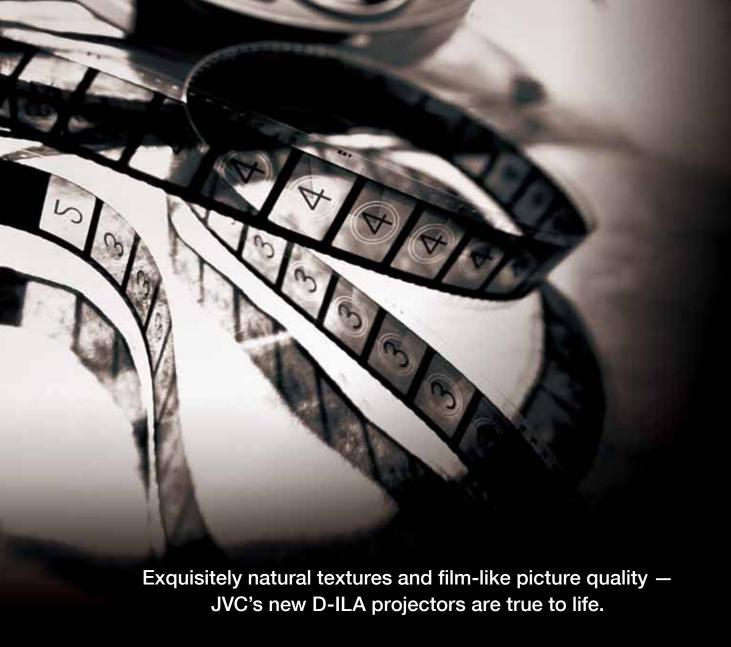


3D Enabled D-ILA Projectors









JVC has long been dedicated to designing home theater projectors that deliver film-like picture quality. In developing its latest generation of D-ILA projectors, JVC focused its expertise on creating the ultimate in color reproduction technology, since accurate color reproduction is a critical component in high quality video content. The result is our exclusive Real Color Imaging Technology that precisely analyzes detailed color-space information within individual color profiles to achieve color reproduction far more faithful to the original source.

JVC's ongoing pursuit for exceptional color reproduction in its D-ILA projectors is also evident in the development of a new optical engine designed to improve contrast and provide a wider color reproduction spectrum. What's more, the quest for authentic replication of the original source has led to the development of a color temperature setting equivalent to that of a Xenon lamp, which offers a near daylight spectrum. This passion for excellence by JVC helps to ensure the exquisite reproduction of film-like texture in all images just as can be seen in cinemas, with nuances in each scene superbly detailed.

This means that in addition to outstanding color reproduction, D-ILA projectors will provide you with an accurate, true-to-life view of what the creator of the original source had envisioned. See the quality for yourself, and discover the exciting potential of JVC projector performance.





# Add dynamic 3D stereoscopic images, and the excitement begins.



#### D-ILA projection in 3D\*

It is now possible to enjoy the excitement of 3D stereoscopic images in the comfort of your living room without using a special screen. JVC's DLA-X7 and DLA-X3 employ a Frame Sequential 3D method to display left and right images sequentially. A 3D Synchro Emitter\* sends a signal to the 3D Active Shutter eyewear\* that synchronizes the left and right eyewear lenses. This allows the left eye to see only the left frame and the right eye to see only the right frame. Slight differences in the left and right frames create the 3D image. The fast response characteristics and picture quality offered by D-ILA technology allow viewers to enjoy vivid and colorful 3D images with far less crosstalk or image ghosting. The DLA-X7 and DLA-X3 projectors are compatible with a variety of 3D formats, including Frame Packing for Blu-ray 3D, Side-by-Side (used mainly for broadcasting), and Top-and-Bottom.

\*Optional 3D Glasses (PK-AG1) and 3D Synchro Emitter (PK-EM1) are required for viewing images in 3D. Note: Keystone, anamorphic mode, and certain other functions cannot be used while projecting in 3D mode.

## Notes about viewing 3D video content

- The optional 3D Synchro Emitter and 3D glasses are required to view 3D images from the DLA-X7 and DLA-X3. 3D video software (3D media or output of 3D broadcasts) and a 3D-compatible video player are also required.
- Perception of 3D images will vary with individual viewers.
- Stop viewing 3D images immediately if any discomfort such as headaches, dizziness, eye fatigue, etc. occur.
- Viewing of 3D images by children under the age of five is not recommended.
- Read the Safety Precautions in the User Manual carefully before viewing any 3D source.

