JVC

The ART of PROJECTION

A True Cinematic Experience

D-ILA

A True Cinematic Experience

The refinement of D-ILA Imaging is a result of over a quarter century of JVC engineering and technology. Discover the pure beauty of reality.

JVC continues to develop its proprietary D-ILA technology for over 25 years.

Developed the first
D-ILA device

D-ILA

1997

0.8" Full HD D-ILA device

2004

0.7" Full HD D-ILA device

2007

4K e-shift   4K/e-shift model

2011

4K   Native 4K D-ILA device

2016

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

2018

D·ILA

BLU·Escent Laser

HDR High Dynamic Range

HDR10+

FILMMAKER MODE

3D

8K e-shift X
Gen 2

2024

Technologies for High-contrast, Brightness, and Definition to Deliver Visual Beauty, that Makes You Feel as If You are There.

**New** **Gen3, Native 4K D-ILA Device for Sharper Images with Ultra-high Contrast**

D-ILA device is the heart of projectors that plays an important role in projecting beautiful images. Device improvement continues to date – the third-generation 0.69-inch native 4K D-ILA device improved the alignment control of liquid crystals and enhanced the flatness of image pixels to offer 1.5-times the native contrast ratio compared to the Gen2 device. Additionally, improvements in the device manufacturing process have resulted in improved screen uniformity and enhanced image quality.
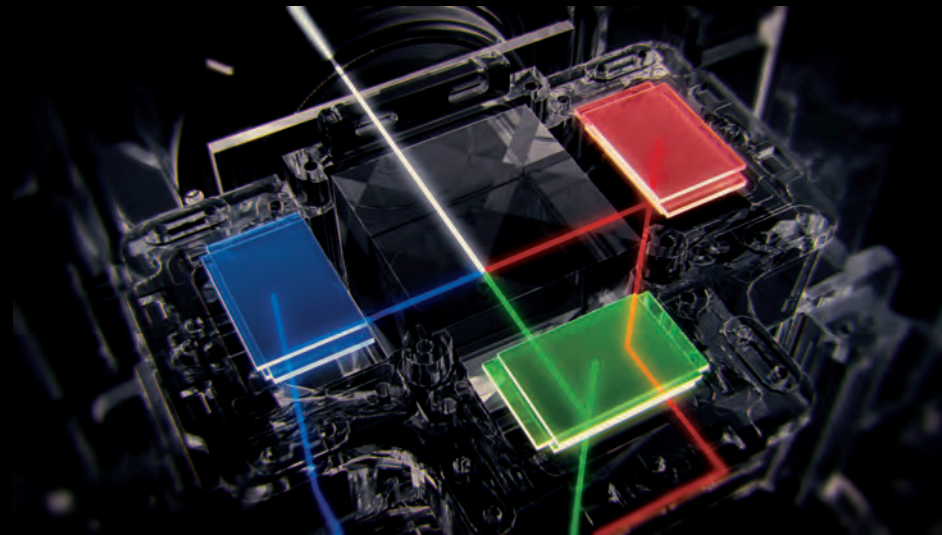
New **Exceptional Brightness and Longevity with BLU-Escent Laser**

Another essential aspect of projectors lies in their light source. The DLA-NZ series adopts JVC's newest laser light source "BLU-Escent Laser" to achieve exceptional peak brightness of 3,300 lumens on the DLA-NZ900 and 2,700 lumens on the DLA-NZ800, both with longevity of 20,000 hours. When compared to the first-generation laser projector*, the projectors' brightness per effective wattage has improved 1.9-fold, which, as a result, also contributes to saving power through improved power efficiency.
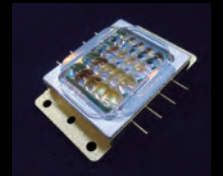
*When compared to the DLA-Z1.

BLU-Escent Laser

4K D-ILA

Unparalleled Black Level and High Luminance Deliver Images Brimming with Reality

The DLA-NZ900 boasts the industry's highest native contrast of 150,000:1* (100,000:1 for the DLA-NZ800) with the Gen3 0.69-inch 4K D-ILA device and wire-grid optical engine, however in combination with the dynamic laser light control, which analyzes the incoming video signal to automatically control the amount of outgoing laser light, a dynamic contrast level of ∞:1 (infinity to 1) can be achieved in scenes with pitch blackness by completely shutting off the light source. As a result, images brimming with reality that are closer to human perception can be produced. Likewise, the new algorithm enables laser control with greater precision to meet the user's preferences.

