

JVC

D-ILA Projectors
DLA-NZ9/NZ8/NZ7/NP5

The ART of PROJECTION



D-ILA

D-ILA

Made in Yokosuka, Japan

8K. LASER. HDR. The ART of PROJECTION

The beauty of D-ILA images is a marvel of engineering.
It has expanded beyond technology into the realm of art.

D-ILA

Developed the first
D-ILA device

1997

Since celebrating the 25th anniversary of D-ILA imaging devices in 2022, JVC continues to be cutting edge, incorporating the most advanced imaging technologies year after year. Now, after a quarter century of evolution, we are proud to present a new chapter in our story from Yokosuka, Japan, where D-ILA devices are developed and produced.



2007

0.7" Full HD D-ILA device



2004

0.8" Full HD D-ILA device

**8K
e-shift**
8K/e-shift
model



2018



4K

Native 4K D-ILA device

2016



**4K
e-shift**

4K/e-shift model

2011



2023

**8K
e-shiftX**

BLUeScent

D-ILA

HDR

HDR10+

FILMMAKER MODE

3D

8K Resolution with 8K60p/4K120p Input and JVC Original 8K/e-shiftX Technology

4K120p input ideal for Low Latency mode

Because these projectors are equipped with 4K120p input, signal latency is infinitesimal, making it effective when displaying high frame-rate gaming content on large screens. What's more, Low Latency Mode reduces delay in displaying PC signals and games, and improves response to the users' rapid operations.



4K
3840 x 2160 px



● **4K Input** **NP5**

From Blu-ray and gaming consoles to 4K streaming services, native 4K content can be enjoyed to its fullest on JVC D-ILA projectors.

8K
e-shiftX

Equipped with newly developed 8K/e-shiftX technology to achieve 8K resolution

NZ9 **NZ8**

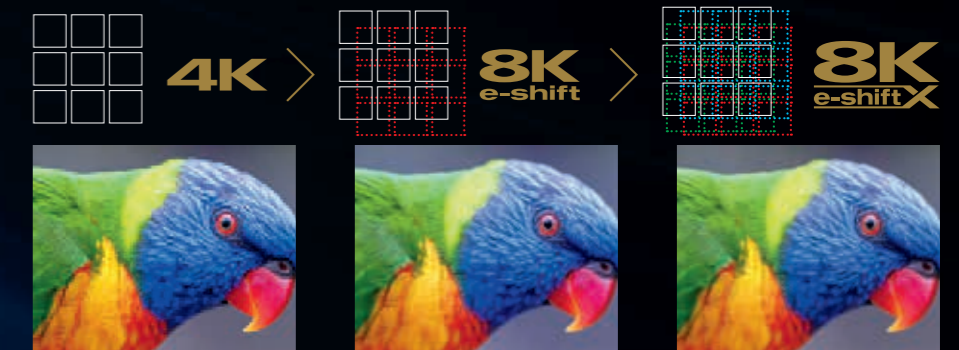
8K
7680 x 4320 px



● **8K Input** **NZ9** **NZ8** **NZ7**

Experience the overwhelming resolution achieved by 8K input and 8K/e-shift, or 8K input and 8K/e-shiftX.

Significant progress has been made to our proprietary 8K/e-shift technology – which combines “e-shift” high-resolution display technology that doubles the resolution by shifting a pixel by 0.5 pixels, and 0.69-inch native 4K D-ILA device. Shift direction has increased from the conventional two diagonal directions to four directions of up, down, left, and right, to enable display of 8K signal information in its entirety. The result is an 8K resolution, enhancing the sense of three-dimensionality and immersion.



See how the native 4K image becomes sharper with 8K/e-shift processing, and as if it is alive with 8K/e-shiftX processing.

World's first*¹ home projector capable of inputting 8K60p/4K120p signals

These projectors adopt LSIs*² developed with the latest technology to process the vast amount of 8K input data, and an up converter to bring any source up to high definition 8K resolution. As a result, more beautiful and realistic video images full of contrast and reality can be enjoyed regardless of the source, from video streaming to 4K UHD-BD videos.

