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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. • D-ILA, e-shift, and BLU-Escent are registered trademarks of JVCKENWOOD Corporation. • FILMMAKER MODE<sup>™</sup> logo and its trade name are registered trademarks of UHD Alliance, Inc. in the US and other countries. • HDR10+<sup>™</sup> logo is a trademark of HDR10+ Technologies, LLC. • ISF is a registered trademark of Imaging Science Foundation, Inc. • HDMI the HDMI logo and High-Definition Multimedia Interface are registered trademarks of HDNI Licensing LLC. • All other brand or product names may be trademarks of the pressure de trademarks of the pressure de trademarks of the pressure detechnologies, 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, if necessary. • All pictures on this brochure are simulated. • Design and specifications are subject to change without notice. • Any rights not expressly granted herein are reserved.



JVC

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

# 8K. LASER. FDR. The ART of PROJECTION

ANNIVERSARY











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.



0.7" Full HD D-ILA device



0.8" Full HD D-ILA device

D-ILA

Development of D-ILA imaging devices began in 1997. Ever since, JVC has remained on the cutting edge, incorporating the most advanced imaging technologies of the times. 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.





## 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.







### 8K. LASER. HDR

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

NZ9 NZ8

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.

to high definition 8K resolution. As a result, more beautiful and realistic video



#### 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<sup>\*5</sup>, 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-11A

#### 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<sup>\*3</sup>. To project highresolution 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<sup>\*4</sup> 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.



100mm



NZ9 NZ8 NZ7



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

# BLU-Escent Laser Diode for exceptional brightness and longevity



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<sup>\*6</sup>. 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.



NZ9 NZ8 NZ7

## Unparalleled black level and high luminance deliver images brimming with reality

Native contrast as high as 100,000:1 is delivered by these projectors<sup>\*\*7</sup> optical engine alone. But on top of that, in combination with the dynamic light source control, an astonishing dynamic contrast of  $\infty$  (infinity) :1 can be achieved for models equipped with the BLU-Escent light source.



## New

#### New algorithm on the dynamic control\*8

Dynamic control was previously based on the average luminance of the entire scene. With the new mode, adjustment is based on the peak luminance. This results in images with increased dynamic range. In particular, the



new mode 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

\*8: Not available on the DLA-NP5 with lamp light source. \*9: The feature will be available through a firmware update scheduled for November 2022.



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

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



# Supports FILMMAKER MODE™ and the Latest Signal Formats

including HDR10 Plus



#### 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.



JVC projectors are compatible with the two dynamic tone mappings of HDR10+ and Frame Adapt HDR. HDR10+ contains the metadata of the producer's intentions for each scene, and with such data, the projector is able to automatically reproduce images as the creator had planned. Frame Adapt HDR instantly analyzes the peak brightness in HDR10 content using an original algorithm, and adjusts to the optimal dynamic range for image projection. Even content without mastering information can be analyzed based on the input signal, so all kinds of HDR10 content can be viewed with optimal picture quality.

With conventional projectors, a scene mixed with bright and dark settings tends to become too bright or too dark.







FILMMAKER MODE<sup>™</sup> that faithfully recreates the creator's intentions

FILMMAKER MODE<sup>™</sup> was developed by the UHD Alliance, an organization of Hollywood movie studios, TV studios, content distributors, consumer electronics manufacturers, and device developers, with the aim of faithfully reproducing the filmmakers' intensions 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. \*9

\*9: The feature will be available through a firmware update scheduled for November 2022.



JVC projectors featuring Frame Adapt HDR and Theater Optimizer can express HDR/HDR10+ content at optimum brightness and darkness in each scene as the creator intended

## 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<sup>\*10</sup>.





\*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.

	1	-	۲		0			
> Color Profi	le							
Color Profile				Auto				
Color Manageme	ent			Red	-			
Color Selection				Magenta				
Hue		0		Cyan				
Saturation		0		Vellow				
Brightness		0		Green Blue				
Before			-	Reset				

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<sup>\*11</sup>



\*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.