*As of April 2024.

Conventional

Starry sky with a sense of contrast

Native Contrast Comparison

	Native Contrast	Compared to the previous model
DLA-NZ900	150,000:1	150%
DLA-NZ800	100,000:1	125%

Controlling the Luminance in 101 Steps

BLU-Escent Laser can finely adjust the luminance according to the environment and preference using the Light Source Control by slider adjustment. There are a total of 101 (0 – 100) luminance control steps that can be used to make fine adjustments to match the target luminance in the environment and on the screen.

101 luminance control steps (0 - 100 steps)
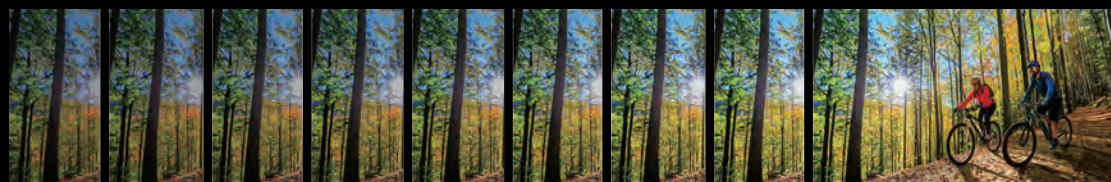
0 ← → 100

Enjoy 8K from Input to Output, by Virtue of 8K60p/4K120p Input, High-performance Lens and 8K/e-shiftX High-resolution Display Technology.

8K60p Input for Ultra-high Res 8K Content. 4K120p Input for Games and More.

Both projectors support a variety of inputs including full 48Gbps 8K60p. By adopting LSIs developed with the latest technology, it is now possible to process four times the amount of information from input to D-ILA device instantly and correctly display 8K signals. As a result, users can enjoy stable high-quality 8K images at all times. Also, using 4K120p input with the Low Latency Mode further improves response to the player's rapid operations, making it effective for displaying high frame-rate gaming content on large screens.

4K
3840 x 2160 px

8K
7680 x 4320 px
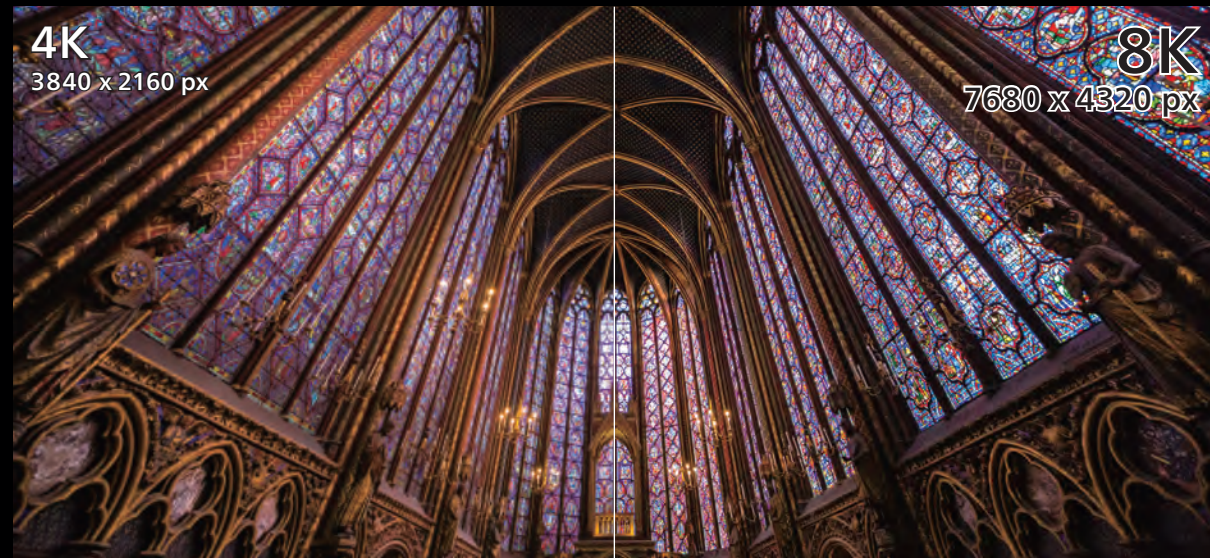
4K Input
From Blu-ray and gaming consoles to 4K streaming services, native 4K content can be enjoyed to its fullest.

