damaged by heat near the air exhaust vents, or bring your hands or face close to the vents while projection is in progress.

Because hot air comes out from the air exhaust vents, it may result in burns, warping or other accidents.



Do not do

Never try to remove the lamp immediately after use because it will be extremely hot. Before removing the lamp, turn off the power supply and wait the duration specified in this guide to allow the lamp to cool completely.



The heat may cause burns or other injuries.

Do not place the source of a naked flame, such as a lit candle, on or near the unit.



Do not do

Unplug the unit when it will not be used for extended periods.

The insulation may deteriorate, which may result in fire.



Disconnect the plug from the outlet

Be sure to check that the power is turned off, the plug is disconnected from the outlet and all cables are disconnected before moving the unit.



the plug from the outlet

Fire or electric shock may result.

# **A** Caution

Unplug the unit from the outlet before cleaning.

This avoids electric shock during cleaning.



When cleaning the unit, do not use wet cloths or solvents such as alcohol, thinner or benzine.

Water infiltration or deterioration and breakage of the unit case could result in electric shock.



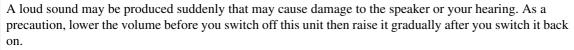
Instructions

Incorrect battery usage may cause leakage of battery fluid and battery rupture, which could result in fire, injury or corrosion of the unit. When replacing batteries, take the following precautions.



- Insert batteries so that the polarities (+ and -) are correct.
- Do not use batteries of different types or mix old and new batteries.
- Do not use any batteries other than those specified in this guide.
- If the batteries leak, wipe away battery fluid with a soft cloth. If fluid gets on your hands, wash them immediately.
- Replace the batteries as soon as they run out.
- Remove the batteries if you will not be using the unit for a long period of time.
- Do not expose batteries to heat or flame and do not put them in water.
- Dispose of used batteries according to local regulations.
- Keep these batteries out of the reach of children. Batteries are choking hazards and are very dangerous if swallowed.

Do not set the volume too high from the outset.





When using headphones, do not turn the volume up too loudly.

You may adversely affect your hearing when listening at loud volumes over extended periods of time.



Do not do

Follow the maintenance schedule for this unit. If the interior of the unit has not been cleaned for a long time, dust may build up, which could cause fire or electric shock.



Replace your air filter periodically as needed.

Contact your dealer to clean the interior of the unit as needed.

# **Use and Storage**

Take note of the following advice in order to prevent malfunction and damage.

# Notes on handling and storage

- Be sure to observe the operating temperatures and storage temperatures given in this guide when using and storing the projector.
- Do not set up the unit in places where it might be subjected to vibration or shock.
- Do not install the unit close to television, radio or video equipment that generates magnetic fields.
   This may adversely affect the audio and images of this unit, and may cause a malfunction. In the event that such symptoms occur, move the unit further away from any television, radio and video equipment.
- Do not operate the projector under any of the following conditions. If this is not observed, problems with operation or accidents may result.



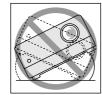
While the projector is standing on its end



While the projector is placed with the top facing up



While the projector is placed with the bottom up



While the projector is tilted to either side

- Do not move this unit during playback.
   This may damage the disc or cause malfunction.
- Avoid using or storing this unit in cigarette or other smoke filled places, or in rooms containing a large amount of dust.
  - This may cause degradation of the image quality.
- Do not touch the projection lens with your bare hands.
  - If fingerprints or marks are left on the face of the lens, the image will not be projected clearly. When the unit is not in use, be sure to attach the lens cover.
- EPSON will not be held responsible for damage arising from projector or lamp failure outside the

- range of that which is covered in your warranty terms.
- You can store the unit in an upright position compactly on a shelf, etc., as it has storage feet on its side. When storing the unit in an upright position, place it on a stable surface with the storage feet at the bottom. Be sure to place the unit in the storage case supplied with the unit so that no dust enters the air intake vent.

# Condensation

If you move this unit from a cold place into a warm room, or, if the room in which this unit is installed is heated rapidly, condensation (moisture) may form internally or on the lens surface. If condensation forms, it may not only cause incorrect operation such as weakening of the image, but also damage the disc and/ or parts. In order to prevent against condensation, setup this unit in the room approximately one hour before it is to be used. If by some chance condensation does form, disconnect the power cable from the outlet, then wait one to two hours before use.

# Lamp

A mercury lamp with high internal pressure is used as the unit's light source.

The characteristics of the mercury lamp are:

- The intensity of the lamp decreases with use.
- When the lamp reaches the end of its life, it will no longer light or may break with a loud noise.
- The life of the lamp may vary greatly depending on the individual lamp characteristics and the operating environment. You should always have a spare lamp ready in case it is needed.
- Once the lamp replacement period has elapsed, the possibility of lamp breakage increases. When the lamp replacement message appears, replace the lamp with a new one as soon as possible.
- This product includes a lamp component that contains mercury (Hg). Please consult your local regulations regarding disposal or recycling.

Do not dispose of it with normal waste.

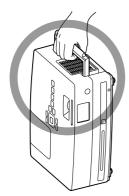
## LCD panel

- The LCD panel is manufactured using extremely high-precision technology.
  - However, black dots may appear on the panel, or some red, blue or green dots may light up extremely brightly at times. Furthermore, sometimes striped color irregularities or brightness irregularities may also appear. They are caused by the characteristics of the LCD panel, and are not a sign of malfunction.
- Screen burn may remain in the projected image when a high-contrast still image is projected for more than 15 minutes.

If screen burn has occured, you should project a bright screen (if a computer is used: white screen, video: as bright an animation as possible) until the screen burn disappears. It takes approx. 30 to 60 minutes, depending on the extent of the screen burn. If the screen burn does not disappear, contact your dealer for advice.  $\triangle$  p. 80

# When moving this unit

- Close the lens cover.
- · Eject the disc.
- Retract the unit feet if extended.
- Carry the unit by holding the handle as shown in the following illustration.



# Transportation cautions

The internal projector components consist of many glass parts and high-precision parts. When transporting the projector, take the following measures to protect the projector from any damage that might result from shock.

- Enclose the projector securely in buffer material to protect it from shock, and place it into a strong cardboard container. Be sure to notify the carrier company that the contents are fragile.
- Close the lens cover and pack the unit.
- \* Your warranty does not cover any damages that may occur to this product during transportation.

# Copyrights

Reproduction of a disc for the purposes of broadcast, projection in public, public musical performance, or rental (regardless of compensation, remuneration, or lack thereof) without the permission of the copyright owner, is strictly prohibited.

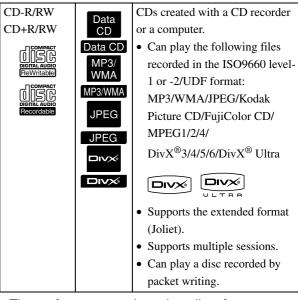
# **Discs and USB Storage**

#### **Discs**

## Readable disc types

The following discs can be played.

Disc types	Symbols used in this guide	Explanation
DVD video  VIDEO  DVD+RW  DVD+R DL  DVD-RW  DVD-R DL  RW  DVD-R DL  RW  DVD+R DL  DVD+R DL	DVD Video  DVD Video  DVD Video  DVD Video  MP3/ WMA  MP3/WMA  JPEG  DIVX  DIVX	Commercially available software containing high-quality movies and forms of visual images. You cannot play DVD videos if the disc region code does not correspond to the region code label on the side of this unit.  DVD discs described on the left, recorded on another DVD recorder.  • Can play a DVD disc containing video format images.  • Can play a DVD disc containing VR format images.  • Can play a disc if it has been "finalized" by the DVD recorder that has recorded the images.  • Can play the following files recorded in the ISO 9660/UDF format:  MP3/WMA/JPEG/MPEG1/2/ 4/DivX®3/4/5/6/DivX® Ultra
Video CD		although the unit supports multiple sessions.
Video CD    SCHEDING	Video CD Video CD	Software containing images and sound.  • Can play a Video CD (in version 2.0) with PBC (playback control).  • Can play a Super Video CD (SVCD).
CD	Audio CD Audio CD	The software containing sound and voice.



 The performance and tonal quality of copycontrol CD discs that do not conform to the compact disc (CD) standard cannot be guaranteed with this unit. CDs that conform to the CD standard will bear the following compact disc logo mark. Check what is displayed on the packaging of the audio disc.



- This unit conforms to the NTSC and PAL television signal formats.
- In the case of DVD video, SVCD, and Video CD, playback functions may be intentionally limited by the software producers. As this unit plays back the contents of a disc certain functions may not work. Refer to the attached user information of the disc being played.
- DVD-R/R DL/RW, DVD+R/R DL/RW, CD-R/RW, and CD+R/RW discs may not be able to be played if they are scratched, dirty, warped, or if the recording status or recording conditions are unsuitable. Also, it may take the unit some time to read the disc data.
- CPRM (Content Protection for Recordable Media)compatible DVD-R discs recorded in the VR format cannot be played back on this unit.
- Only the audio of the following discs can be played back.
  - MIX-MODE CD CD-G CD-EXTRA
  - CD TEXT

## Unreadable disc types

• The following discs cannot be played.

- DVD-ROM - CD-ROM - PHOTO CD

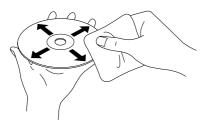
- DVD audio - SACD - DACD

- DVD-RAM

- Round discs with a diameter other than 8 cm or 12 cm
- · Irregularly shaped discs

## **Disc Handling**

- Avoid touching the playback side with your bare hands
- Be sure to store discs in their cases when not in use.
- Avoid storing your discs in places with high humidity or in direct sunlight.
- If the playback surface of the disc is dirty with dust or fingerprints, the image and audio quality may deteriorate. When the playback surface is dirty, gently wipe the disc clean with a soft dry cloth, starting from the center of the disc then moving outwards.



- Do not use cleaning products such as benzine, or anti-static products designed for analog records.
- Do not glue paper or attach stickers to a disc.

# USB storage that can be played

- You can attach and play the following USB 1.1 based storage devices to the unit:
  - USB memory (only devices that are not equipped with the security function)
  - Multicard reader
  - Digital camera (if USB mass storage class is supported)
- Use a multicard reader to connect an SD memory card or other media to the unit.
- The FAT16 and FAT32 file systems are supported.
- Some system files may not be supported. If the media is not supported, format the media in the Windows system before use.

 This unit can play only one memory card even if multiple cards are mounted on the card reader.
 Mount only the card you wish to play.

# Specifications of files that can be played

File format	File extension*	Specifications
MP3	".mp3" or	Bit rate: 16 to 320K bps
	".MP3"	Sampling frequency: 11
		kHz, 16 kHz, 22.05 kHz,
		32 kHz, 44.1 kHz, 48 kHz
WMA	".wma" or	Bit rate: 64 to 192K bps
	".WMA"	Sampling frequency: 44.1
		kHz, 48 kHz
DivX <sup>®</sup>	".divx" or	Up to 3M bps
DivX <sup>®</sup>	".DIVX", ".avi"	Maximum number of
Ultra	or ".AVI"	pixels: 720 x 576 pixels
		Optimum frame rate: 30
		fps
		A file may not be in the
		DivX® file format even if
		it has an ".avi" or ".AVI"
		file extension. In such a
		case, the file cannot be
		played.
JPEG	".jpg" or ".JPG"	Number of pixels: Up to
		3027 x 2048 pixels
		No Motion JPEG is
		supported.
		JPEG data created by the
		DCF (Design rule for
		Camera File system)
		standard based digital
		camera is supported.
		Pictures may not be
		played back if the auto
		rotate function of digital
		still camera is used or if
		data is processed, edited
		or saved again using
		computer image editing
		software.

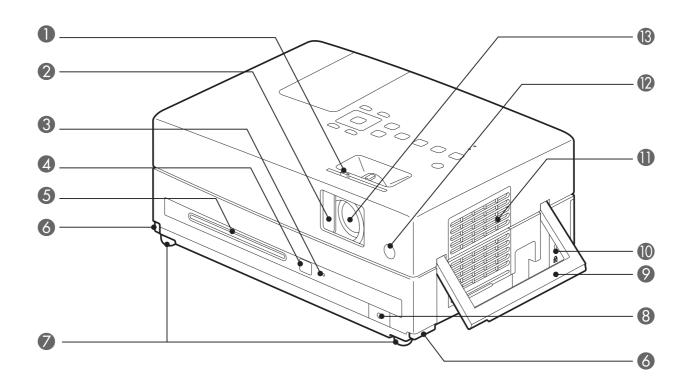
<sup>\*</sup>If double-byte character is used for a file name, it will not be displayed correctly.

File size	4GB
Total number of files*	648 files (including folders) + 2 default folders
Total number of folders*	Up to 300 folders

<sup>\*</sup>This figure is unlimited if "MP3/JPEG Nav" from the settings menu is set to "Without Menu".