*1: As a home theater projector, as of September 2021; according to research by JVC KENWOOD.
*2: Except for the DLA-NP5

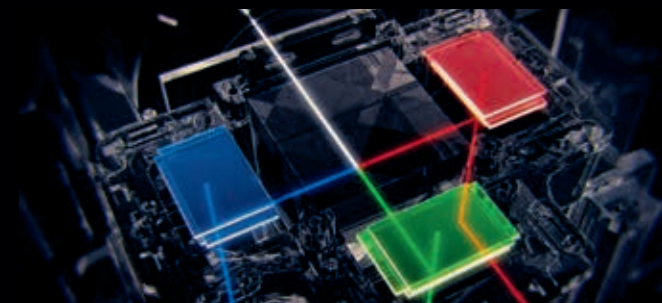


Ultra-High Contrast Optics with 4K D-ILA device

NZ9 NZ8

High-resolution image projection is reliant on the device and the optical system. The refined 0.69-inch 4K D-ILA device has doubled the speed required to display images from 120 Hz to 240 Hz-equivalent. The new Ultra-High Contrast Optics featured on the DLA-NZ9 and NZ8 contribute to achieve optical brightness as high as 3,000 lumens^{*5}, and the new optics has dramatically improved the image quality by thoroughly suppressing the return of unnecessary light to the projection screen.

^{*5}: Brightness of 3,000 lumens for the DLA-NZ9 and 2,500 lumens for the NZ8. Refer to page 10 for the brightness of other models.



4K
D-ILA

Essential all-glass lens to depict all the data in the 8K image

The high-end DLA-NZ9 is equipped with an 18-element, 16-group all-glass lens featuring a full aluminum lens barrel^{*3}. To project high-resolution 8K images to every corner of the screen, the projector incorporates five ED lenses calibrated for differences in the R/G/B refractive index to reduce chromatic aberration and color fringing when lens shift kicks in to deliver precise reproduction of 4K- or 8K-resolution^{*4} projection.

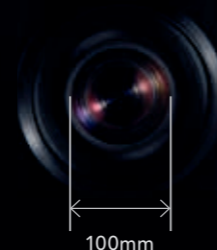
^{*3}: 65 mm diameter, 17-element, 15-group all glass lens is featured on the DLA-NZ8, NZ7 and NP5 models.

^{*4}: Resolution varies depending on the model.

High-quality 18-element,
16-group 100-mm glass
lens with a full aluminum
lens barrel.



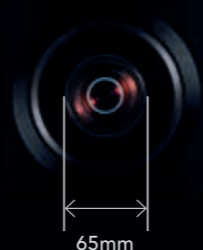
NZ9



NZ8

NZ7

NP5



BLU-Escent

JVC's Original Laser Diode Light Source, Offers
Depth and Dimensionality to 8K Imagery

BLU-Escent Laser Diode for exceptional brightness and longevity

NZ9 NZ8 NZ7

The D-ILA home-theater projectors (except the DLA-NP5) are equipped with the blue laser diode BLU-Escent, which is used in professional applications such as simulators. This laser diode allows dynamic control of brightness and exceptional brightness of 3,000 lumens to reproduce images that are closer to human perception. What's more, a single BLU-Escent laser light source delivers longevity of 20,000 hours^{*6}. Combining the latest BLU-Escent package with the D-ILA device achieves a detailed, smooth, powerful video expression.

^{*6}: In theory, this amounts to 20 years or more while watching a 2.5-hour movie every day.

Unparalleled black level and high luminance deliver images brimming with reality

NZ9 NZ8 NZ7

High native contrast as high as 100,000:1 can be achieved with these projectors^{**7} optical engine alone, however in combination with the dynamic light source control, an astonishing dynamic contrast of ∞ (infinity) :1 can be achieved on all JVC BLU-Escent light source models.

^{*7}: Native contrast ratio of 100,000:1 for the DLA-NZ9, 80,000:1 for the NZ8, and 40,000:1 for the NZ7, all with ∞ :1 dynamic contrast ratio. The NP5 delivers 40,000:1 native contrast ratio with 400,000:1 dynamic contrast ratio.

New Light Source Control by Gauge

The laser light source can be finely adjusted according to the environment and preference using the Light Source Control by Gauge featured on the latest BLU-Escent models^{*8}. The function has been updated from the previous 3 steps to enable fine 0 - 100 steps adjustment^{*8} of luminance, based on the brightness of the screen and flexible setting according to the usage environment.

High-precision algorithm on the laser dynamic control^{*9}

NZ9 NZ8 NZ7

JVC's laser dynamic control uses algorithm to adjust the brightness with the peak luminance, resulting in images with increased dynamic range. This mode greatly improves reproduction of content such as stars twinkling in pitch blackness and nightscapes. In addition, even images with low peak luminance can be enjoyed with a greater sense of contrast.