8K Input
Experience the overwhelming resolution achieved by 8K input and proprietary 8K/e-shiftX.

New Gen2 8K/e-shiftX Realizes Remarkable 8K Resolution Display

JVC's proprietary 8K/e-shiftX, which is a combination of "e-shift technology" – a high-resolution display technology that doubles the resolution by shifting a pixel by 0.5 pixels in four directions up, down, left, and right – and "0.69-inch native 4K D-ILA devices" has made significant progress as the second generation 8K/e-shiftX. The latest version features JVC's newest 8K scaling engine that drastically improves the projector's sharpness and detail across a wide range of content, including 8K (8192 x 4320 pixels) sources.
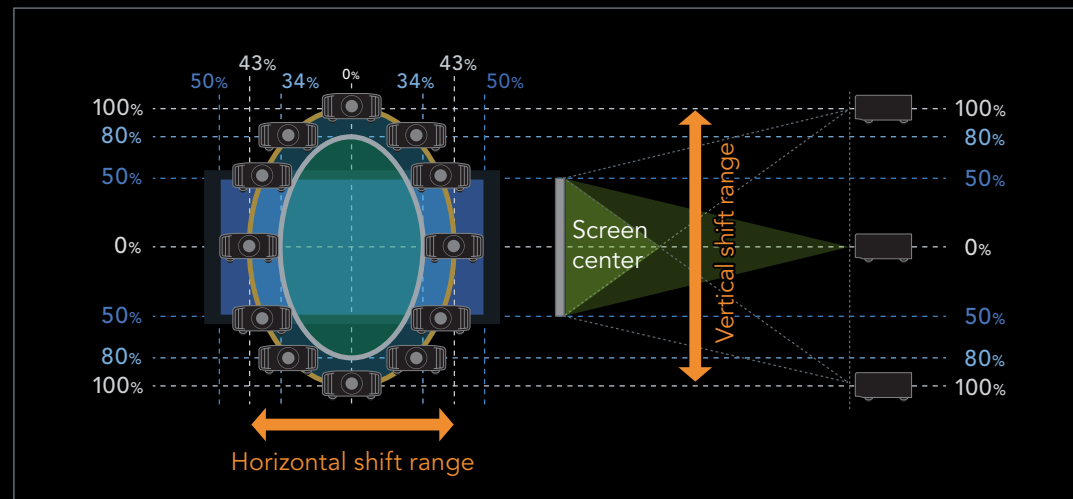

See how the native 4K image becomes sharper as if it is alive with the newest 8K/e-shiftX processing.

All-glass Lens System Made to Clearly Depict Everything What 8K Image Has to Offer
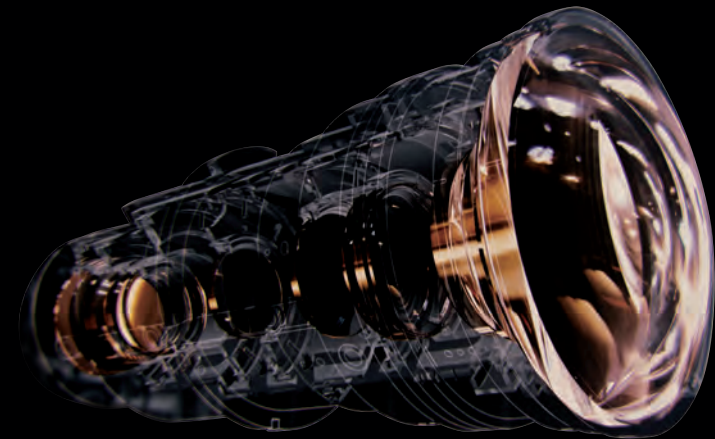
These projectors are equipped with high-quality multi-element, multi-group wide-diameter all-glass lens (see below for individual lens specs) with a full aluminum lens barrel. In order to project high-resolution images to every corner of the screen, the DLA-NZ900 incorporates five ED lenses with different R/G/B refractive indexes in the large-diameter lens to project high-resolution images while maintaining a wide shift range of 100% vertically and 43% horizontally*. This 100mm HQ lens system not only reduces chromatic aberration and color fringing when lens shift kicks in, but also enables faithful reproduction of distortion-free 8K images no matter where it is installed due to its wide V/H shift range.