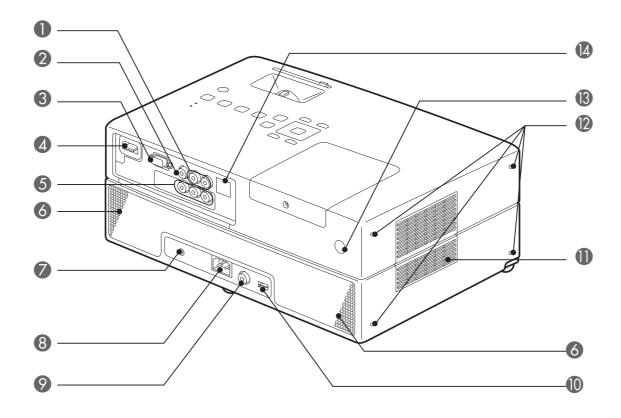
# **Parts Name and Functions**

# Front

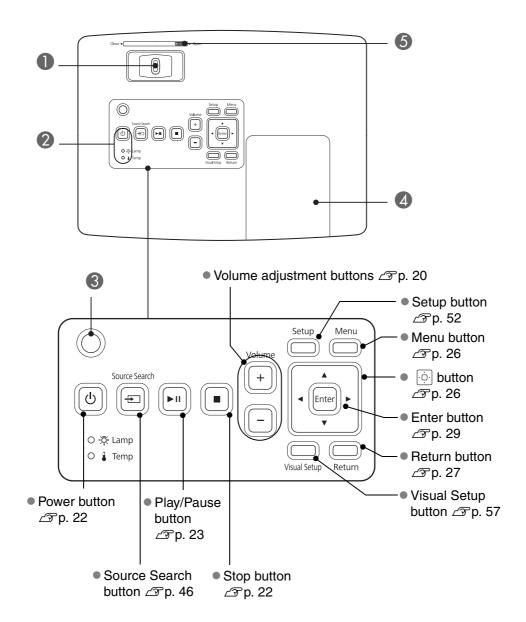


Name	Function
Slide lens cover knob.	Slide the knob to open and close the slide lens cover.
2 Slide lens cover	Close the lens cover to protect the lens when the unit is not in use. You can stop the projection completely by closing the lens cover during projection. However, if this state continues for 30 minutes, the unit lamp is turned off automatically.  P. 18
3 Disc indicator	Lights up green when a disc is inserted into the disc slot. $\triangle P$ p. 19
4 Eject button	Press this button to eject a disc from the disc slot. $\mathcal{L}$ p. 22
5 Disc slot	Insert a disc you wish to play. $\mathcal{T}$ p. 19
6 Foot adjust lever	Press the Foot adjust lever to extend and retract the Front adjustable foot. \( \sigma \) p. 21
Front adjustable foot	The feet on the side of the projection lens can be extended by turning them. Extending the feet to the maximum extent tilts this unit by approximately 10 degrees.   p. 21
8 Headphone jack	Connects a headphone to the unit. ∠ p. 48
Handle (Security cable installation point)	Hold this handle when carrying the unit.  Pp. 9 Pass a commercially available wire lock through here and lock it in place.  Pp. 60
Security slot (A)	The Security slot is compatible with the Microsaver Security System manufactured by Kensington. $2$ p. 60
Air intake vent (Air filter cover)	Take the cooling air into the unit. If dust collects on the air intake vent it can cause the internal temperature of the unit to rise, and this can lead to operation problems and a shortening of the service life of optical parts. Clean it periodically. (3) p. 66
Remote control light-receiving area	Receives signals from the remote control. $\triangle P$ p. 16
<b>13</b> Projection lens	Projects an image.

# Rear

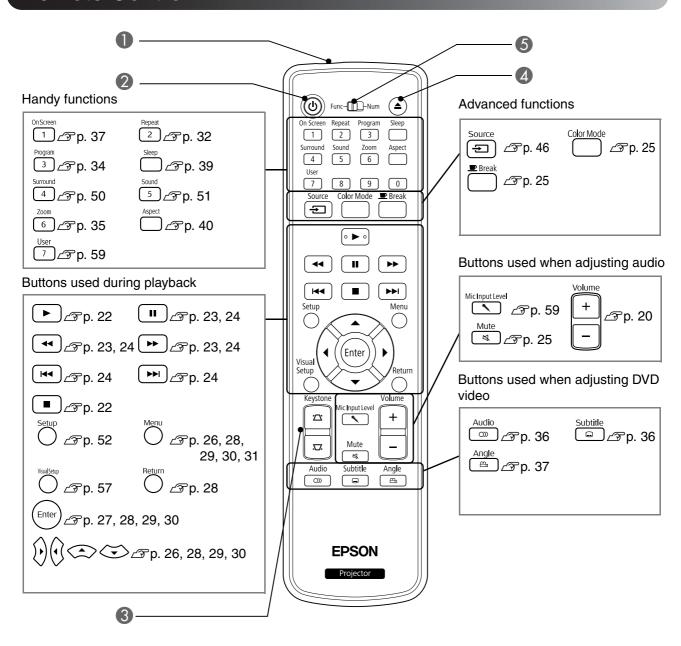


Name	Function
1 Audio input port	Can be connected to the audio output port of the connected video device or a computer. $\mathcal{F}$ p. 43, 44
2 Video input port	Can be connected to the ordinary image output port of a video device. $\triangle P$ p. 43
3 Computer input port	Can be connected to the RGB output port of a computer. $\triangle P$ p. 45
4 HDMI input port	Connects an HDMI-format video device or a computer to the unit. Tp. 44
<b>5</b> Component input port	Can be connected to the component (YCbCr or YPbPr) output port of a video device. 🗷 p. 44
6 Speakers	Support the virtual surround sound system. $\triangle P$ p. 50
Mic Input Port	Connects to a microphone. Tp. 49
8 Power inlet port	Connect the power cable.  Tp. 18
Digital Coaxial Audio-Out port	Can be connected to an audio device with a digital coaxial audio input port. $\triangle P$ p. 50
<b>(1)</b> USB port	Connects a USB 1.1-based USB memory or a multicard reader to play the MP3/WMA, JPEG, DivX <sup>®</sup> and other format storages. \( \sigma p. 42 \)
Air exhaust vent	The air outlet of the unit after cooling.  Caution  Do not block the exhaust vents, and do not touch the exhaust vent immediately after projecting, or while projecting, since it becomes hot.
Storage feet	Used when placing the unit in an upright position. When storing the unit in an upright position, place it on a stable surface with the storage feet at the bottom. Be sure to place the unit in the storage case supplied with the unit so that no dust enters the air intake vent.
Remote control light-receiving area	Receives signals from the remote control. $\triangle \mathfrak{T}$ p. 16
Service port	This is the control port. It is not used during normal operation.



Name	Function
Focusing ring	Move to the left or right for image focusing. $\triangle P$ p. 20
2 Status indicator	If a problem occurs in the unit, the status indicator blinks or lights up to indicate the problem. $\triangle Pp. 61$
3 Ambient light sensor	Detects the brightness of the room. When "Auto" is selected in the color mode, the projector optimizes the image automatically. $\mathcal{L} \mathcal{F} p. 25$
4 Lamp cover	When replacing the lamp, open this cover and replace the lamp. $\triangle P$ p. 69
<b>5</b> Lens cover knob	Slide the holder to open or close the lens cover. $\triangle P$ p. 18

# Remote Control



	Name	Function	
	note control light- itting area	Emits remote control signals. $\triangle \mathfrak{T}$ p. 16	
2	(4)	Turns power supply to the unit on or off. ∠ p. 22	
3		Corrects keystone distortion of the screen image to square or rectangular. $\mathcal{F}$ p. 21	
4	<b>(</b>	Press this button to eject a disc from the disc slot. ZPp. 22	
5 Fur	nction/numeric toggle tch	Switches between the functions and numerics you wish to use. Slide this switch to the Function position to use any function.	

# **Preparing the Remote Control**

# Inserting the batteries



Check the positions of the (+) and (-) marks inside the battery holder to ensure the batteries are inserted the correct way.

At the time of purchase, the batteries are not installed into the remote control. Insert the batteries provided with this unit, before use.

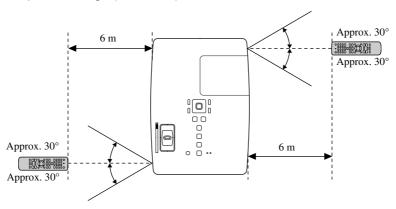
- Push in the catch on the rear of the remote control, then lift it upwards.
- Insert the batteries observing correct polarity.
- 3 Close the battery cover.



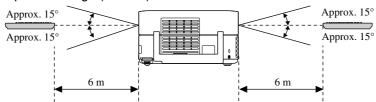
If delays in the responsiveness of the remote control occur, or if it does not operate after it has been used for some time, it probably means that the batteries are becoming flat and need to be replaced. Have two spare AA-size alkaline or manganese dry batteries ready to use. You can only use AA-size alkaline or manganese dry batteries.

# Remote control usage range

#### Operable range (horizontal)



#### Operable range (vertical)

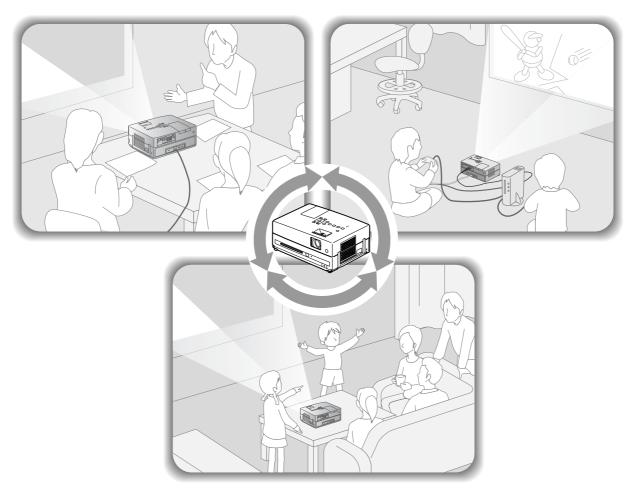




Avoid allowing direct sunlight or fluorescent light to fall on the remote control light-receiving area of this unit. The signal from the remote control may not be able to be received.

# **Quick Start**



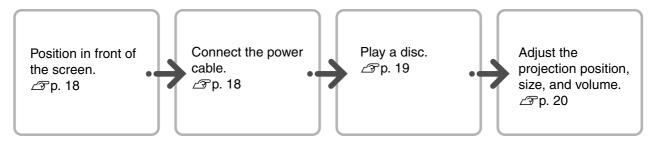


# Playback procedure

No complicated connections are necessary. You do not even need to select the television type or change the input.

You can enjoy your DVDs on the big screen by following these four easy steps.

The standard speakers support virtual surround sound system, and you can enjoy real stereo surround sound using the left and right speakers.

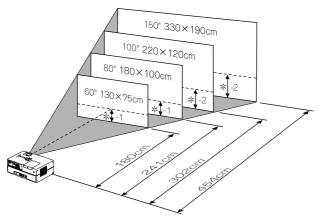


# Installation

# Projection distance and screen size

Place the unit in a position that will enable the optimum size image to be projected on the screen.

When you use a 16:9 ratio, 80" type widescreen, for example, place the unit approximately 241 cm away from the screen.

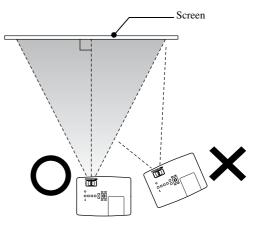


\*The distance from the center of the lens to the base of the screen

The further this unit is moved away from the screen, the larger the projected image becomes. Values are just reference.

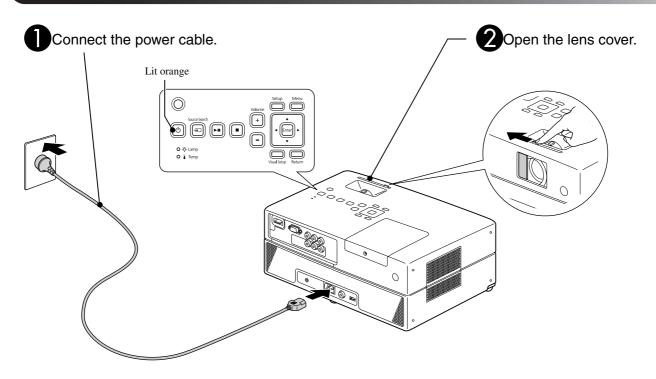
For detailed projection distance values 2 p. 72

Position this unit so that it is parallel to the screen.



If this unit is not placed parallel to the screen, the projected image is distorted in the shape of a keystone.

# Connecting the power cable



# **Disc Playback**

# Playing a disc and projecting













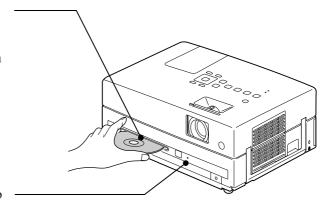
Insert the disc into its slot by facing the disc label upward.

If you are using a dual-side disc, face the side you wish to play downwards.

Insert an 8-cm disc into the disc slot center position.

A short beep sounds and the power comes on.

Inserting the disc makes the Disc indicator light up green.



#### CAUTION

Do not use discs with any CD/DVD label stickers stuck to them, and do not use discs that have condensation on them. This may cause malfunction or damage.



Start playback.

The projection lamp lights up automatically, and projection begins. It takes approximately 30 seconds from when the lamp lights up until the image is projected brightly.