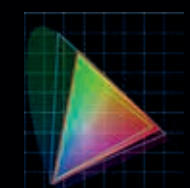
^{*9}: Not available on the DLA-NP5 with lamp light source.



Vivid color images achieved with DCI-P3-equivalent wide color gamut

NZ9 NZ8

The use of a laser light source and cinema filters enables a wide color gamut equivalent to DCI-P3, not to mention BT.709. When HDR content is projected on the DLA-NZ9 or the NZ8, it's possible to richly reproduce colors such as the gradations of the sky and ocean, the contrast of red roses, or a row of fresh green trees.



— DLA-NZ9/NZ8 — BT.709 (sRGB) — DCI — BT.2020

NZ9 NZ8 NZ7



^{*8}: The feature will be available through a firmware update scheduled for November 2023.

Supports Frame Adapt HDR Generation 2 Dynamic Tone Mapping, HDR10 Plus Signal Format, and More



HDR (High Dynamic Range) drastically improves expressive power of images

When it comes to reproducing the rich video information of HDR content, including the extended brightness range, BT.2020 wide color gamut and 10-bit gradation, rely on one of the new D-ILA projectors. New models support all HDR formats including HDR10 for Blu-ray and streaming, HLG for broadcasting, and the latest HDR10+ signal format with dynamic metadata compatibility.

New **HDR10+** **Brighter and more colorful HDR images achieved with Frame Adapt HDR Generation 2 Technology***

The Frame Adapt HDR technology, which uses a proprietary algorithm to instantaneously analyze the maximum brightness of HDR10 content per frame and adjust the dynamic range in real time to the optimum range for video projection on projectors, has evolved into the second generation. As the culmination of the HDR image processing technology that has been cultivated up to now, the tone mapping algorithm has been completely reexamined in accordance with the scene and frame to achieve HDR images with higher definition creating an immersive three-dimensional experience by suppressing the whiteness especially in the high brightness area. In addition, the proprietary algorithm for tone curve selection has been improved to reproduce HDR images that are brighter, more colorful, and have a wider dynamic range.

*8: The feature will be available through a firmware update scheduled for November 2023.



Original Image



Frame Adapt HDR (Conventional)



New Frame Adapt HDR Generation 2

MOVIE A

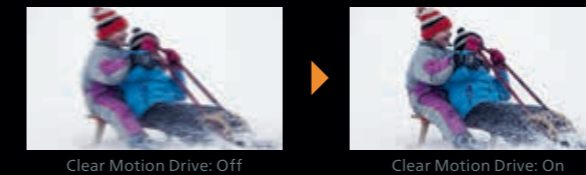


Featuring a FILMMAKER MODE™ that recreates the creator's original vision

FILMMAKER MODE™ was developed by the UHD Alliance, an organization of professionals and industry members, with the aim of faithfully reproducing the filmmakers' intentions in the home. When using the mode, picture quality adjustment functions such as frame interpolation, and noise reduction are turned off, and the color temperature is set to D65 (6500K), allowing users to enjoy movies and documentaries with picture quality that is faithful to the original master.

ADJUSTMENTS AND INSTALLATION

■ **Clear Motion Drive's** compensation accuracy has been improved in the periphery of intersecting objects. Added with Motion Enhance technology, the projector can reproduce much smoother moving images*10.



*10: The function is disabled when inputting 4K120p signals.

■ **6-axis Color Management System** with red, green, blue, cyan, magenta, and yellow axes enables the precise adjustment of hue, saturation, and intensity.



■ **The USB Back-up function** can save and write settings on the main unit menu to a third-party USB flash drive all at once. It is important to save adjustments made by an installer or specialist, or to undo unintended adjustments made by children or family members.



■ **Auto Calibration function** optimizes all essential elements found in the image, including color balance, gamma characteristics, color space, and color tracking, using an optical sensor and proprietary software*11.



*11: An optical sensor and proprietary software, which is downloadable from JVC website, are required to perform auto calibration function. Refer to the JVC website for details.

■ **Installation Mode** allows users to centrally manage eight settings (Lens Control, Pixel Adjustment, Mask, Anamorphic on or off, Screen Setting, Installation Style, Keystone, and Aspect) to enjoy projected video optimized for each environment. Ten different mode settings can be named and stored in memory.