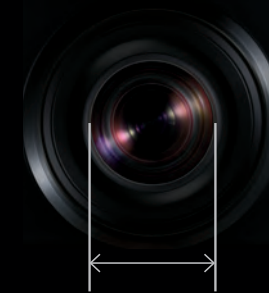*The DLA-NZ800 features 80% vertical/34% horizontal shift range, without ED lenses.

DLA-NZ900

18-element, 16-group 100-mm all-glass lens and five ED lenses

DLA-NZ800

17-element, 15-group 65-mm all-glass lens

100mm

65mm

◯ ▭ Range capable for the DLA-NZ900   ◯ ▭ Range capable for the DLA-NZ800

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

Designed to Deal with a Variety of HDR (High Dynamic Range) Functions and Content

HDR 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 the new D-ILA projectors. Both models support all HDR formats including HDR10 for Blu-ray and streaming, HLG for broadcasting, and the HDR10+ with dynamic meta-data compatibility. The projectors' improvements for higher brightness and contrast have helped to achieve a wider dynamic range, allowing users to enjoy an immersive experience with HDR images full of reality.

Gen2 Frame Adapt HDR Function for Brighter and More Colorful HDR Images

The Frame Adapt HDR function, which uses a proprietary algorithm to instantaneously analyze the maximum brightness of any HDR10 content per scene or per frame and perform real-time tone mapping to optimal dynamic range for video projection, has evolved into the second generation (Gen2). The algorithm for tone mapping has been fully reexamined to achieve HDR images with higher definition. Furthermore, the proprietary algorithm for tone curve selection has also been improved to reproduce HDR images that are brighter, more colorful and have a wider dynamic range.

New DML (Display Mastering Luminance) for Better HDR Experience

DML (Max Display Mastering Luminance) meta-data, which represents the nit level of the professional monitor used to grade the movie to the director's standards, is used to set the dynamic range of the title for improved HDR tone mapping. On the DLA-NZ900/800 series, both DML and MaxCLL values are used for the HDR levels.

	DLA-NZ900 DLA-NZ800	DLA-NZ9 DLA-NZ8
MaxCLL	Yes	Yes
DML	Yes	Not available

New Deeper Blacks for Richer Gradation

The new Deep Black function has been added to Frame Adapt HDR, with a new algorithm to further subdue tones in dark areas to achieve more realistic darkness. This function maximizes the dynamic range of the new-generation 4K D-ILA devices and delivers images with more contrast than ever before. Scenes with light and dark shades such as nightscapes can be projected with greater realism.

Original Image ▶ Frame Adapt HDR (Conventional) ▶ Frame Adapt HDR Generation 2

Conventional ▶ New Deep Black function

Vivid Reproduction of HDR Sources Containing Wide Color Gamut

Even when HDR content using a wide color gamut equivalent to BT.709 and DCI-P3 is projected on these projectors, the original cinema filter combined with the BLU-Escent Laser work together to reproduce rich colors, such as the gradations of the sky and ocean, the contrast of red roses, or a row of fresh green trees.

— DLA-NZ900/NZ800 — BT.709 (sRGB)
— DCI — BT.2020
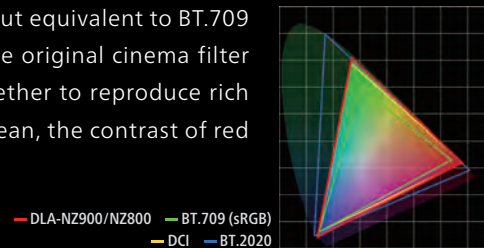
New Picture Mode "Vivid"

To reproduce SDR content with a narrow dynamic range in more saturated colors, conventional Natural mode has been improved to the new "Vivid" mode. This mode is excellent for projecting SDR animated works that are popular in streaming content and gaming CGs with greater vividness.

Conventional Natural mode

New "Vivid" mode

FILMMAKER MODE™ for Faithfully Recreating the Creator's Original Intentions

FILMMAKER MODE™ was developed by the UHD Alliance with the aim of faithfully reproducing the filmmakers' intensions in the home. When using the mode, picture quality adjustments 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*, which reduces afterimages, has improved its algorithm for compensation accuracy in the periphery of intersecting objects. Together with Motion Enhance technology, these projectors enable much smoother reproduction of images.