When the Menu appears:

DVD Video @p. 26

Video CD 27 p. 27

MP3/WMA **DIVX B**p. 29



When using this unit at high altitudes, that is 1500 m or more above sea level, set "High Altitude Mode" to "On".  $\triangle \mathfrak{F}$  p. 59

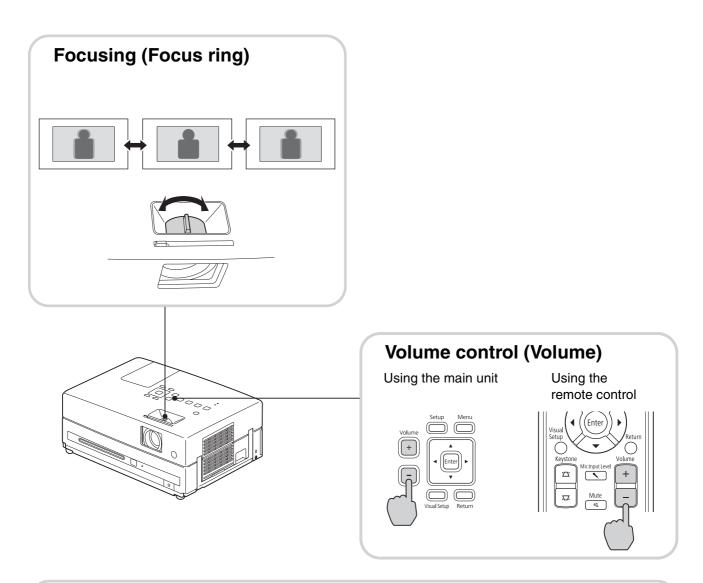


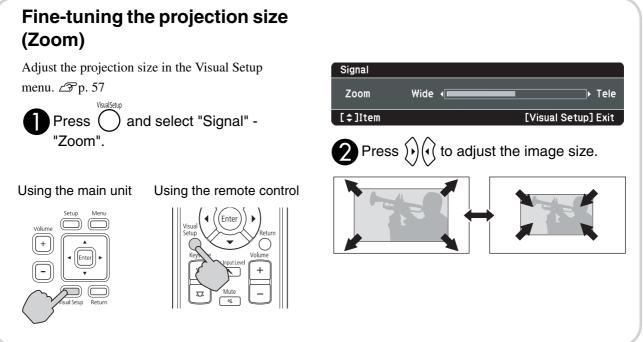
Never look at the lens after you have turned the unit power switch to On.

Close the lens cover before inserting or ejecting a disc.

# Adjusting the projection position and volume

Adjust the volume and image being projected.





# **Correcting keystone** distortion of the image (Keystone)

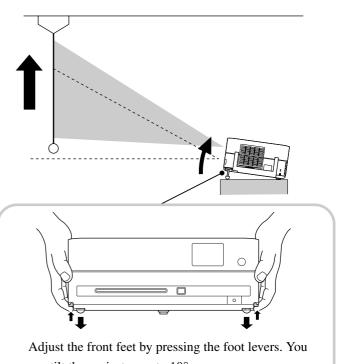
· Adjusting the height of your image This unit automatically detects vertical tilt and corrects the images that are keystone distorted. If the projected image is still distorted, you can adjust it from the Visual Setup menu or using the remote control.  $\triangle p$ . 57

To project the image higher, press the foot levers and adjust the height.



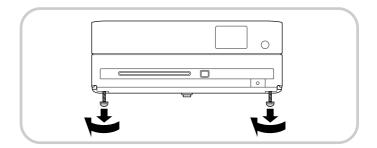
Be sure to push in the front feet by pushing the foot levers when carrying the projector.

· Correcting the distorted images Tern the feet to adjust the horizontal tilt angle.



can tilt the projector up to 10°.

Adjust the feet in such a way that the unit is level.

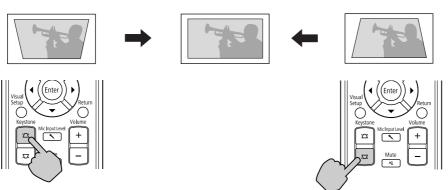


When the bottom of the image is wide

If you extend the foot and tilt the unit, the image will have keystone distortion.

Reshape the keystone distortion as follows:

When the top of the image is wide



If the unit is tilted by up to 30° degrees in an upward or downward orientation, you can correct the image shape. However, it will be difficult to focus if the tilt angle is large.



# Stopping playback













Press

DVD Video Video CD Audio CD DIX After stopping, when you press , playback is resumed from the interrupted scene (resume).

#### Notes on resume play

- If you press when "Loading" is displayed on the screen, "Resume Play" is displayed and the disc is played from the last stop position.
- Remember that the resume play function is canceled if you press utwice.
- You cannot resume playing a disc indicated as
   MP3/WMA JPEG on the File List and on VR formatted DVD Video .
- You can resume playing up to 10 discs that you have recently played even if you replace the discs.
- The position from where playback resumes may be slightly different to where playback was stopped.
- The audio language, subtitle language, and angle settings are memorized along with the stopping position.
- If you stop play when the disc menu is displayed, the resume play may fail.

# Turning off the power

- When you have played back a disc, press (a) to eject the disc from its slot.
  - Once you have pressed (a), if you want to play back the ejected disc again, you cannot push it back into the disc slot manually. Press (a).
- Press (b).

You can use the on the main unit to achieve the same effect as the effect of the on the remote control.

Unplug the power cable from the electrical outlet after the confirmation buzzer beeps twice.

If you only press (b) to turn off the power, electricity continues to be consumed.

Close the lens cover.

Keep the lens cover in place when the unit is not being used to protect the lens from dirt and damage.

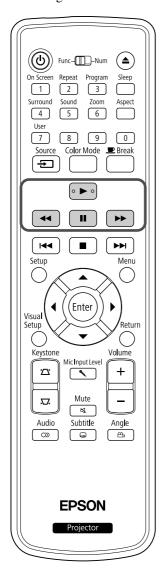
• If you turn on the projector immediately after turning it off, the load time to project images becomes longer.

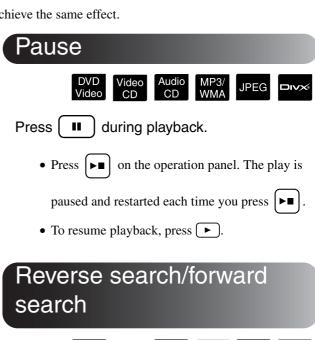
CAUTION

Disconnecting the power cable before the projector beeps may damage the optical components.

# **Basic Playback Operations**

From here on, operations are explained primarily using the buttons of the remote control. You can also use the buttons with the same markings as those on the unit control panel to achieve the same effect.



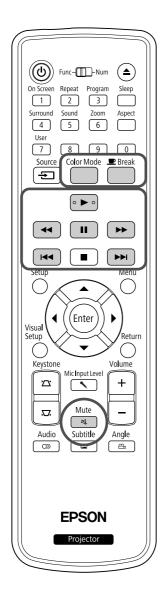


Press ◀ or ▶ during playback.

- There are five levels of reverse/forward search speeds that change each time the buttons are pressed.
- Press 🕨 to return to normal playback.



Depending on the disc you use, the sound may not be audible during forward/reverse search.



# Skip



Press or by during playback or when paused.

DVD Video Video CD Audio CD If you press once during chapter/track playback, playback returns to the start of the chapter or track being played. After this, playback returns to the start of the previous chapter/track each time you press of the previous chapter the previous chap



# Frame advance



JPEG

Press during paused playback.

- A single frame is advanced each time you press
   This unit does not have a frame return function.
- Press 🕨 to return to normal playback.

# Slow motion playback



- Press at the point where you want to begin slow motion playback in order to pause the image.
- Press .
  - There are 4 levels of playback speed, selectable each time ( is pressed.
  - When playing a DVD Video, slow motion review can be performed by pressing . There are 4 levels of rewinding speed that change each time is pressed.
  - Press **b** to return to normal playback.
  - No sound is output during slow motion playback.

# Temporarily using the projector's light as illumination (Break)













The break function is useful if, in the middle of a movie, you want to get up or move around, get a drink,

or some food, and so on. By simply pressing the button you can pause the disc being played until you can get up to turn the lights on in the room.

# Press during playback.

- The projection lamp remains lit, whilst the projected image disappears. flashes in the lower right portion of the screen.
- The screen darkens after about five minutes if the unit is left in break mode without any operations being made. Additionally, after approximately 30 minutes have elapsed, power to the unit automatically turns off.
- Press to return to the state before the break button was pressed. If the power has switched off, press (b) to switch the power back on.



- Operations cannot be performed when the disc menu is displayed.
- When you press any of the following buttons, break mode is cancelled and the function of the button you pressed is performed.



# Color Mode















You can select a picture quality to correspond to the brightness and other conditions of your room.



Press

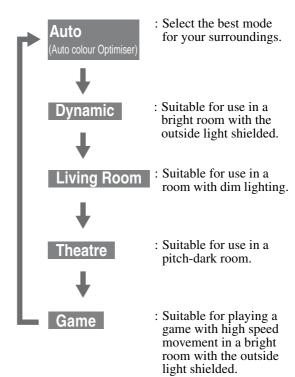


The currently selected color mode name is displayed on the screen.

Dynamic

While the color mode name is displayed, press repeatedly until the desired color mode appears.

After waiting a few seconds, the color mode name disappears and the picture quality changes.



• Game is selectable only when Ext.Vid./Comp. is turned on.

# Adjusting the light intensity (Auto Iris

Set the "Auto Iris" in the Visual Setup menu.  $\mathcal{L}$  p. 58 When "Auto Iris" is on, the light intensity from the lamp is automatically controlled according to the brightness of images, and you can get higher contrast and rich images.

When the color mode is set to "Auto", you cannot make the setting.

Press on and then select "Image" - "Auto Iris".

Select "On" by pressing of to confirm the selection.



#### Mute

Press during playback.

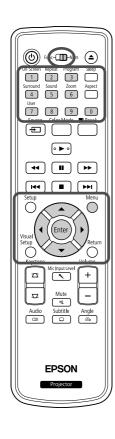
- Sound stops coming from the speakers and headphones.
- Press to return to normal playback. The former volume is also restored when power to the unit is turned on again.

# Advanced Operations

# Becoming a playback expert

# Playback from a DVD menu





Some DVD Video discs have the following kinds of original menus saved in them.

•Root Menu: When multiple titles (image and audio) have been recorded, this integrated disc information is displayed.

To display the top menu

Press and hold for about 3 seconds to display the top menu.

 Menu: Title-specific playback data (chapter, angle, audio, and subtitle menus) is displayed.

1 Press during playback.

Press () and select the item you want to see.

You can also select the title number or chapter number directly using the numeric buttons.

#### When using the numeric buttons

With the function/numerics toggle switch in the [Numeric] position, press the following buttons.

#### Example)

5:  $\boxed{5}$   $\boxed{10: 1 \rightarrow 0}$   $\boxed{15: 1 \rightarrow 5}$   $\boxed{20: 2 \rightarrow 0}$ 

Once you have finished entering numbers, return the function/numerics toggle switch back to the [Function] position.

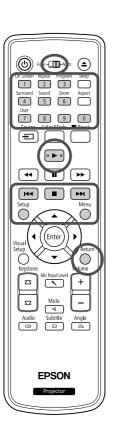
# 3 Press Enter



- Certain discs may not contain a menu. If a menu is not recorded, these operations cannot be executed.
- Depending on the disc, playback may begin automatically, even if is not pressed.

# Playback a Video CD from the menu





You can play a Video CD disc by selecting the desired chapter from any of the following two menus.

- •PBC (Playback control) function: If a Video CD with "PBC (playback control) enabled" specified on the disc or jacket is inserted into the disc slot, a menu screen is displayed. You can select the scene or information you wish to see interactively from this menu.
- •Preview function: You can select the desired track or scene and play it back in the following three formats.
- **Track Digest:** Plays the first three or four seconds of each track sequentially. Six tracks are projected on a single screen page.
- **Disc Interval:** The total disc time is divided by six, and the first three or four seconds of each interval are played. Six images are projected on a single screen page.
- **Track Interval:** When a track is being played, it is divided by six and the first three or four seconds of each interval are played. Six images are projected on a single screen page.

# PBC (playback control) playback

1 When playing a Video CD that contains PBC, the following kind of menu is displayed.



2 Select the item you want to see using or the numeric buttons. or the

The selected contents are played.

To turn to the previous/next page of the menu screen  Press when the menu screen is displayed.
To call the menu screen during playback  Each time is pressed, the menu goes back by one step. Press repeatedly
until the menu is displayed.
To call the PBC menu screen When you display the playback information or the preview screen, the PBC mode is canceled.
To call the PBC menu again during play, stop play by pressing twice. Then,
press .

If you select "Others" from the settings menu and set "PBC" to "Off", the disc is played directly without displaying the menu screen. PBC is "On" by default.  $\triangle Pp. 54$ 

# To play using the Preview function

If you press while a video CD is playing, the following Preview menu is displayed.



- You can also use Track Digest and Disc Interval by pressing when stopped.
- 2 Select an item by pressing 🔾, and press Enter



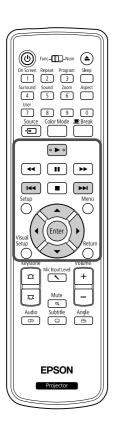
- If a disc contains six or more tracks, you can press to display the next or previous page when you select Track Digest.
- You can return to the initial menu by selecting "Menu" and pressing (Enter).
- You can close the Preview menu by selecting "Exit" and pressing (Enter).

3 Select the track you want to see using ( ) ( ), and press (Enter).

The selected track is played.

# JPEG, MP3/WMA and DivX® playback





Although the JPEG, MP3WMA or Files stored in a disc and a USB storage device are played back by selecting the desired file from a File List, the function varies depending on the file, as follows.

- If a **JPEG** in the folder is selected, the JPEG files stored in the folder are played back starting from the selected file in Slideshow sequence.
- MP3WMA files are automatically played back, starting from the first file. If you want to play back another file, select a file from the File List displayed.

If a Kodak Picture CD or FUJICOLOR CD is inserted into the disc slot, Slideshow playback is automatically performed.