1		٢		0	E	Ħ		Ť		0	
Installation Made			Mode1		> Inst Mode Se	tallation M lect	ode		Node1 Node2		
Lens Control Pivel Adjust Mask Anamorphic Screen Setting Installation Style Keystone D		-	off Front			Name Edit Mode Copy			Model Model Model Model Model Model Model Model		
Aspect			Auto								





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



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.















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

#### Specifications

• speemed										
GENERAL		DLA-NZ9	DLA-NZ8	DLA-NZ7	DLA-NP5					
Device		0	0.69-inch Native 4K D-II	A 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					
	Туре		x2 Motorized Zoom	& Focus, All-glass Lens	5					
Lens	Diameter	100 mm 65 mm								
Lens Shift	Lens Shift (motorized, in 16:9 aspect ratio)		±80% / ±34%							
Projection Display Size (diagonal)		60 inch - 300 inch 60 inch - 200 inch								
Light Source		E	BLU-Escent Laser Diode		NSH 265 W					
Brightness		3,000 lm	2,500 lm	2,200 lm	1,900 lm					
Contrast Ratio	Dynamic		œ:1		400,000:1					
Contrast Natio	Native	100,000:1	80,000:1	40,000:1	40,000:1					
DCI-P3 Color Gamu	ut				-					
Input Terminals	HDMI		2 (48Gbps, HDCP2.	3, no support for CEC)						
	TRIGGER	1 (Mini Jack, DC12V/100mA)								
Output Terminals	3D SYNCHRO			-Din 3pin)						
				ub 9pin)						
Control Terminal	LAN	1 (RJ-45)								
Service Terminal	SERVICE			r firmware update)						
Power	Projector in use	440 W 420 W								
Consumption	Standby	Eco-mode: 0.3 W								
	Networked standby	1.5 W (LAN)								
Fan Noise		24 dB (In Low Mode) AC100-240 V, 50/60 Hz								
Power Requiremen										
Dimension (W x H :	k D, including feet)	500 x 234 x 528 mm	500 x 234		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		DLA-NZ9	DLA-NZO	ULA-NZ7	DLA-NF3					
4K120p input		•	•	•	-					
Ultra-High Contras	t Optics	•	•							
ontra mign contras	HDR10+	•	•	•	-					
	HLG	•	•	•	•					
	Mastering Info Display			L/Max FALL)						
HDR	Frame Adapt HDR	•	• (WILL CE	•	•					
	Theater Optimizer*12	•	•	•	•					
	Auto Tone Mapping	•	•	•	•					
FILMMAKER MODE <sup>TM*9</sup>		•	•	•	•					
3D Support		•	•	•	•					
Clear Motion Drive		•	•	•	•					
Motion Enhance		•	•	•	•					
Low Latency Mode		•	•	•	•					
Auto Calibration		•	•	•	•					
Installation Mode			• (10 m	emories)						
isfccc Certification		•	•	•	•					
Screen Adjustmen	t Mode		• (199	modes) *9						

\*9: The feature will be available through a firmware update scheduled for November 2022.
\*12: Theater Optimizer can be activated only when the projector's picture mode is set to Frame Adapt HDR.

HDMI cable that supports 8K60p/4K120p transmission. A fully-certified Ultra High Speed HDMI™ Cable.

PK-EM2

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

DLA-NZ9

#### Optional Accessories

### VX-UH1150LC HDMI Cable

15 m long, 48Gbps

#### **RF 3D Emitter**

#### PK-AG3 **RF 3D Glasses**

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





#### Low Lamp power setting, 3,500 hours at High Lamp power setting.

#### Projection Distance Chart

	Sc	reen size as	pect ratio: 16	:9	Screen size aspect ratio: 2.35:1 (Cinematic)					
	Scree	Screen size Projection dista		n distance	Screen size		Projection distance			
reen diagonal (inch)	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

	Sc	reen size asp	pect ratio: 16	:9	Screen size aspect ratio: 2.35:1 (Cinematic)					
	Screen size		Projection distance		Screen size		Projection distance			
reen diagonal (inch)	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.

#### RJ-45 (LAN, for control) 3D Emitter HDMI x 2 12 V Trigger 📮 📮 🦣 - 6 RS-232C (for control) USB (for firmware update)

#### External Dimensions

### DLA-NZ9



#### DLA-NZ8/DLA-NZ7





DLA-NP5







### Connectors