*The function is disabled when inputting 4K120p signals.

■ Ultra-high Contrast Optics not only contributes to achieving high optical brightness, but also suppresses the return of unnecessary light to the projection screen for clear and colorful images.

■ Installation Mode allows user to centrally manage 8 settings such as Lens Control, and Pixel Adjustment. A total of 10 different mode settings can be named, stored and called up.

■ Auto Calibration function that uses an optical sensor with proprietary software* optimizing all essential elements found in the image, including color balance, gamma characteristics, etc. that change according to installation and usage conditions.

*Optional optical sensor and proprietary software, PC, and LAN cable are required to perform auto calibration function.

■ 199 Screen Adjustment modes can be used to correct imbalances caused by screen characteristics.

■ Ease of installation. Rear air intake and front exhaust layout is designed to flexibly accommodate all types of home theater installations, including installation close to a wall.

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

DLA-NZ900 8K Home Theater Projector

100mm HQ Lens

DLA-NZ800 8K Home Theater Projector

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

● Specifications

GENERAL		DLA-NZ900	DLA-NZ800
Device		3rd Generation 0.69-inch Native 4K D-ILA Device (4096 x 2160) x3	
Display Resolution		8192 x 4320 (Gen2 8K/e-shiftX)	
Lens	Type	x2 motorized zoom & focus, all-glass lens	
	Diameter	100 mm	65 mm
Lens Shift (motorized in 16:9 aspect ratio)	Vertical range	±100%	±80%
	Horizontal range	±43%	±34%
Projection Display Size (diagonal)		60 inch – 300 inch	60 inch – 200 inch
Light Source		BLU-Escent Laser diode	
Brightness		3,300 lm	2,700 lm
Contrast Ratio	Dynamic	∞:1	
	Native	150,000:1	100,000:1
Cinema Filter (Color Gamut)		DCI-P3	
Input Terminal	HDMI	2 (48 Gbps/HDCP 2.3, no support CEC)	
Output Terminal	TRIGGER	1 (Mini Jack, DC 12 V/100 mA)	
	3D SYNCHRO	1 (Mini Din 3-pin)	
Control Terminal	RS 232C	1 (D-sub 9pin)	
	LAN	1 (RJ45)	
Service Terminal	SERVICE	1 (USB Type A) for firmware update and backing up settings	
Power Consumption	Projector in Use	440 W	
	Eco-mode Standby	0.3 W	
	Standby	1.5 W	
Fan Noise		24 dB (LD power at minimum)	
Power Requirement		AC 100-240V, 50/60Hz	
Dimensions (W x H x D, including feet)		500 mm x 234 mm x 528 mm	500 mm x 234 mm x 505 mm
Weight (net)		25.3 kg	23.1 kg

FEATURES		DLA-NZ900	DLA-NZ800
8K60p Input		●	
4K120p Input		●	
Light Source Control by Slider Adjustment		101 steps	
Ultra-High Contrast Optics		●	
HDR	HDR10+	●	
	HLG	●	
	Mastering Info Display	● (Max CLL/Max FALL/DML)	
	Frame Adapt HDR Gen2	●	
	Theater Optimizer*	●	
	Auto Tone Mapping	●	
"Vivid" Mode for SDR		●	
FILMMAKER MODE™		●	
3D Support		●	
Clear Motion Drive		●	
Motion Enhance		●	
Low Latency Mode		●	
Auto Calibration		●	
Installation Mode		●	
ISFccc Certification		●	
Screen Adjustment Mode		● (199 modes)	
USB Back-up		●	

*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.