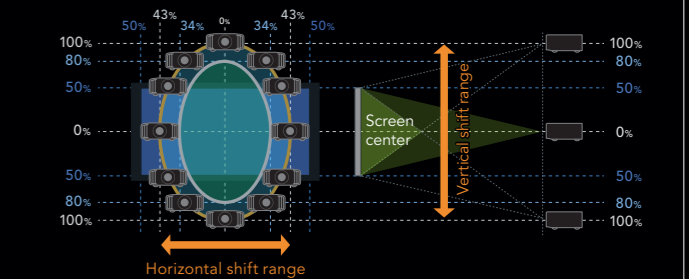


Installation Mode and Memory graphical interfaces

i Scan or click on the QR code to access the Screen Adjustment Mode Table



■ **Lens Shift function** is used to install the projector with flexibility. Vertical/horizontal wide shift ranges help project images without distortion.

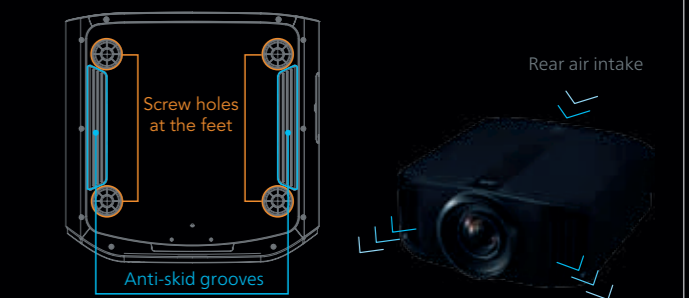


○ Range capable for the DLA-NZ9

○ Range capable for the DLA-NZ8/NZ7/NP5

Above diagram shows shift range for the 16:9 aspect ratio projection.

■ **Intake/exhaust layout and Footprint designed for ease of installation.** Rear air intake and front exhaust layout provide flexibility for a variety of installations. Screw holes at the feet are compatible with a conventional ceiling-mount bracket, while the anti-skid grooves prevent the projector from slipping when installed.



DLA-NZ9 D-ILA Projector

8K e-shiftX **BLUeScent** **D-ILA**



100mm HQ Lens



DLA-NZ8 D-ILA Projector

8K e-shiftX **BLUeScent** **D-ILA**



DLA-NZ7 D-ILA Projector

8K e-shift **BLUeScent** **D-ILA**



DLA-NP5B/W D-ILA Projector

4K D-ILA



For more information on the new D-ILA projectors, scan or click on the QR code to access the Official Website

Specifications

GENERAL		DLA-NZ9	DLA-NZ8	DLA-NZ7	DLA-NP5
Device		0.69-inch Native 4K D-ILA Device (4096 x 2160) x3			
e-shift		8K/e-shiftX (4-direction shift)		8K/e-shift (2-direction shift)	—
Display Resolution		8192 x 4320			4096 x 2160
Lens	Type	x2 Motorized Zoom & Focus, All-glass Lens			
	Diameter	100 mm	65 mm		
Lens Shift	Vertical/Horizontal (motorized, in 16:9 aspect ratio)	±100% / ±43%	±80% / ±34%		
Projection Display Size (diagonal)		60 inch - 300 inch	60 inch - 200 inch		
Light Source		BLU-Escent Laser Diode			NSH 265 W
Light Source Control		0-100 steps*8			Low/High
Brightness		3,000 lm	2,500 lm	2,200 lm	1,900 lm
Contrast Ratio	Dynamic	∞:1			400,000:1
	Native	100,000:1	80,000:1	40,000:1	40,000:1
DCI-P3 Color Gamut		•			—
Input Terminals	HDMI	2 (48Gbps, HDCP2.3, no support for CEC)			
	TRIGGER	1 (Mini Jack, DC12V/100mA)			
Output Terminals	3D SYNCHRO	1 (Mini-Din 3pin)			
	RS-232C	1 (Dsub 9pin)			
Control Terminal	LAN	1 (RJ-45)			
Service Terminal	SERVICE	1 (USB Type A, for firmware update)			
Power Consumption	Projector in use	440 W		420 W	
	Standby	Eco-mode: 0.3 W			
	Networked standby	1.5 W (LAN)			
Fan Noise		24 dB (In Low Mode)			
Power Requirement		AC100-240 V, 50/60 Hz			
Dimension (W x H x D, including feet)		500 x 234 x 528 mm	500 x 234 x 505 mm		500 x 234 x 495 mm
Weight (net)		25.3 kg	23.1 kg	22.5 kg	19.2 kg

