



News Release

JVCKENWOOD
creates excitement & peace of mind

30th August 2018

**JVC introduces new Native 4K projector line-up including
the world's first home theater projector corresponding to 8K display ***
"DLA-NX9" with 8K e-shift technology, "DLA-N7" "DLA-N5" with native 4K



*8K signal input is not supported.

JVC has announced a totally new line up of three D-ILA projectors adopting the newest Native 4K D-ILA devices. "DLA-NX9" as the world's first 8K e-shift home theater projector, and two Native4K models "DLA-N7 / N5". Planned for release in EMEA from late October.

The DLA-NX9 with its 8K e-shift technology together with its 100mm diameter high resolution glass lens, offer high definition 8K images with a much higher resolution than 4K that rival reality even on large screens. In addition, "DLA-N7 / N5" incorporates the latest 4K D-ILA device and 65mm diameter glass lens to reproduce smooth, detailed 4K imagery that respond to the high-definition video display needs that are increasing demand.

Model Name	Description	Available Color
DLA-NX9	World's First 8K e-shift Home Theater Projector	Black
DLA-N7	Native 4K Home Theater Projector	Black
DLA-N5	Native 4K Home Theater Projector	Black or White

<Product Planning Intention>

In 2016, JVC launched the flagship model "DLA-Z1" equipped with 0.69-inch 4K "D-ILA" device, which has received high reputation for its high definition images. On the other hand, 4K contents such as UHD Blu-ray and 4K streaming, 4K broadcasting are increasing, and the demand to easily enjoy high quality 4K images are also increasing. Under these circumstances, JVC will release a new lineup of D-ILA projectors that incorporate our newest 0.69-inch Native 4K D-ILA device, which enable high-definition display.

"DLA-NX9" is equipped with 8K e-shift technology and it is the world's first home theater projector that achieves 8K display*. In addition to detailed imagery exceeding 4K, it also combines high brightness, high contrast, wide color gamut, and creates images that are closer to reality than ever.

"DLA-N7" is high quality native 4K model taking advantage of high contrast and excellent color reproducibility in addition to 4K resolution, for users who demand particular quality for movie reproduction.

"DLA-N5" is a model that allows you to enjoy the latest content such as 4K HDR more easily, adding white color version considering usage in the living room theater etc.

<Main features>

1. High definition video exceeding 4K realized by "8K e-shift technology" (DLA-NX9)

"e-shift" is JVC's proprietary high resolution display technology that doubles the resolution by shifting pixels diagonally 0.5pixel. This e-shift technology together with the Native 4K D-ILA devices DLA-NX9 produces an 8K image on the screen. The 8K e-shift image produces much higher resolution than 4K that rival reality even on large screens. Also, by using original high-resolution technology "Multiple Pixel Control", full HD and 4K images are also converted to high-definition 8K images*.

2. Newest 0.69 inch native 4K "D-ILA" device

The newest 0.69 inch native 4K D-ILA device with 3.8 μm pixel pitch achieves high resolution display of 8.8 million pixels (4096 x 2160 pixels), and with improved planarization technique which reduces light scattering and light diffraction results in both improved brightness and black level compared to conventional device. The narrow pitch provides Native4K imagery with smooth, detailed picture without any visible pixel structure even on large screens.

3. High resolution 18-element, 16-group all-glass lens with full aluminum lens barrel (DLA-NX9)

"DLA-NX9" is equipped High resolution 18-element, 16-group all-glass lens with full aluminum lens barrel. To ensure high resolution up to every corner of the screen while realizing a wide shift range of +/-100% vertical, +/-43% horizontal, 100 mm diameter lens is selected. Not only that, 5 special low dispersion lens considering the different refractive index of Red, Green and Blue, has been adopted to suppress chromatic aberration, bleeding etc. and faithfully reproduce the 8K resolution.

4. New “Auto Tone Mapping” function automatically adjust settings for optimum HDR10 image

The HDR10 mastering information MaxCLL (Maximum Content Light Level) / MaxFALL (Maximum Frame Average Light Level) varies greatly depending on each content. Therefore, in order to achieve the best HDR10 experience it is necessary to set the appropriate brightness settings for each content. The new "Auto Tone Mapping" function equipped in the new line-up automatically adjust settings based on the mastering information (In case of content that does not contain mastering information, it will be fixed value or manual adjustment). Various HDR images with different brightness can be viewed optimally without manual adjustment of the settings.

5. Compatible with HDR technology that dramatically improves picture quality to look like reality

HDR content has more information than ever, such as expansion of luminance range, wide color gamut such as BT2020, 10 bit gradation, etc. High performing, high precision projector is required for accurate image reproduction of such contents. The new D-ILA projectors faithfully reproduces HDR10 contents such as UHD Blu-ray, in addition to the HLG (hybrid log gamma) adopted in broadcasting etc., with its "high brightness, high contrast, and wide color gamut".

6. Bright, vibrant and dynamic imagery

Combination of 265W ultra-high pressure mercury lamp and highly efficient optical engine realize high brightness of 2,200lm (DLA-NX9). Together with the new D-ILA device which has narrow pixel gap and improved light efficiency realize smooth, powerful image. (Brightness for DLA-N7 is 1,900 lm, for DLA-N5 is 1,800 lm).