When you play back a disc containing JPEG, MP3/WMA or files, or a USB storage device, the following File List is displayed.



- 2 Select a folder or file using 🔾.
  - When the File List is displayed, you can go to the next or previous page by using When you are on the first page, the button is ineffective and vice versa.
- **3** Press or Enter to begin playback.

If is pressed while playing back JPEG, MP3WMA, Kodak Picture CD or FUJICOLOR CD, the display returns to the File List.

• If is displayed, you will return to the File List when you press twice.



- When you select "Others" from the settings menu and set the "MP3/
  JPEG Nav" to "Without Menu", all MP3, WMA, JPEG and DivX<sup>®</sup> files
  are listed. "With Menu" is set by default. Pp. 54
- MP3/WMA ID3 tag is supported. The album name, artist name, and track name, if set, are displayed at the right of the File List (only alphanumeric characters are supported).

#### **Slideshow Playback Operation**

- The image switching interval depends on the selected image size.
- The Slideshow ends after projection of all JPEG files in the folder.
- You can rotate an image by pressing ()(.
- You can reverse the top and bottom of an image by pressing .
- You can reverse the right and left of an image by pressing .
- If you press during Slideshow playback, the Slideshow is canceled and the thumbnail list is displayed.
- If you press during Slideshow playback, the File List is displayed.

  If you select the desired JPEG file from the list and press, the Slideshow will start.
- A progressive JPEG file takes a longer time to start when compared with a baseline JPEG file.
- The JPEG files stored in a USB storage device are also played in the Slideshow.

## Operations from the thumbnail list



- When you select the desired thumbnail and press (Enter), the Slideshow restarts from the selected position.
- When you press , the File List is displayed. If you select the desired JPEG file from the list and press , the Slideshow will start.

#### When playing MP3/WMA audio

Once menu selection is complete and the audio begins, close the lens cover. You can enjoy just the music being played.

#### Simultaneous MP3/WMA and JPEG playback

If a disc contains a mix of MP3/WMA and JPEG files, you can enjoy the Slideshow with sounds.

When a disc containing both MP3/WMA and JPEG files is inserted into the disc slot, the MP3/WMA files are automatically played. If a JPEG file from the File List displayed is selected, the Slideshow will start.

- The Slideshow ends after projection of all JPEG files in the folder.
- When you press during simultaneous file play, the Slideshow is canceled and the file thumbnail list is displayed. When you select the desired thumbnail from its list and press from the selected position.
- You can return to the File List screen by pressing during simultaneous file play. You can select the desired MP3/WMA file and press
  Then, when you select a JPEG file for Slideshow and press
  the selected items are played back simultaneously.
- If a USB storage device has both MP3/WMA and JPEG files, you can also enjoy the Slideshow with sound.

#### Notes on playback

- Depending on the recording and the characteristics of the disc it is possible that the disc may not be readable, or that disc reading may take some time.
- The time it takes to read a disc differs depending on the number of folders or files recorded on the disc.
- The order of the File List displayed on the screen may differ from the order displayed on the computer monitor.
- Files of a commercial MP3 disc may be played in the different order from those recorded on the disc.
- It may take some time to play MP3 files containing still picture data. The timeelapsed is not displayed until playback has commenced. Further, there are times when an accurate elapsed time is not displayed, even once playback has commenced.
- It is possible that data that has been processed, edited, or saved using computer image editing software might not play.
- When playing back a Slideshow, JPEG files may be played in a different order from that recorded on the disc, and you cannot change the order in which they are played back.

# Playback by selecting the chapter or track number











During playback or when paused, select the chapter or track number you wish to play by pressing the numeric buttons.

The "When using the numeric buttons" p. 26



- Audio CD MP3/WMA JPEG Can also be used when stopped.
- Depending on the disc, certain operations may not be possible.

# Repeat play and random play













Set the [Function] position before performing operations



Depending on the type of disc, you can loop playback within a range of titles, chapters, or tracks, as in the table below.

Press 2 during playback.

The repeat mode changes whenever you press 2 and the repeat mode name and icon are displayed on the screen.

• Video CD is not available when playing back using the PBC function.

#### DVD Video

Screen display	Function	Contents
<b>Chapter</b>	Chapter repeat	Repeats the current chapter.
<b>♂</b> Title	Title repeat	Repeats the current title.
Shuffle	Random play	Randomly plays titles and chapters.
Shuffle Repeat	Random repeat	Repeats random play. Tracks are played in a different order when repeated.
Repeat Off	Repeat Off	Cancels repeat or random play.

#### Video CD Audio CD

Screen display	Function	Contents
<b>♂</b> Track	Track repeat	Repeats the current track.
ڪAII	Disc repeat	Repeats entire tracks of the disc.
Shuffle	Random play	Randomly plays all tracks of the disc.
Shuffle Repeat	Random repeat	Repeats random play. Tracks are played in a different order when repeated.
Repeat Off	Repeat Off	Cancels repeat or random play.

#### MP3/WMA JPEG DIVX®

(If "Others" is selected from the settings menu and if "MP3/JPEG Nav" is set to "With Menu")

Screen display	Function	Contents
Repeat One	File repeat	Repeats the current file.
Repeat Folder	Folder repeat	Repeats files in the current folder.
Shuffle	Random play	Randomly plays files in the current folder.
Repeat Off	Repeat Off	Cancels repeat or random play.

#### MP3/WMA JPEG DIVX

(If "Others" is selected from the settings menu and if "MP3/JPEG Nav" is set to "Without Menu")

Screen display	Function	Contents
Repeat One	File repeat	Repeats the current file.
Repeat All	Disc repeat	Repeats all files on the current disc.
Shuffle	Random play	Randomly plays all files on the disc.
Repeat Off	Repeat Off	Cancels repeat or random play.

#### Canceling repeat play

Press 2 repeatedly until "Repeat Off" is displayed on the screen.



- DVD Video does not allow use of the "Title repeat" function with some DVDs.
- You can also repeat the play from the playback information screen.
   ¬p. 37
- The 2 button is ineffective during program play.

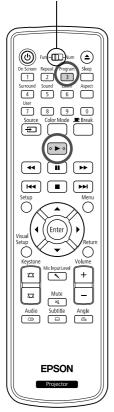
# Program play







Set the [Function] position before performing operations



You can set titles, chapters, and tracks to playback in your order of preference.

Press during play or when paused.

The program screen will appear for you to set a playback sequence.

2 Using the numeric keys, enter title and track/chapter numbers sequentially.

The "When using the numeric buttons" p. 26

- Use ()(() to shift the cursor in respective directions.
- If the disc has 10 or more tracks/chapters, either press or select "Next" on the screen and press to display the next page. To display the previous page, either press or select "Previous" on the screen and press fines).
- If you wish to delete a track or chapter you have entered, position the pointer on it and press (Enter).
- To close the program screen, select "Exit" from the program screen and press (Enter).
- **3** When you have set the playback sequence, select "Start" from the screen and press (Enter).
  - Playback starts in the set sequence.
  - Once the set playback is fully complete, playback stops.

#### Canceling program play

- Press .
- Turn the power switch off.

Resuming normal playback

Stop play and press .



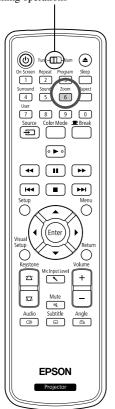
- You can set the program play of up to 10 discs. Also, you can set up to 20 tracks or chapters of each disc. Your settings are held in memory even when you have changed the discs. Insert the disc with the playback sequence set in the disc slot, press 3, and select "Start" from the program screen. Program play starts.
- Pressing 2 during program play will not function.
- You may not use the program play for some types of discs.







Set the [Function] position before performing operations



You can zoom (enlarge or compress) the projection image on the unit screen. If the enlarged image exceeds the screen size, you can display it by panning.

Press 6 during playback.

The magnification (or zoom rate) is displayed.



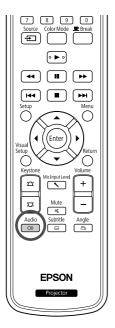
- 2 Select the desired magnification by pressing 6 repeatedly.
  - You can only enlarge JPEG images. You cannot reduce them.
  - After you have enlarged the image, press  $(\bullet)$   $(\bullet)$   $(\bullet)$  to pan.
  - To return to the original size, press 6 repeatedly until the Zoom Rate disappears.

#### Changing the audio language









When a disc has been recorded with multiple audio signals or languages, you can switch to the available audio signal or language of your preference.

Press during playback.

The current audio settings are displayed on the screen.

2 Select the desired settings by pressing repeatedly.



- You can also switch from the playback information screen.  $\triangle T$  p. 37
- If a language code (for example 6978) is displayed  $\triangle Tp. 55$

#### Changing the subtitles display







You can choose whether or not to display subtitles for discs that have been recorded with subtitles. If a disc has multiple language subtitles, you can switch to the preferred language.

Press Subtitle during playback.

The current subtitle settings are displayed on the screen.

- 2 Select the desired settings by pressing repeatedly.
  - If the available subtitle is not found, the nicon is displayed.



- You can also switch from the playback information screen. \( \sigma \) p. 37
- When using \(\text{DVX}\), you can switch between the embedded subtitle and the subtitle file data. Both of them can be displayed with 45 single-byte characters (27 double-byte characters) on 2 lines maximum. Any excess characters are not displayed.

A subtitle file with any of the following extensions is valid:

".srt", ".smi", ".sub", ".ssa" and ".ass";

The subtitle file name must be the same as the file name of the movie.

#### Changing the angle





For discs that have been recorded with multiple camera angles, you can switch from the main angle to a different camera angle of your preference, such as from above, or from the right, during playback.

Press during playback.

The current angle is displayed on the screen.

2 Select the desired angle by pressing Angle repeatedly.



You can also switch from the playback information screen.  $\Delta Pp. 37$ 

#### Carrying out operations from the playback information screen

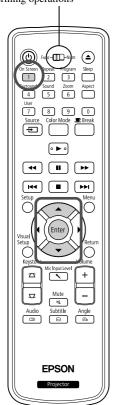








Set the [Function] position before performing operations



You can check the current playback status and change your settings without stopping the play.

Press  $\binom{On Screen}{1}$  during playback.

The projected image is reduced, and the following information screen is displayed under it.



- When you are using a Audio CD, the playback time is switched as follows each time you press 1: "Single Remain" → "Total Elapsed" → "Total Remain" → "Single Elapsed.
- When you are using a MP3/WMA, the playback time is switched as follows each time you press 1: "Total Elapsed" → "Total Remain" → "-:--:--" (WMA does not support for Track Time)

# Pressing , position the pointer on the desired item and press Enter.

- You can set the title/chapter/track number and time by using the numeric keys, and set the play start time. 

  P. 26
- When the selected item appears, select the desired value using and press (Enter).
- $\bullet$  Press  ${ {\footnotesize \bigcirc \atop 1} \atop {\footnotesize 0} \footnotesize {\footnotesize 0$
- When you are using and "-:--:" is displayed, you can set the play start time of the track by using numeric keys.
- You cannot use this function when play is stopped.

### **3** Press Enter.

Playback starts with the selected title/chapter/track or specified time settings.

#### Contents on the playback information screen

#### DVD Video

Title	Specify a title number you wish to play by using the numeric keys.
Chapter	Specify a chapter number you wish to play by using the numeric keys.
Audio	Select the sound system and the language.
Subtitle	Select to display or not display subtitles and language.
Angle	You can switch the camera angle.
TT time	Set the play start time of a title using the numeric keys.
Ch time	Set the play start time of a chapter using the numeric keys.
Repeat*	Select the repeat play mode.
Time Disp.	Select how to display the play time at bottom right of the playback information screen.

#### Video CD

Track	Specify a track number you wish to play using the numeric keys.
Disc Time	Set the play start time of a disc using the numeric keys.
Track Time	Set the play start time of a track using the numeric keys.
Repeat*	Select the repeat play mode.
Time Disp.	Select how to display the play time at bottom right of the playback information screen.

<sup>\*</sup>You cannot select random play or random repeat for the repeat setting on the playback information screen. Set it up using  $\stackrel{\text{Repeat}}{2}$ .  $\swarrow$  p. 32

#### Setting the sleep timer







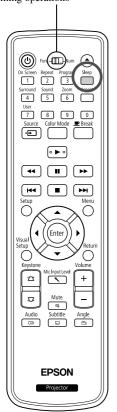








Set the [Function] position before performing operations



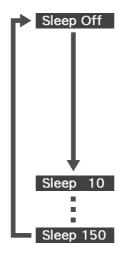
When the time you set on the sleep timer has passed, the unit power switch is turned off automatically. You can prevent unnecessary power from being consumed if you fall asleep while watching a movie.

If the sleep timer is set to "Sleep Off" and if play is stopped or finished and the unit is not operated for approximately 30 minutes, the unit power switch is turned off automatically.

#### Press Sleep.

• When you press , the current sleep timer setting is displayed.

When the sleep timer is displayed, select the desired setting using



- : If the standby screen is projected and if the unit is not operated for approximately 30 minutes, its power switch is turned off automatically. If image signals are not entered in Ext.//comp. mode and if the unit is not operated for approximately 30 minutes, its power switch is turned off automatically (default setting).
- : After 10 minutes have elapsed, the power switches off.
- : After 150 minutes have elapsed, the power switches off.

#### Setting the sleep timer

The "Sleep" message is displayed on the screen approximately 20 seconds before automatic power off.

#### Changing the sleep timer

Press repeatedly and select the new time.