FEATURES		DLA-NZ9	DLA-NZ8	DLA-NZ7	DLA-NP5
8K60p Input		•	•	•	–
4K120p input		•	•	•	•
Ultra-High Contrast Optics		•	•	–	–
HDR	HDR10+	•	•	•	•
	HLG	•	•	•	•
	Mastering Info Display	• (Max CLL/Max FALL)			
	Frame Adapt HDR Generation 2*8	•	•	•	•
	Theater Optimizer*12	•	•	•	•
	Auto Tone Mapping	•	•	•	•
FILMMAKER MODE™		•	•	•	•
3D Support		•	•	•	•
Clear Motion Drive		•	•	•	•
Motion Enhance		•	•	•	•
Low Latency Mode		•	•	•	•
Auto Calibration		•	•	•	•
Installation Mode		• (10 memories)			
isfccc Certification		•	•	•	•
Screen Adjustment Mode		• (199 modes)			
USB Back-up*8		•	•	•	•

*8: The feature will be available through a firmware update scheduled for November 2023.

*12: Theater Optimizer can be activated only when the projector's picture mode is set to Frame Adapt HDR.

Optional Accessories

VX-UH1150LC

HDMI Cable

15 m long, 48Gbps
HDMI cable that supports 8K60p/4K120p transmission. A fully-certified Ultra High Speed HDMI™ Cable.



PK-AG3

RF 3D Glasses

Full recharge takes
2.5 hours and works for 100 hours.
Includes USB-Mini USB cable.



PK-EM2

RF 3D Emitter

Signal reaches to 10 meters. No IR signal interruption with other equipment. No limitation to the number of the glasses.



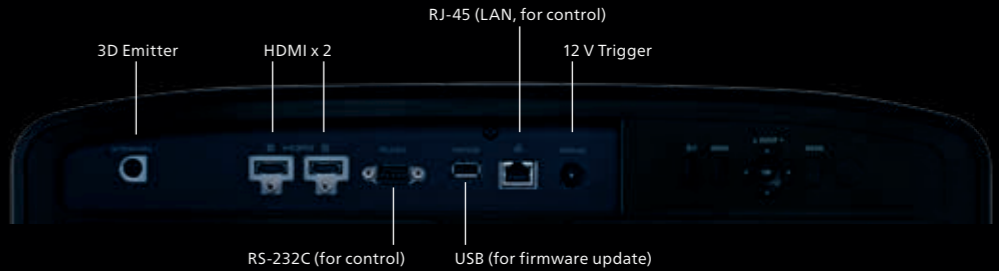
PK-L2618U

Replacement Lamp

Lamp time of 4,500 hours at
Low Lamp power setting, 3,500 hours at
High Lamp power setting.