### ■ Optional equipment



3D Glasses PK-AG1-B



3D Synchro Emitter **PK-EM1** 



# JVC's exclusive Real Color Imaging Technology

Film-making in general is a time-consuming process requiring considerable effort by its creators, and at JVC, we focused on enhancing color space information to ensure that all images are reproduced as faithfully to the original source as possible. To accomplish this, JVC precisely analyzed the color information of original film prints to create exclusive color profiles, which led to the development of its innovative Real Color Imaging Technology. This technology precisely detects the color specifications in film to not only optimize color replication, but also to heighten picture quality to levels that go beyond expectations.

#### ■ Color temperature setting of a Xenon lamp

In yet another way to achieve a film-like picture, the Real Color Imaging Technology incorporates a color temperature setting equivalent to that of a Xenon lamp, a popular light source used in cinemas. A Xenon mode color temperature setting allows for the authentic reproduction of colors

similar to those of film in cinemas, while using highly efficient and economical ultra-high pressure mercury lamps.



Conventional color temperature setting



Xenon mode color temperature setting











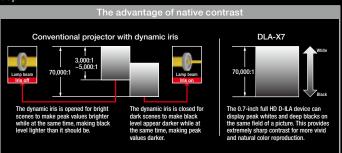




## Cinema-like quality with the new optical engine

#### 70,000:1 native contrast ratio is achieved

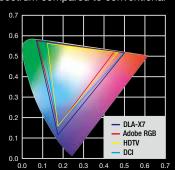
The newly developed optical engine features a new wire grid and a redesigned aperture that reduce excess light leakage to negligible levels, making possible a remarkable 70,000:1 native contrast ratio. High contrast and film-like quality offered by the original D-ILA devices also help to ensure smoother grayscale, truer black levels and more depth.



#### Adobe RGB for a wider color reproduction spectrum

The new optical engine achieves a greater expansion of the color spectrum by employing an innovative color filter. This results in a fullspectrum of color reproduction with complete coverage of different color spaces such as Adobe RGB, DCI, and HDMI with a 20%' increase in the color reproduction spectrum compared to conventional

JVC projector models. With this increase in color space, the new optical engine can more vividly reproduce colors such as the green of trees, the blue of oceans, etc., which were difficult to recreate accurately up until now. \*When compared to the DLA-HD950.



## **DLA-X7 Picture Quality adjustment features**



### New Color Management System with 7-axis matrix

In addition to the ordinary 6-axis matrix of red, green, blue, cyan, magenta, and yellow, the new Color Management System features a seventh matrix of orange to ensure the precise adjustment of hue, saturation, and intensity. The addition of the orange axis also helps in enhancing the selection of the color spectrum for skin tones. And for improved operability, only the color being adjusted will be shown on the screen while the others are displayed in black and white.





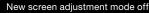
Displays only the color being adjusted; others are displayed in black and white.

### New screen adjustment modes\*

JVC has focused on individual screen characteristics to ensure the faithful reproduction of film-like picture quality. By improving upon the screen correction modes found on conventional models, these new screen adjustment modes analyze the RGB reflective characteristics of the screen being used to achieve optimum correction. The user can select an optimal parameter from a set of 94 parameters for an outstanding picture with natural color balance.

\*Please refer to the JVC website for the comparison table of primary screens and adjustment modes.







New screen adjustment mode on

## JVC original Film Tone

Until now, attempting to correct brightness or contrast settings as desired caused black or white levels to shift incorrectly with each setting. In order to overcome this issue, JVC has developed an original Film Tone function, which works to balance gamma, contrast, and brightness settings without affecting the gray scaling of the source to enable brightness adjustment that better matches the ambient environment.









#### Darkness and lightness correction

Adjustment of gray level, another essential factor for creating highquality images, can be corrected by separating darkness and lightness levels. By enabling darkness and lightness correction, the desired levels of gradation can be achieved without the tedious gamma correction process of conventional models.

#### The world's first projector to pass THX 3D Display Certification<sup>2</sup>



The JVC DLA-X7 is the world's first projector to be accredited for the THX 3D Certification. During the THX 3D Certification process, more than 400 laboratory tests are conducted, evaluating projector's color accuracy, cross-talk, viewing angles and video processing to ensure the high quality 3D and 2D display performance that home theater enthusiasts demand today. Featuring THX Cinema Mode, this projector has a simple, one button solution for optimized playback of 3D and 2D movies on Blu-ray Disc and broadcast TV. Additionally, the projector can be professionally calibrated by trained dealers to the user's choice of screen surfaces in the THX Mode.

\*1 As of November 1, 2010 under the front projector category
\*2 Best performance screen size for 3D is 90 inches diagonal (16:9).