#### Checking the sleep timer setting

Once the sleep timer has been set, if you press once, the remaining time before sleep is displayed on the screen.



- Sleep timer settings are not memorized. If the power is switched off, the sleep timer is canceled.
- With discs that return to the menu once playback has completed, power to the unit will not turn off even when the "Sleep Off" mode is set.

#### Changing the aspect ratio









The unit automatically recognizes the aspect suitable for the input signal, and the image is projected in the appropriate aspect. If you want to change the aspect yourself, or if the aspect is not correct, you can change it in the following way.

#### Press Aspect.

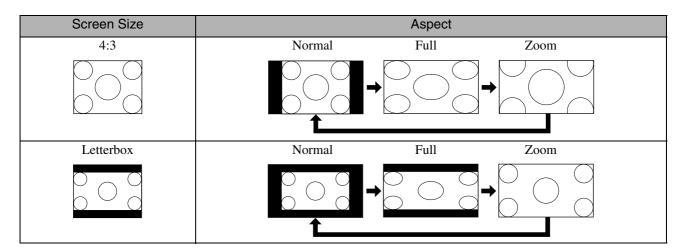
- Each time you press the aspect ratio name is displayed on the screen and the aspect ratio is changed.
- The aspect ratio for disc settings and image signals can be changed in the following way.

#### When projecting by using the built-in DVD player

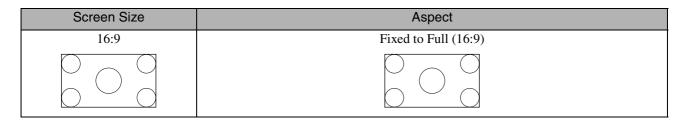
Screen Size	Aspect
16:9	Fixed to Full (16:9)
4:3	Normal Full Zoom
Letterbox	Normal Full Zoom
	↑

<sup>\*</sup> JPEG Fixed to Normal when the Slideshow is executed.

# When projecting component video (SDTV)/HDMI (SDTV), composite video images



#### When projecting component video (HDTV)/HDMI (HDTV) images



#### When projecting computer images

Wide panel computer images are always projected at the normal (wide screen) setting.

If wide panel computer images are not projected in the correct aspect, press the button to change to an appropriate aspect.

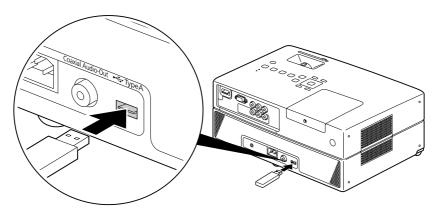
# Playback by attaching a peripheral device

#### Connecting a USB storage device

You can attach a USB memory or multicard reader that conform to the USB 1.1 to the unit and play the following format files.

- MP3/WMA files
- JPEG files
- DivX<sup>®</sup> files

The file playback and your operations during play are the same as when you play files of a Data CD using the standard DVD player.





- When you connect a USB storage device to the unit, the source is changed to the USB and playback starts automatically when:
- a disc is being played or stopped on the standard DVD player.
- another video device, a TV set or a computer is connected to the unit and a disc is being played or stopped.
- If you use a USB hub, the unit will not operate normally. Connect the USB storage device directly to the unit.

#### CAUTION

- When power to the unit is turned on with only a USB storage connected (no disc inserted in the disc slot), the USB storage is not recognized and "No Disc" is displayed. Even if you press , it does not playback. In such a case, remove the USB storage and then reconnect.
- Do not remove the USB storage during a Slideshow. Stop the Slideshow by pressing •, and remove the USB storage.

#### Connecting to another video device, a TV set, or a Computer

Aside from the built-in DVD player, this unit can project images by connecting to a computer or the following devices with a video output port.

- Video recorder - Game machine - Video device with built-in TV tuner - Video camera and others

#### Video equipment signal format

The kind of video signal that can be output depends on the video equipment. The image quality differs depending on the video signal format. Generally speaking, the order of quality of the image goes as follows.

1. HDMI  $\rightarrow$  2. Component video  $\rightarrow$  3. Composite video

Check which signal system to use in the "Documentation" supplied with the video equipment that is being used. The composite video may be called "Image output".

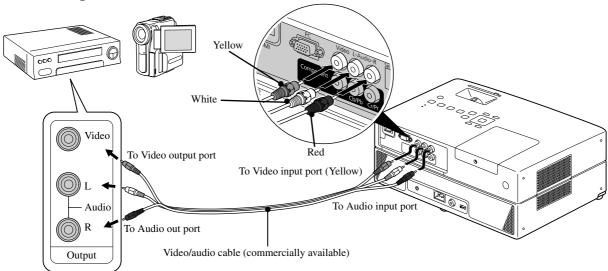


If the equipment you are connecting has a unique connector shape, connect using the cable supplied with your equipment, or an optional cable.

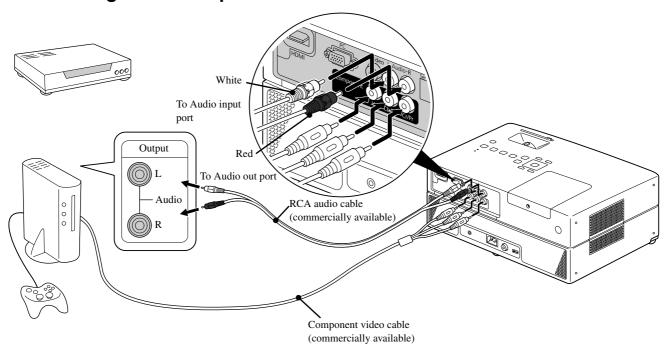
#### CAUTION

- Turn off connected equipment. Damage may result if you try to connect when the power is on.
- Close the lens cover before connecting a device to the unit. If fingerprints or marks are left on the face of the lens, the image will not be projected clearly.
- Do not try to force a cable plug with a different shape the port. This may damage the unit or the equipment.

#### Connecting with a video cable



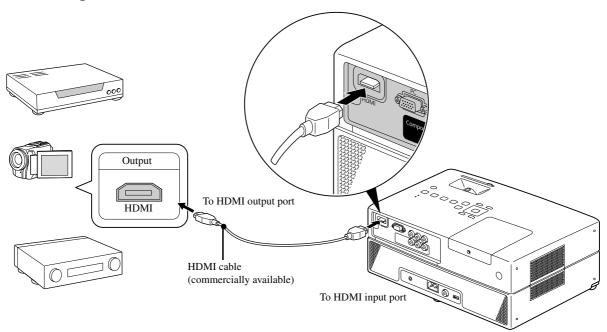
#### Connecting with a component video cable





For a D port output device, use a commercially available D port - component conversion cable.

#### Connecting with an HDMI cable

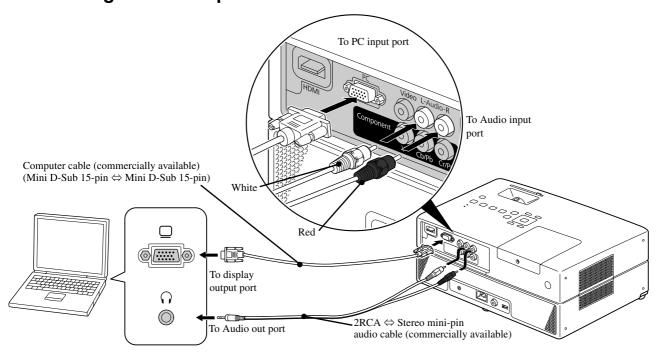


Use a HDMI cable that meets the HDMI standard. Otherwise, the image may not be displayed clearly or lost.



PCM Audio is supported. If no audio is output, set the destination device to the PCM out mode.

#### Connecting with a computer





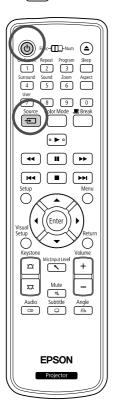
Use a cable marked "No resistance" when you use a commercially available  $2RCA \Leftrightarrow$  stereo mini-plug audio cable.

#### Projecting images from external video equipment or a computer

This unit automatically detects input signals and changes the projected image.

The projector automatically detects signals being input from connected equipment, and the image being input from the equipment is projected.

You can project the target image quickly as input ports with no image signal being input are ignored when you change by pressing the source.



- 1 Open the lens cover and press (b)
- 2 Turn the device power switch on, and press the [Play] or [Playback] button on the video device.
- 3 Press ( to start detecting input signals.

When two or more pieces of equipment are connected, press the until the target image is projected.

To return to the standard built-in DVD player
Make any of the following operations.

• Press ▶.

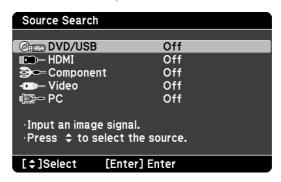
• Insert a disc into the disc slot.

• Select "DVD/USB" by pressing Source

• Press ♠.



The following screen showing the status of image signals is displayed when only the image that the projector is currently displaying is available, or when no image signal can be found. You can select the input port where the equipment you want to use is connected. If no operation is performed after about 10 seconds, the screen closes.



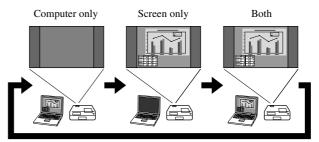
#### When a computer image is not projected

You can switch the image signal destination from the computer by holding down  $\stackrel{\text{Fn}}{}$  and pressing  $\stackrel{\text{FO}}{}$  (the key is usually labeled  $\bigcirc$  or  $\stackrel{\text{L}}{}$ ).  $\stackrel{\text{L}}{}$  Computer "Documentation"

After switching, wait a few seconds for projection to start.

Examples of Switching Output			
Epson	Fn + F8	Toshiba	(Fn) + (F5)
NEC		IBM/Lenovo	/Fn\ + /F7\
Panasonic	<u>(Fn)</u> + <u>(F3)</u>	Sony	
SOTEC		Dell	(Fn) + (F8)
HP	<u>(Fn)</u> + <u>(F4)</u>	Fujitsu	(Fn) + (F10)
Macintosh	Set mirroring or display detection.  Depending on your OS, you can set them by pressing  E2.		

Depending on the computer, each time the key to change the output is pressed, the display status may also change as follows.



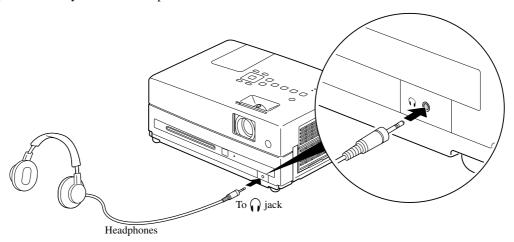
# **Audio Settings**

#### Listening with headphones

#### **⚠** Caution

- When listening with headphones, make sure the volume is not too high. You may damage your hearing when listening to sounds at high volume over an extended period of time.
- Do not set the volume too high from the outset. A loud sound may be produced suddenly that may cause damage to your headphones or your hearing. As a precaution, lower the volume before you switch off this unit then raise it gradually after you switch it back on.

Connecting commercially available headphones.





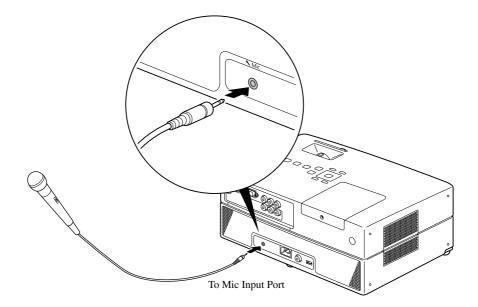
Once you have connected your headphones to the headphone jack, no sound will come from the speakers.

#### Connecting a microphone

You can output microphone audio from the projector's speaker by connecting a microphone to the projector's Mic Input Port.

To adjust audio from the Mic input port, press







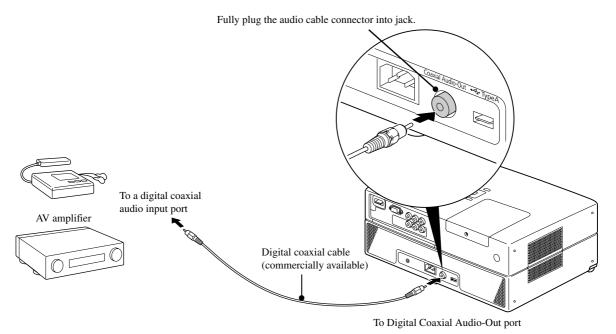
- When the Mic Input Level is too low, adjust it using MicInputLevel .  $\mathcal{T}p.64$
- You can select "Mic Input Level" from the Option page in the Visual Setup menu. 🗷 p. 59

CAUTION

The projector is compatible with a dynamic mic. It does not support plug-in-power type.

#### Connecting to audio equipment with a digital coaxial audio input port

You can connect to AV amplifiers and so on or equipment capable of making digital recordings when they are equipped with a coaxial digital audio input port. When connecting, use a commercially available coaxial digital cable.

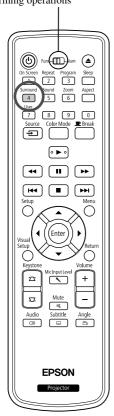




The signal being output from the Digital Coaxial Audio-Out port is changed with the "Digital Output" setting in the settings menu. For detailed output signal information  $\triangle P$  p. 56

#### Selecting the surround sound mode

Set the [Function] position before performing operations



When you turn the Virtual surround sound function on, you can enjoy real stereo sound although sound is usually provided through multiple speakers.

Press Surround 4.

The current settings are displayed on the screen.