● Connectors

3D Emitter
HDMI x 2
RS-232C (for control)
USB (for firmware update and backup)
RJ-45 (LAN, for control)
12 V Trigger

● Projection Distance Chart

DLA-NZ900

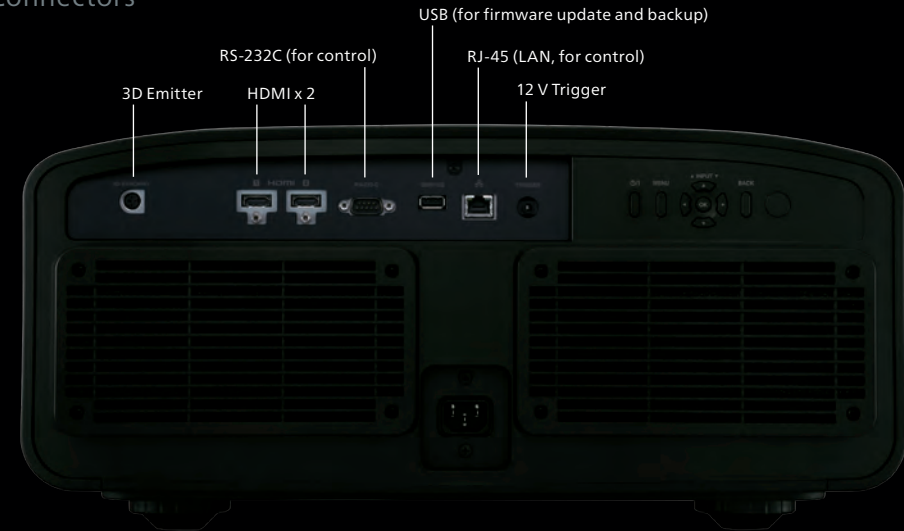| Screen diagonal (inch) | Screen size aspect ratio: 16:9 | | | | Screen size aspect ratio: 2.4:1 (Cinematic) | | | |
| | Screen size | | Projection distance | | Screen size | | Projection distance | |
	Width (mm)	Height (mm)	Wide (m)	Tele (m)	Width (mm)	Height (mm)	Wide (m)	Tele (m)
60	1,328	747	1.75	3.61	1,402	586	1.86	3.83
90	1,992	1,121	2.67	5.46	2,103	879	2.83	5.78
100	2,214	1,245	2.98	6.07	2,337	977	3.16	6.43
110	2,435	1,370	3.28	6.69	2,571	1,075	3.48	7.09
120	2,657	1,494	3.59	7.30	2,805	1,172	3.81	7.74
150	3,321	1,868	4.51	9.15	3,506	1,465	4.78	9.69
200	4,428	2,491	6.04	12.22	4,674	1,954	6.40	12.95
250	5,535	3,113	7.57	15.30	5,843	2,442	8.02	16.20
280	6,199	3,487	8.48	17.14	—	—	—	—

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

DLA-NZ800

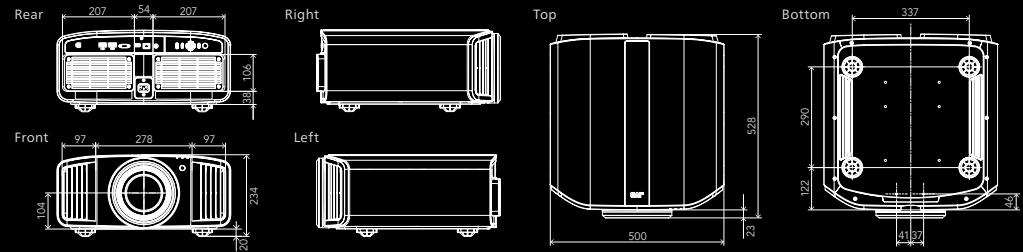| Screen diagonal (inch) | Screen size aspect ratio: 16:9 | | | | Screen size aspect ratio: 2.4:1 (Cinematic) | | | |
| | Screen size | | Projection distance | | Screen size | | Projection distance | |
	Width (mm)	Height (mm)	Wide (m)	Tele (m)	Width (mm)	Height (mm)	Wide (m)	Tele (m)
60	1,328	747	1.88	3.85	1,402	586	1.99	4.08
90	1,992	1,121	2.84	5.80	2,103	879	3.01	6.15
100	2,214	1,245	3.16	6.45	2,337	977	3.35	6.83
110	2,435	1,370	3.49	7.10	2,571	1,075	3.69	7.52
120	2,657	1,494	3.81	7.75	2,805	1,172	4.03	8.21
150	3,321	1,868	4.77	9.70	3,506	1,465	5.05	10.27
200	4,428	2,491	6.38	12.95	—	—	—	—

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

● External Dimensions/Unit: mm

DLA-NZ900

Rear Right Top Bottom
Front Left

DLA-NZ800

Rear Right Top Bottom
Front Left

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