7. Native Contrast Ratio of 100,000:1 translates to a spectacular Dynamic Contrast Ratio of 1,000,000:1

New 0.69 inch native 4K D-ILA device and optical engine with wire grid realize native contrast ratio of 100,000:1 (DLA-NX9). In combination with "Intelligent Lens Aperture" which analyzes the input image and automatically controls the black level, we realized a spectacular dynamic contrast of 1,000,000:1. Together with the ultimate dynamic range brought by high brightness offer immersive high quality image experience. (For "DLA-N7" Native 80,000:1, Dynamic 800,000:1, "DLA-N5" native 40,000:1, Dynamic 400,000:1)

8. Colorful image with wide color gamut beyond DCI P3 (DLA-NX9, DLA-N7)

By adopting the new cinema filter, DLA-NX9 and DLA-N7 achieves a wide color gamut beyond DCI-P3 as well as BT.709. HDR content such as UHD Blu-ray has adopted a wider color gamut than before, and with a wide color gamut D-ILA projector, it is possible to reproduce rich colors such as crimson rose and fresh green of trees, and the natural gradations of sky and sea.

9. Renewed "Clear Motion Drive" supporting 4K60P (4:4:4) signal

"Clear Motion Drive" is JVC's original motion control technology which also supports 4K60P (4:4:4) signal. The feature has been renewed for the new line up improving moving images more than ever. Together with "Motion Enhance" which optimizes the driving of D-ILA device according to the motion of the image, motion blur is reduced significantly compared to conventional projectors.

<Other features>

- "THX 4K DISPLAY" (approval in progress) guarantees high-quality and high performance for the ultimate reference home theater experience (DLA-NX9).

- isf certification which is the image quality standard by all models. It is possible to perform color calibration by isf approved engineer.

- Equipped with "installation mode" function that memorize up to 10 kinds of installation adjustments such as lens memory, pixel adjustment, screen mask etc. as one.

- Compatible with "Auto Calibration Function" that optimizes image quality under various installation conditions and also compromise for the changing color balance in long-term projector usage etc.

(In order to use the "Auto Calibration Function", an optical sensor, exclusive software, PC and LAN cable is required).

- "Screen Adjustment Mode", which correct the color balance that can differ by various screen characteristics.

- "Low Latency Mode" which decrease the input lags from the source.

- Optimized circuit configuration halves the time it takes for signal recognition compared to our conventional models.

< Spec Chart >

MODEL		DLA-NX9	DLA-N7	DLA-N5
Available Color		Black	Black	Black, White
Device		New 0.69inch4K D - ILA Device (4,096x2,160) x 3		
8K e-shift technology		Yes	-	
Display resolution		8,192x4,320	4,096x2,160	
Lens		100mm diameter all-glass lens, X2 Motorized Zoom & Focus	65mm diameter all-glass lens, X2 Motorized Zoom & Focus	
Lens Shift (when projection aspect ratio is 16:9)		Vertical $\pm 100\%$ 、 Horizontal $\pm 43\%$ (motorized)	Vertical $\pm 80\%$ 、Horizontal $\pm 34\%$ (motorized)	
Projection Display Size (diagonal)		60 inch – 300 inch	60 inch – 200 inch	
Light Source Lamp		NSH 265W		
Brightness		2,200lm	1,900lm	1800lm
Contrast Ratio	Dynamic	1,000,000:1	800,000 : 1	400,000:1
	Native	100,000:1	80,000 : 1	40,000:1
DCI P3 Full cover		Yes		-
Input Terminal	HDMI	2 (3D/Deep Color/HDCP2.2)		
Output Terminal	Trigger	1 (Mini jack, DC12V/100mA)		
	3D Sync	1 (Mini Din 3pin)		
Control Terminal	RS-232C	1 (D-sub 9pin)		
	LAN	1 (RJ45)		
Terminal for Service use	USB	1 (USB TypeA for Firmware update)		
Video Input Signal Format	Digital	480p、576p、720p 60/50、1080i 60/50、1080p 60/50/24、 3840x2160p 60/50/30/25/24、4096x2160p 60/50/30/25/24		
PC Input Signal Format	Digital (HDMI)	VGA/SVGA/XGA/WXGA/WXGA+/SXGA/SXGA+		
3D Format	Frame Packing	720p 60/50、1080p 24		
	Side-by-Side	720p 60/50、1080p 60/50/24、1080i 60/50		
	Top & Bottom	720p 60/50、1080p 24		
Power Consumption		400W (Normal standby: 1.5W Eco-mode standb: 0.3W)		
Power Requirement		AC 100-240V、50/60Hz		
Dimensions (W x H x D)		500mm x 234mm x 518mm	500mm x 234mm x 495mm	
Weight (net)		21.8kg	19.8kg	19.6kg

Design and specifications are subject to change without notice

< Optional Accessories >

- Compatible to currently available optional 3D accessories, RF emitter PK-EM2, RF glasses PK-EM3.
- New Replacement Lamp PK-L2618U.