Stereo

2 Select the desired settings by pressing 4 repeatedly.

Stereo : Stereo mode

Multi : Virtual surround sound mode

#### Selecting the digital sound effects

Set the [Function] position before performing operations



You can select the sound effects appropriate to the musical genre of the current disc.

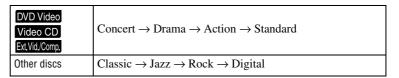
1 Press 5

The current settings are displayed on the screen.

Concert

2 Select the desired settings by pressing sound repeatedly.

The sound effects, which you can select according to the inserted disc or the connected source, are switched as follows:





Select "Concert" or "Classic" sound effects for flat sound output.

# Settings and Adjustments

# **Setup Menu Operation and Functions**

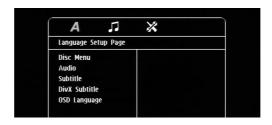
The settings of this unit can be adjusted to suit the environment in which it is used.

#### Using the setup menu

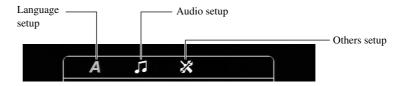


1 Press during playback or when stopped.

The following setup menu is displayed.



2 Press and select the desired icon.



Press to select the item to be set, and then press .

The settings are displayed on the right.



- 4 Select the setting you wish to change, and press Enter

  To display other setting pages, select a desired icon by repeatedly

  pressing (1).
- $\textbf{5} \quad \text{After setup is complete, press} \overset{\text{Setup}}{\bigcirc} \text{ to close the setup menu.}$

#### Setup menu list

#### Language page

Eject the disc before the setup. You cannot make the setting below when a disc is inserted.

Setting Item	Setting Contents
Disc Menu Select the DVD video menu language.	For "6978" and other language codes, see the "Language code list". Pp. 55
Audio Select the DVD video soundtrack language.	These settings become available when settings have been recorded on the disc itself. If they have not been recorded, the setting contents become available. If the language selected is not recorded on the
Subtitle Select the DVD video subtitle language.	disc, the default language for that disc is used.
DivX Subtitle Select a font type that supports the DivX subtitle.	Central Europe, Cyrillic, Greek, Standard, Hebrew Select the "Standard" to display the standard list of Roman subtitle fonts already installed on the unit.
OSD Language Select the menu language (for Setup and Visual Setup).	English :

#### Audio page

Setting Item	Setting Contents
Digital Output  Select the kind of output signal according to the equipment connected to the Digital  Coaxial Audio-Out port.  For detailed information  P. 56	All: Use when connected to a DTS/Dolby Digital Decoder, or when connected to equipment with these functions.  PCM Only: Use when connected to equipment that is only compliant with Linear PCM.
Night Mode Compensates for the variation in the way we hear loud and quiet sounds when playing back at low volume. Only available for DVD videos that have been recorded in Dolby Digital. Turn the Dolby Digital mode "On" if the volume of voices in the movie is low.	On: Reduce the loudness but increases volume of quieter sounds.  Off: Use this option to enjoy normal or powerful clear stereo surround sound.

#### Others page

Setting Item	Setting Contents
Screen Saver Set whether or not to start the screen saver function if play has stopped and a still image is projected for approximately 15 minutes without any unit operation.	On: The Screen Saver function starts. Off: The Screen Saver function does not start.
PBC Set to activate the PBC or cancel it during play of Video CD.	<ul> <li>On: Starts to play with PBC active. When Video CD is played, its menu screen appears.</li> <li>Off: Starts to play with PBC inactive. The first and subsequent tracks are played sequentially.</li> </ul>
DivX <sup>®</sup> VOD code  The registration codes required for video ondemand service are provided.	Press and check your registration code that is displayed.  After checking, press Enter.  Using your registration code, you can purchase or rent videos provided by DivX® video on-demand services (www.divx.com/vod).
MP3/JPEG NAV Display of hierarchical menu including folders.	Without Menu: Displays all MP3/WMA, JPEG and contained on a disc.  With Menu: Displays the menu containing folders.
Default  Resets all settings to their initial states, except for "Disc Lock" and "Password" from the Settings menu and "Reset Lamp Hours" from the Visual Setup menu.	Press ( and press ( to start initialization.
Password Set your password when you play a disc protected with a "Disc Lock."	Using the numeric keys of the remote control, enter your 6-digit password in the "Old Password" column. When you enter a password for the first time, enter "000000".  Enter a new 6-digit password in the "New Password" column. Enter the new 6-digit password again for confirmation in the "Confirm PWD" column.  When you press (Enter), your new password is registered.
	If you cannot remember your password, simply enter "000000" in the "Old Password" column.
Disc Lock If you have locked a disc with the Disc Lock function, you will need to enter your password to play the disc. You can protect discs from unauthorized play. You can lock up to 40 discs.	Lock: Locks playback of the currently inserted disc. You will need to enter the 6-digit password to play it. Unlock: Allows playback of all discs.

### Language code list

Abkhazian	6566	Gaelic; Scottish Gaelic	7168	Magyar	7285	Sinhalese	8373
Afar	6565	Gallegan	7176	Malayalam	7776	Slovensky	8373
Afrikaans	6570	Georgian	7565	Maltese	7784	Slovenian	8376
Amharic	6577	Gikuyu; Kikuyu	7573	Manx	7186	Somali	8379
Arabic	6582	Guarani	7178	Maori	7773	Sotho; Southern	8384
Armenian	7289	Gujarati	7185	Marathi	7782	South Ndebele	7882
Assamese	6583	Hausa	7265	Marshallese	7772	Sundanese	8385
Avestan	6569	Herero	7290	Moldavian	7779	Suomi	7073
Aymara	6589	Hindi	7273	Mongolian	7778	Swahili	8387
Azerhaijani	6590	Hiri Motu	7279	Nauru	7865	Swati	8383
Bahasa Melayu	7783	Hrwatski	6779	Navaho; Navajo	7886	Svenska	8386
Bashkir	6665	Ido	7379	Ndebele, North	7868	Tagalog	8476
Belarusian	6669	Interlingua (International)	7365	Ndebele, South	7882	Tahitian	8489
Bengali	6678	Interlingue	7365	Ndonga	7871	Tajik	8471
Bihari	6672	Inuktitut	7385	Nederlands	7876	Tamil	8465
Bislama	6673	Inupiaq	7375	Nepali	7869	Tatar	8484
Bokmål, Norwegian	7866	Irish	7165	Norsk	7879	Telugu	8469
Bosanski	6683	Íslenska	7383	Northern Sami	8369	Thai	8472
Brezhoneg	6682	Italiano	7384	North Ndebele	7868	Tibetan	6679
Bulgarian	6671	Ivrit	7269	Norwegian Nynorsk;	7878	Tigrinya	8473
Burmese	7789	Japanese	7465	Occitan; Provencal	7967	Tonga (Tonga Island)	8479
Castellano, Enpañol	6983	Javanese	7486	Old Bulgarian; Old Slavonic	6785	Tsonga	8483
Catalán	6765	Kalaallisut	7576	Oriya	7982	Tswana	8478
Chamorro	6772	Kannada	7578	Oromo	7977	Türkçe	8482
Chechen	6769	Kashmiri	7583	Ossetian; Ossetic	7983	Turkmen	8475
Chewa; Chichewa; Nyanja	7889	Kazakh	7575	Pali	8073	Twi	8487
中文	9072	Kernewek	7587	Panjabi	8065	Uighur	8571
Chuang; Zhuang	9065	Khmer	7577	Persian	7065	Ukurainian	8575
Church Slavic; Slavonic	6785	Kinyarwanda	8287	Polski	8076	Urdu	8582
Chuvash	6786	Kirghiz	7589	Português	8084	Uzbek	8590
Corsican	6779	Komi	7586	Pushto	8083	Vietnamese	8673
Česky	6783	Korean	7579	Russian	8285	Volapuk	8679
Dansk	6865	Kuanyama; Kwanyama	7574	Quechua	8185	Walloon	8765
Deutsch	6869	Kurdish	7585	Raeto-Romance	8277	Welsh	6789
Dzongkha	6890	Lao	7679	Romanian	8279	Wolof	8779
English	6978	Latina	7665	Rundi	8278	Xhosa	8872
Esperanto	6979	Latvian	7686	Samoan	8377	Yiddish	8973
Estonian	6984	Letzeburgesch;	7666	Sango	8371	Yoruba	8979
Euskara	6985	limburgan; limburger	7673	Sanskrit	8365	Zulu	9085
Ελληνικά	6976	Lingala	7678	Sardinian	8367		
Faroese	7079	Lithuanian	7684	Serbian	8382		
Français	7082	Luxembourgish;	7666	Shona	8378		
Frysk	7089	Macedonian	7775	Shqip	8381		
Fijian	7074	Malagasy	7771	Sindhi	8368		

### "Digital Output" settings and output signals

Playback Disc	"Digital Output" Settings		
1 layback bisc	Stream	PCM	
Linear PCM DVD video	Linear PC	CM Stereo	
DTS DVD video	DTS bit stream	48 kHz, 16 bit linear PCM	
Dolby digital DVD video	Dolby digital bit stream	48 kHz, 16 bit stereo linear PCM	
Audio CD, Video CD, SVCD	44.1 kHz, 16 bit stereo linear P	CM/48 kHz, 16 bit linear PCM	
DTS Audio CD	DTS bit stream	44.1 kHz, 16 bit linear PCM	
MP3/WMA disc	32/44.1/48 kHz,	16 bit linear PCM	

# Operations and functions on the Visual Setup menu

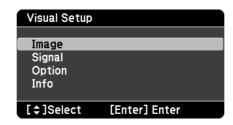
You can adjust the brightness, contrast, and other values of the projected image.

#### Operations on the Visual Setup menu

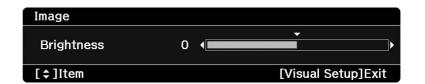


1 Press during projection.

The following menu is displayed.



Press to select the item to be set, and then press Enter).



- **3** Press to select the item to be set, and then press to adjust.
  - When options are displayed, select a desired option and press (Enter) to enable it.
- 4 After setup is complete, press to close the menu.

### Visual Setup menu

#### Image page

When the color mode is set to "Auto", you cannot make the setting. 
Pp. 25

Setting Item	Setting Contents
Brightness	Adjusts the image brightness.
Contrast	Adjusts the difference between light and shade in the images.
Color Saturation	Adjusts the color saturation for the images. (This is not displayed when a computer is connected.)
Tint	Adjusts the image tint. (This is not displayed when the external video or computer connected is not NTSC.)
Sharpness	Adjusts the image sharpness.
Color Temp.	Adjusts the entire image tint. High: Makes the image bluish. Low: Makes the image reddish.
Auto Iris	Adjusts the light intensity according to the brightness of the displayed image. On: Activates Auto Iris. Off: Deactivates Auto Iris.

#### Signal page

Setting Item	Setting Contents
Keystone	You can correct keystone distortion in the vertical directions.
Auto Keystone	On: Performs Auto Keystone. Off: Deactivates Auto Keystone.
Zoom	Adjusts the image size. Wide: Enlarges the image. Tele: Reduces the image.
Power Consumption When the color mode is set to "Auto", you cannot make the setting.  Pp. 25	You can set the Lamp brightness to "ECO" or "Normal".  Select "ECO" if the images being projected are too bright such as when projecting images in a dark room or onto a small screen.  When "ECO" is selected, the amount of electricity consumed and the lamp's operation life are changes as follows, and fan rotation noise during projection is reduced. Electrical consumption: about 16% decrease, lamp life: about 1.2 times longer
Resolution	When set to "Auto", the resolution of the input signal is automatically identified. If the images cannot be projected correctly when set to "Auto", such as when some of the image is missing, adjust to "Wide" depending on the connected computer for wide screens, or set to "Normal" for "4:3" or "5:4" screens.
Video Signal Sets the signal format of the video equipment connected to the Video input port.	Only displayed when "Video" is selected as the source. At the time of purchase, this is set to "Auto" so the video signal is recognized automatically. If interference appears in the projected images or no images appear when you select "Auto", select the appropriate signal manually.
Ceiling Projection	On: Projects images onto the ceiling using the optional Ceiling Reflector Kit.  Off: Deactivates the ceiling projection.

#### Option page

Setting Item	Setting Contents
Mic Input Level	Adjust if the Mic Input Level is too low to hear from the projector's speaker, or if the level is too high making the audio crack. When the Mic Input Level is turned down to "0", no audio is output from the speaker.
User Button	You can select the item assigned from the Visual Setup menu with
	the remote control's $\frac{User}{7}$ . By pressing the $\frac{User}{7}$ the assigned
	menu item selection/adjustment screen is displayed, allowing you to make one-touch settings/adjustments. You can assign one of the
	following five items to the $\frac{User}{7}$ .
	Power Consumption, Info, Zoom, Resolution, Ceiling Projection
Child Lock	On: Starts the Child Lock. To turn the power supply on, hold
Use (b) on the main unit to lock the power-	down on the main unit for approximately 5 seconds or
on.	hold down (1) on the remote control.
	Off: Cancels the Child Lock.
High Altitude Mode Set this mode when you use this unit at high altitudes.	When using this unit at high altitudes, that is 1500 meters or more above sea level, turn this mode "On".