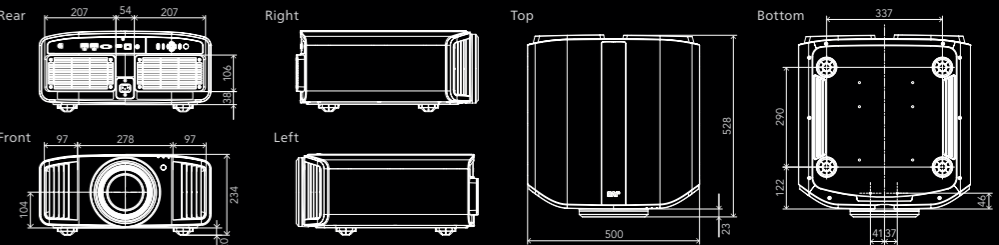


Connectors

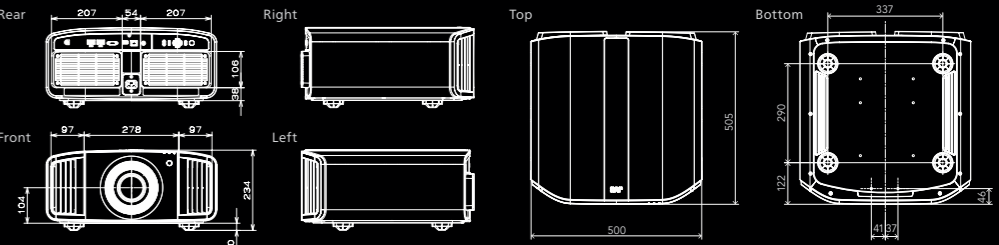


External Dimensions

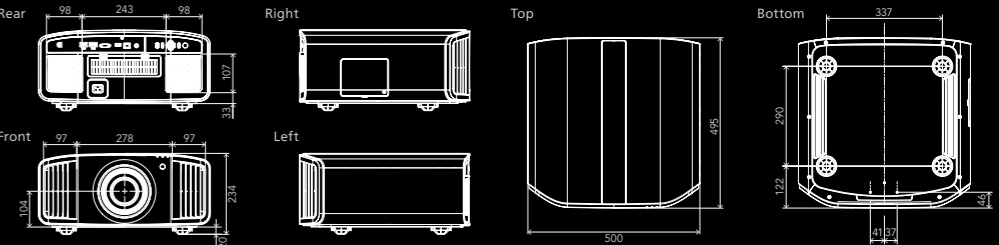
DLA-NZ9



DLA-NZ8/DLA-NZ7



DLA-NP5



Projection Distance Chart

DLA-NZ9

Screen diagonal (inch)	Screen size aspect ratio: 16:9				Screen size aspect ratio: 2.35:1 (Cinematic)			
	Screen size		Projection distance		Screen size		Projection distance	
	Width (mm)	Height (mm)	Wide (m)	Tele (m)	Width (mm)	Height (mm)	Wide (m)	Tele (m)
60	1,328	747	1.75	3.61	1,402	597	1.86	3.82
90	1,992	1,121	2.67	5.46	2,103	895	2.83	5.77
100	2,214	1,245	2.98	6.07	2,337	995	3.15	6.41
110	2,435	1,370	3.28	6.69	2,571	1,094	3.47	7.06
120	2,657	1,494	3.59	7.30	2,805	1,193	3.79	7.71
150	3,321	1,868	4.51	9.15	3,506	1,492	4.76	9.66
200	4,428	2,491	6.04	12.22	4,674	1,989	6.38	12.91
250	5,535	3,113	7.57	15.30	5,843	2,486	7.99	16.15
280	6,199	3,487	8.48	17.14	–	–	–	–
300	–	–	–	–	–	–	–	–

*Projection distances are design specifications, so there is ±5% variation.

DLA-NZ8/DLA-NZ7/DLA-NP5

Screen diagonal (inch)	Screen size aspect ratio: 16:9				Screen size aspect ratio: 2.35:1 (Cinematic)			
	Screen size		Projection distance		Screen size		Projection distance	
	Width (mm)	Height (mm)	Wide (m)	Tele (m)	Width (mm)	Height (mm)	Wide (m)	Tele (m)
60	1,328	747	1.88	3.85	1,402	597	1.99	4.07
90	1,992	1,121	2.84	5.80	2,103	895	3.00	6.13
100	2,214	1,245	3.16	6.45	2,337	995	3.34	6.81
110	2,435	1,370	3.49	7.10	2,571	1,094	3.68	7.50
120	2,657	1,494	3.81	7.75	2,805	1,193	4.02	8.18
150	3,321	1,868	4.77	9.70	3,506	1,492	5.04	10.24
200	4,428	2,491	6.38	12.95	–	–	–	–

*Projection distances are design specifications, so there is ±5% variation.



Note: As stated in this brochure, the DLA-NZ9, DLA-NZ8, and DLA-NZ7 models are the world's first home theater projectors (as of September 2021) to support 8K60p/4K120p input; according to a research conducted by JVCKENWOOD.

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- HDMI, the HDMI logo and High-Definition Multimedia Interface are registered trademarks of HDMI Licensing LLC.
- All other brand or product names may be trademarks and/or registered trademarks of their respective owners.
- Please be aware that, because the D-ILA device is manufactured using highly advanced technologies, 0.01% or fewer of the pixels may be non-performing (always on or off).
- The DLA-NP5 is equipped with an ultra-high pressure mercury lamp, which may break, emitting a loud noise, when it is subjected to shock or after it has been used for some length of time.
- Please note that, depending on how the projector is used, there can be considerable difference regarding how many hours the light source will operate before requiring replacement.
- An additional payment is required for installation of the projector or a new light source, if necessary.
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