#### Info page

Item		Contents
Information Displays the current status.	Lamp Hours Source:	Total usage time of the lamp. 0H is displayed for 0 to 10 hours. Changes to units of 1 hour at 10 hours and above. The display turns yellow text when it is time to change the lamp.  Displays whether standard DVD player images are being projected, or images from
		external video equipment or a computer are being projected. l:This is displayed when "Video" is selected as the "Source", and displays the format
	Resolution:	of the video signal being input.  The resolution is displayed if the "Source" is other than "Video". The resolution of image signals from a computer and the component video signals that are being input are displayed.
	Status:	Displays any error information. You may be asked for this information when you contact your service center.
Reset Lamp Hours		we replaced the unit lamp, initialize the lamp hour settings. The accumulated lamp ne is cleared.

# **Security Functions**

#### Anti-Theft Lock

The projector includes the following security devices to prevent from being stolen.

• Security slot

The security slot is compatible with the Microsaver Security System manufactured by Kensington. You can find details about the Microsaver Security System on the Kensington homepage http://www.kensington.com/.

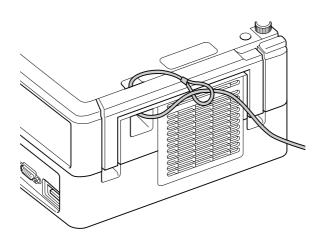
• Security cable installation point

A commercially available theft-prevention wire lock can be passed through the installation point to secure the projector to a desk or pillar.

#### Installing the wire lock

Pass an anti-theft wire lock through the handle.

See the documentation supplied with the wire lock for locking instructions.



# Appendix

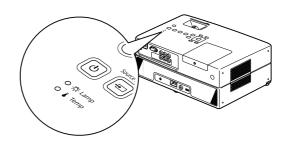


#### Reading the indicators

You can check the status of this unit using the indicators on the top panel.

Check each condition in the following table and follow the steps to remedy the problem.

\* If all indicators are not lit, the power cable is not connected correctly or the unit is not powered.



#### When the ♥ or ▮ indicators flash orange

Warning







Red



Orange



#### **High Temperature** alarm

You can continue projecting in this state. Projection stops automatically if subsequent high temperatures are registered.

Check the 2 items listed.

- · Move this unit away from the wall at least 20 cm.
- · Clean the air filter. △ p. 66



If there is no improvement when you press ( ) and switch the

power on, discontinue use and disconnect the power cable from

the electrical outlet. Contact your local dealer or the nearest address provided in the Inquiries. App. 80

Green

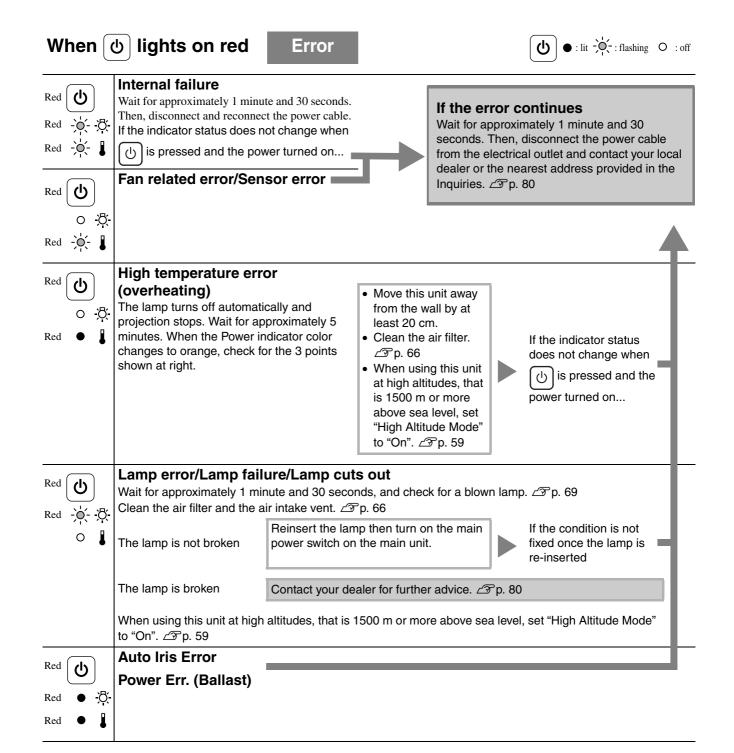


Orange



Lamp replacement notification

It is time to replace the lamp. Replace the lamp with a new one as soon as possible. Do not continue to use the lamp in this state, otherwise it may explode. 
Pp. 69



#### When the ☼ or ▮ indicators are off Normal



Orange	Standing-by	Shows that the unit is ready to be used.
Green	During warming up (Approx. 30 sec)	In warm-up mode, pressing base has no effect.  Do not unplug the power cable during warm-up. This may reduce the lifespan of the lamp.
Green	Projection in Progress	
Orange	Cooling down	The operation of all remote control and main unit buttons is suspended during cooldown. Enters stand-by mode once cool-down has completed.  Do not unplug the power cable during cool-down. This may reduce the lifespan of the lamp.
Green	Break	Press to return to normal playback.
Flashes orange two times	Child Lock	Child Lock is set. $\triangle \mathcal{F}$ p. 59

#### When the indicators provide no help

If this unit is not functioning normally, check the following notes before requesting repairs. However, if the unit fails to improve, contact your dealer for advice.

At these times	Check here	Reference page
Power does not turn on	• Did you press ①?	<b>△</b> Pp. 18
	Disconnect and reconnect the power cable.	<b>Æ</b> p. 18
	• Is the unit cooling down?	<b>⊿</b> Pp. 63
	• If the indicator goes on and off when you touch the power cable, turn off the main power switch then disconnect and reconnect the power cable. If the unit fails to improve, it is possible that the power cable has been damaged. Stop using the unit, disconnect the power cable from the electrical outlet, and contact your dealer.	<b>∠</b> Fp. 80
	• Is the Child Lock set?	<b>△</b> Pp. 59
No images appear	• Is the lens cover closed?	<b>⊅</b> p. 18
	• Is the DVD video region number correct?	<b>Æ</b> p. 10
	• Press <b>b</b> to switch to DVD.	<b>Æ</b> p. 46
	• Is the lamp spent?	△7 p. 61
Images are fuzzy or out of	Has the focus been adjusted?	<b>⊅</b> p. 20
focus	• Is the unit at the correct distance?	<b>⊅</b> p. 72
	Could there be condensation?	<b>⊅</b> p. 8
Images appear dark	• Is the color mode appropriate to the usage environment?	<b>⊅</b> p. 25
	• Is the lamp due for replacement?	<b>⊅</b> p. 67
	• Is the screensaver running?	<b>₽</b> p. 54
The remote control does not work	• Is the Function/Numerics toggle switch in the [Numeric] (numerical input) position?	<b>∠</b> Fp. 26
	Depending on the disc, certain operations are prohibited.	-
	• Are the batteries dead, or have the batteries been inserted incorrectly?	<b>⊅</b> p. 16
There is no audio or it is too	Has the volume been adjusted to the minimum setting?	<b>☞</b> p. 20
low.	• Is the Mic Input Level turned up too high?	<b>☎</b> p. 59
	■ Is mute mode active? Press    Mute	-
	• Is the lens cover closed?	△7 p. 18
The audio distorts	Is the volume too loud?	△Fp. 20
No sound can be heard from the microphone	• Is the microphone connected correctly?  Disconnect the cable from the Mic Input Port, and then reconnect the cable.	<b>≇</b> p. 49
	• Is the Mic Input Level turned down too low?	<b>≇</b> p. 59
	• The projector is compatible with a dynamic mic. It does not support plug-in-power type.	-
The audio/subtitle language cannot be changed	If multiple languages are not recorded on the disc, they cannot be changed.	-
	• Depending on the disc, there are some types that can only be changed from the DVD menu.	-
Subtitles do not appear	• If there are no subtitles on the disc, they are not displayed.	-
	• Is the subtitle language set to "OFF"?	<b>₽</b> p. 36

#### When using external video or computer mode

At these times	Check here	Reference page
No images appear	Is the power for the connected equipment turned on?     Switch on the power to the connected equipment, or start playback depending on the playback method for the connected equipment.	<i>⊈</i> F p. 46
"Signal not supported" is displayed		
	When a computer is connected     Are the resolution and refresh rate modes for the image signal compatible with the unit?     Use the computer's documentation and so on to check and change the resolution and the refresh rate for the image signal being output by the computer.	<b>∕</b> Pp. 73
"No signal." is displayed	Are the cables connected correctly?	<b>☎</b> p. 43 - 45
	Is the power for the connected equipment turned on? Turn on the power for the connected equipment. Press the playback button according to the connected video equipment.	<i>⊈</i> 7 p. 46
	Is a laptop computer or a computer with a built-in LCD screen connected?  Change the image signal's output destination from the computer.	<i>⊈</i> Fp. 47
	• Press bto switch to DVD.	∠3 p. 46
The signal is distorted	• If an extension cable is used, electrical interference may affect the signals. Connect amplification equipment and check.	-
	Is the computer's image signal resolution mode compatible with the unit?  Use the computer's documentation and so on to check and change the resolution for the image signal being output by the computer.	<b>∠</b> F p. 73
	Press the Enter button on the remote control if interference or flickering appear in the computer image being projected. "Running Auto Setup" is displayed and synchronization, tracking, and position are automatically adjusted.	-
Image is truncated (large) or small	• The unit automatically recognizes the aspect ratio appropriate to input signals and projects images. If the aspect ratio is not selected correctly, press and select the aspect ratio appropriate to the input signal.	<b>∠</b> Fp. 40
	Press the Enter button on the remote control if part of the computer image being projected is missing. "Running Auto Setup" is displayed and synchronization, tracking, and position are automatically adjusted.	-
Image colors are not right	In the Visual Setup menu, set the "Video Signal" to the signal format appropriate to the device.	<b>△</b> p. 58
Moving images being played back by the computer become black	Change the computer's image signal to external output only.  Check the "Documentation" supplied with the computer for more information, or inquire to the computer's manufacturer.	-

### **Maintenance**

This section describes maintenance tasks such as cleaning the unit and replacing consumable parts.

#### **⚠** Caution

Before starting the maintenance, unplug the power cable from the electrical outlet.

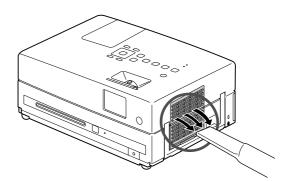
#### Cleaning

## Cleaning the air filter and air intake vent

When dust builds up on the air filter or the air intake vent, or the message "The unit is overheating. Make sure nothing is blocking the air vent, and clean or replace the air filter." is displayed, remove any dust from the air filter and the air intake vent using a vacuum cleaner.

#### CAUTION

- If dust collects on the air filter or the air intake vent it can
  cause the internal temperature of the unit to rise, and this
  can lead to operation problems and a shortening of the
  service life of optical parts. It is recommended that you
  clean these parts at least once every three months. Clean
  them more often than this if the unit is used in particularly
  dusty environments.
- Do not rinse the air filter in water. Do not use detergents or solvents.



#### Cleaning the main unit

Clean the surface by wiping it gently with a soft cloth. If the unit is particularly dirty, moisten a cloth with water containing a small amount of neutral detergent, firmly wring the cloth dry, wipe the unit softly with the cloth to remove stains, and then wipe it again with a soft, dry cloth.

#### Cleaning the projection lens

Use a commercially available cloth for cleaning glasses to gently wipe the lens.

#### CAUTION

Do not use volatile substances such as wax, alcohol, or thinner to clean the unit's surface. These can cause the unit to warp and make the coating finish peel off.

#### CAUTION

Do not rub the lens with harsh materials or subject the lens to impact shock, as it is fragile.

#### Consumables replacement period

#### Air filter replacement period

When the air filter gets dirty or is broken

#### Lamp replacement period

- The message "Replace the lamp" appears on the screen when projection starts.
- The projected image gets darker or starts to deteriorate.



- In order to maintain the initial brightness and image quality, the lamp replacement message is displayed after about 3900 hours of use has passed. The time at which this message is displayed will vary depending on the color mode settings and the conditions under which this unit has been used.
- If you continue to use the lamp after this period, the possibility of the lamp breaking becomes greater. When the lamp replacement message appears, replace the lamp with a new one as soon as possible, even if it is still working.
- Do not turn the projector on immediately after turning it off. Turning the projector on and off frequently may shorten the life of the lamp.
- Depending on the characteristics of the lamp and on the way it has been used, the lamp may become darker or stop working before the lamp warning message appears. You should always have a spare lamp ready in case it is needed.

#### Optional Accessories and Consumables

The following optional accessories and consumables are available for purchase if required. This list of optional accessories is applicable as of August, 2009. Details of accessories are subject to change without notice and availability may vary depending on the country or area of purchase.

#### **Consumables**

Replacement lamp ELPLP56	Air filter ELPAF26	
(Lamp x1)	(Air filter x1)	
Use as a replacement for used lamps.	Use as a replacement for used air filters.	

#### **Optional accessories**

50" portable screen ELPSC06	HD-15 cable ELPKC02		
60" portable screen ELPSC07	(1.8 m - for mini D-Sub 15-pin/mini D-Sub 15-pin)		
80" portable screen ELPSC08	HD-15 cable ELPKC09		
100" screen ELPSC10	(3 m - for mini D-Sub 15-pin/mini D-Sub 15-pin)		
A compact screen which can be carried easily.	HD-15 PC cable ELPKC10 (20 m - for mini D-Sub 15-pin/mini D-Sub 15-pin)		
(Aspect ratio 4:3)	Use to connect the unit to a computer.		
	Component video cable ELPKC19 (3 m - for mini D-Sub 15-pin/RCA male x 3)		
	Use to connect a component video source.		

#### How to replace consumables

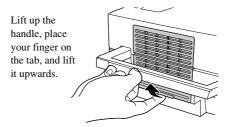
#### Replacing the air filter



Dispose of used air filters properly in accordance with your local regulations.

Filter: Polypropylene Frames: ABS resin

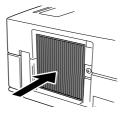
- 1 Turn the power switch off and when a short beep sounds, unplug the power cable.
- **2** Remove the air filter cover.



**3** Take out the old air filter.



4 Install the new air filter.



5 Install the filter cover.

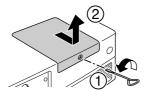


#### Replacing the lamp

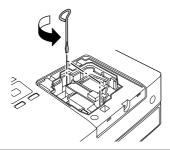
#### **⚠** Caution

The lamp is hot immediately after use. Once the power has been switched off, allow approximately one hour to pass before replacing the lamp to allow it to cool thoroughly.

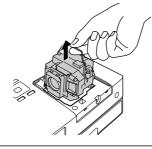
- 1 Turn the power switch off, and when a short beep sounds, unplug the power cable.
- 2 Loosen the screws of the lamp cover attachment using the screwdriver that supplied with the replacement lamp. Slide the lamp cover toward you, and then lift it up to remove it.



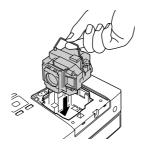
3 Loosen the lamp attachment screws.



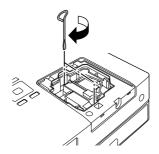
4 Take out the old lamp.



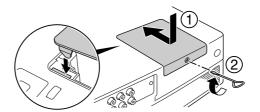
5 Install the new lamp.



6 Tighten the lamp attachment screws firmly.



Install the lamp cover.



#### CAUTION

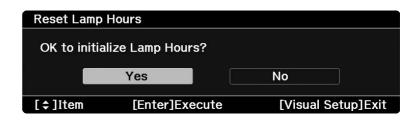
- Install the lamp and the lamp cover securely. If the lamp or the lamp cover is not installed correctly, this unit will be turned off as a safety precaution.
- This product includes a lamp component that contains mercury (Hg). Please consult your local regulations regarding disposal or recycling.
   Do not dispose of it with normal waste.

#### Resetting the lamp operating time

After the lamp has been replaced, make sure you initialize the Lamp Hours setting.

The unit has a built-in counter that keeps track of the lamp operating time and the lamp replacement message is displayed based on this counter.

- Connect the power cable, and press (b).
- Press and when the menu appears, set the "Info" to "Reset Lamp Hours".



 $\mathbf{3}$  Select "Yes" and press (Enter) to initialize the setting.



# **Projection Distance and Screen Size**

Refer to the following table and place the unit in a position which allows the best possible projection for the size of the screen. Values are just reference.

Units: cm

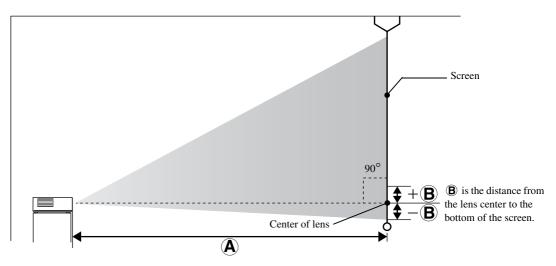
16:9 Screen Size		Projection Distance (A)	₿	
		Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	
30"	66 x 37	89 - 121	0 - 6	
40"	89 x 50	119 - 162	-1 - 8	
60"	130 x 75	180 - 244	-1 - 12	
80"	180 x 100	241 - 326	-1 - 16	
100"	220 x 120	302 - 408	-2 - 20	
120"	270 x 150	363 - 491	-2 - 23	
150"	330 x 190	454 - 614	-2 - 29	
200"	400 x 250	606 - 820	-3 - 39	

Units: cm

4:3 Screen Size		Projection Distance 🛕	₿	
		Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	
30"	61 x 46	109 - 148	-1 - 7	
40"	81 x 61	146 - 198	-1 - 10	
60"	120 x 90	221 - 299	-1 - 14	
80"	160 x 120	295 - 400	-2 - 19	
100"	200 x 150	370 - 500	-2 - 24	
120"	240 x 180	445 - 601	-2 - 29	
150"	300 x 230	556 - 752	-3 - 36	

Units: cm

16:10 Screen Size		Projection Distance 🛕	B	
		Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	Minimum Maximum (Zoom Adjustment Wide) (Zoom Adjustment Tele)	
30"	65 x 40	96 - 131	-1 - 6	
40"	86 x 54	129 - 175	-1 - 8	
60"	130 x 81	195 - 264	-1 - 13	
80"	170 x 110	261 - 353	-2 - 17	
100"	220 x 130	326 - 442	-2 - 21	
120"	260 x 160	392 - 531	-2 - 25	
150"	320 x 200	491 - 664	-3 - 32	
200"	430 x 270	656 - 886	-4 - 42	



# **Compatible Resolution List**

#### **Composite video**

Units: Dots

Signal	Resolution	Aspect Mode		
Signal		Normal	Full	Zoom
TV (NTSC)	720 x 480	720 x 540	960 x 540	960 x 540
	720 x 360 *	(4:3)	(16:9)	(16:9)
TV (PAL, SECAM)	720 x 576	720 x 540	960 x 540	960 x 540
	720 x 432 *	(4:3)	(16:9)	(16:9)

<sup>\*</sup> Letterbox signal

#### **Component video**

Units: Dots

Signal	Resolution	Aspect Mode		
<del>Sig</del> nal	riesolution	Normal	Full	Zoom
SDTV (480i, 60Hz)	720 x 480	720 x 540	960 x 540	960 x 540
	720 x 360 *	(4:3)	(16:9)	(16:9)
SDTV (576i, 50Hz)	720 x 576	720 x 540	960 x 540	960 x 540
	720 x 432 *	(4:3)	(16:9)	(16:9)
SDTV (480p)	720 x 480	720 x 540	960 x 540	960 x 540
	720 x 360 *	(4:3)	(16:9)	(16:9)
SDTV (576p)	720 x 576	720 x 540	960 x 540	960 x 540
	720 x 432 *	(4:3)	(16:9)	(16:9)
HDTV (720p) 16:9	1280 x 720	960 x 540 (16:9)	-	-
HDTV (1080i) 16:9	1920 x 1080	960 x 540 (16:9)	-	-

<sup>\*</sup> Letterbox signal

HDMI Units: Dots

Signal	Resolution	Aspect Mode		
Signal	Normal		Full	Zoom
VGA60	640 x 480	720 x 540	960 x 540	960 x 540
V G/100	640 x 360 *	720 X 3 10	700 K 5 10	700 K 5 10
SDTV(480i,60Hz)	720 x 480	720 x 540	960 x 540	960 x 540
5D1 ( (+001,00112)	720 x 360 *	720 X 340	700 X 540	700 X 540
SDTV(576i,50Hz)	720 x 576	720 x 540	960 x 540	960 x 540
5D1 (5761,56112)	720 x 432 *	720 X 340	700 X 540	700 X 540
SDTV(480p)	720 x 480	720 x 540	960 x 540	960 x 540
<i>SD1</i> (100p)	720 x 360 *	720 X 3 TO	700 11 0 10	700 K 5 T0
SDTV(576p)	720 x 576	720 x 540	960 x 540	960 x 540
5D1 (576p)	720 x 432 *			
SVGA60	800 x 600	720 x 540	960 x 540	960 x 540
XGA60	1024 x 768	720 x 540	960 x 540	960 x 540
HDTV(720p)	1280 x 720	960 x 540	-	-
WXGA60	1280 x 800	864 x 540	960 x 540	960 x 540
SXGA2_60	1280 x 960	720 x 540	960 x 540	960 x 540

Signal	Resolution	Aspect Mode		
		Normal	Full	Zoom
SXGA3_60	1280 x 1024	675 x 540	960 x 540	960 x 540
HDTV(1080i)	1920 x 1080	960 x 540	-	-
HDTV(1080p,50Hz)	1920 x 1080	960 x 540	-	-
HDTV(1080i,60Hz)	1920 x 1080	960 x 540	-	-

<sup>\*</sup> Letterbox signal

#### **Computer image**

Units: Dots

Signal	Resolution	Aspect Mode		
		Normal	Full	Zoom
VGA60/72/75/85,	640 x 480	640 x 480 720 x 540		060 540
iMac * 1	640 x 360 * <sup>2</sup>	720 X 340	960 x 540	960 x 540
SVGA56/60/72/75/85,	800 x 600	720 x 540	960 x 540	960 x 540
iMac * 1	800 x 450 * <sup>2</sup>	720 X 340	900 X 340	
XGA60/70/75/85,	1024 x 768	720 x 540	060 540	960 x 540
iMac * 1	1024 x 576 * <sup>2</sup>	720 X 340	960 x 540	
SXGA1_70/75	1152 x 864	720 x 540	960 x 540	960 x 540
WXGA60/75/85	1280 x 800	864 x 540	960 x 540	960 x 540
WXGA60-1	1280 x 768	900 x 540	960 x 540	960 x 540
WXGA60-2	1360 x 768	956 x 540	960 x 540	960 x 540
SXGA2_60	1280 x 960	720 x 540	960 x 540	960 x 540
SXGA3_60/75/85	1280 x 1024	675 x 540	960 x 540	960 x 540
MAC13"	640 x 480	720 x 540	960 x 540	960 x 540
MAC16"	832 x 624	720 x 540	960 x 540	960 x 540
MAC19"	1024 x 768	720 x 540	960 x 540	960 x 540
MAC21"	1152 x 870	715 x 540	960 x 540	960 x 540

 $<sup>\</sup>ensuremath{^{*}}$  1 You cannot connect to models where the VGA output port is not installed.

Even when signals other than those mentioned above are input, it is likely that the image can be projected. However, not all functions may be supported.

Small characters, and so on may not be visible.

<sup>\* 2</sup> Letterbox signals

# **Compatible MPEG format list**

Extension	Video Codec	Audio Codec	Resolution
.AVI	MPEG-1/MPEG-2/ MPEG-4(Advanced Simple Profile)	PCM/ADPCM/MPEG/ MP3/WMA/AC3/DTS	PAL: 25 Hz 720 x 576 or less NTSC: 30Hz 720 x 480 or less
.VID/.DIV/ .DIVX(Home Theater)/ .XVID	MPEG-4(Advanced Simple Profile)	PCM/ADPCM/MPEG/ MP3/WMA/AC3/DTS	PAL: 25 Hz 720 x 576 or less NTSC: 30Hz 720 x 480 or less
.MPE/ .MPG/ .MPEG	MPEG-1/ MPEG-2	PCM/ADPCM/LPCM/ MPEG/MP3/WMA/ AC3/DTS	PAL: 25 Hz 720 x 576 or less NTSC: 30Hz 720 x 480 or less
.DAT	MPEG-1	MPEG I or II /layer II	PAL: 25Hz 352 x 288/704 x 576 NTSC: 30Hz 352 x 240/704 x 480
.VOB	MPEG-2	PCM/ADPCM/LPCM/ MPEG/MP3/WMA/ AC3/DTS	PAL: 25Hz 720 x 576 NTSC: 30Hz 720 x 480

The file format must meet the following requirements

• Resolution: up to 720 x 576

• GMC (global motion compensation) point: Up to one

• Bit rate: CD: 5.6 Mbps DVD: 19Mbps

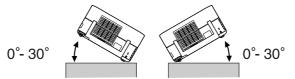
USB: 5.57 Mbps (However, this may be slower depending on the performance of the USB storage.)

# **Specifications**

Product name	EH-DM3					
Dimensions	335W x 136H x 239D mm (Including projections)					
Panel size	0.54" wide	<b>;</b>				
Display method	Polysilicor	n TFT activ	e matrix			
Resolution	518,400 pi	xels (960W	V x 540H dots) x 3			
Focus adjustment	Manual					
Zoom adjustment	Digital typ	e (Approx.	1:1.35)			
Lamp (light source)	UHE lamp, 200W, Model No.: ELPLP56					
Power supply	100 - 240VAC +/-10%, 50/60Hz, 3.5-1.5A					
Power	100 to 120	VAC area Operating: 310 W Standby: 0.3 W				
consumption 200	200 to 240	0VAC area Operating: 292 W Standby: 0.4 W		V		
Operating altitude	Altitude: 0 m to 2286 m					
Operating temperature	+5 to +35°C (No condensation)					
Storage temperature	-10 to +60°C (No condensation)					
Mass	Approximately 4.2 kg					
	Input	Audio port		1	RCA pin jack	
		Video port		1	RCA pin jack	
		Compone	nt port	1	RCA pin jack	
		Computer	port	1	Mini D-Sub 15-pin	
Connectors		HDMI inp	put port	1	HDMI	
		Mic Input Port		1	Stereo mini jack	
		USB port		1	Type A	
Out	Output	Digital Coaxial Audio-Out port		1	RCA pin jack	
		Headphone jack		1	3.5 mm mini-jack	
Speakers	Maximum input 10W, Rated impedance 8 $\Omega$ ohms					
Audio output  Diau	Analog audio	1 speaker system:Practical, maximum output 10W + 10W (10% THD)				
	output 1	1 headphone system: 25 mW/32 $\Omega$ ohms				
		Dynamic range: 70 dB or more				
	Digital audio output	Digital coaxial output				

<sup>\*</sup> The USB ports may not accept all USB-compatible devices.

#### Tilted angle



The unit may fail or may cause an accident if it is tilted more than 30 degrees.