#### Certified by ISF (Imaging Science Foundation)



The DLA-X7 projector has been licensed with the ISF C3 (Certified Calibration Controls) mode, enabling trained dealers to professionally calibrate it to your choices of screen surface, lighting environments and video sources and then securely store precision settings into the projector. This helps to ensure reproduction of film or video content accurate to the source and excellent picture quality optimized for specific environments.



# Breathtaking video with 1,300-lumen brightness and 50,000:1 native contrast ratio

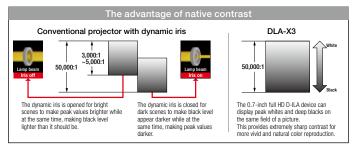
The redesigned optical engine utilizes a newly developed 220W ultra-high pressure mercury lamp to achieve a brightness level of 1,300 lumens. What's more, JVC's original D-ILA devices provide the DLA-X3 with a 50,000:1 native contrast ratio for breathtaking video reproduction with ample contrast, even in brightly lit rooms.





Conventional projector

DLA-X3



# Six picture modes and three color spaces

Users can select from six picture modes to perfectly match the content and ensure exceptional picture quality. Up to three color spaces can also be used to achieve the optimum color space that will complement the picture modes.

# New Clear Motion Drive improves pictures with rapid movement

As an original manufacturer of high-speed drive technology, JVC has further enhanced its detection interpolation technology through high-precision interpolation algorithms to develop a new Clear Motion Drive that helps to smooth movement in the picture. By reducing blur that can be generated in high-speed scenes such as sports events, etc., the new Clear Motion Drive makes the overall picture much smoother and clearer. Additionally, as the amount of picture delay is very limited, these projectors are also well suited for playing video games.





New Clear Motion Drive off

New Clear Motion Drive on

# Original screen adjustment modes

As the quality of projected images can vary slightly depending on the type of screen used, the DLA-X3 is equipped with JVC's original screen adjustment modes that allow users to select the optimum mode to match screen characteristics for more natural and balanced color reproduction.





Screen adjustment mode off

Screen adjustment mode on









# An array of convenient features for the DLA-X7 and DLA-X3



# Unique automatic lens cover

A unique automatic lens cover opens and closes upon power on/off to protect against dust or damage, so users are assured of easy, troublefree operation via the remote controller, even if the projector is installed on the ceiling.





Lens cover closed (power off)

Lens cover open (power on)



# A wide range of input and output terminals

In addition to HDMI terminals compatible with Blu-ray and DVD sources, these projectors also feature several other terminals including remote terminals for remote operation via connection of an extended IR sensor, a trigger terminal for an anamorphic lens, and the X7 features a LAN terminal for projector control.





DLA-X7

DLA-X3

#### ■ Optional Equipment



User-replaceable Lamp PK-L2210U



3D Glasses PK-AG1-B



3D Synchro Emitter PK-EM1

# Complies with the latest HDMI standard: Ver.1.4a

Two HDMI Ver.1.4a standard inputs, which comply with 3D, 1080p/24 input and Deep Color, are available that are capable of up to 12bit signal input per color (approx. 68.7 billion colors). The two terminals are separated far apart to allow

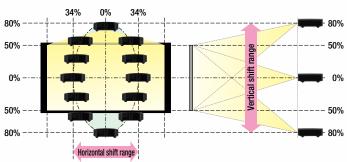
for two wide HDMI cables to be inserted simultaneously.



# 🝗 Flexible installation guaranteed

Setting up the projector in a location ideal for projection is made easy thanks to the ±80% vertical and ±34% horizontal powered lens-shift function with remote control. These projectors also feature a highperformance 2x zoom lens with motorized focus that can project images upon a large 100-inch screen at distances of between 3.1 and 6.2 meters. With the high-performance motor, the once tedious tasks of setting zoom ratios and focus adjustments are now simple and effortless.

#### ±80% vertical and ±34% horizontal electric lens shift function



The vertical and horizontal lens shift function cannot be set to the maximum values simultaneously.

#### ■ Projection distance chart

Display size (16:9) Inches and (mm)			Throw distance		
Width	Height	Diagonal	Feet – Inch Meters	Feet – Inch Meters	
52 1/4	29 1/, (747)	60 (1523)	5 – 10 1.78	12 – 0 3.66	
60	33 1/4 (857)	68 1/1 (1749)	6 - 8 1/4 2.05	13 - 9 1/2 4.20	
70	39 1/, (1000)	80 1/1 (2040)	7 – 10 2.39	16 – 1 1/4 4.91	
80	45 (1143)	91 1/4 (2332)	8 - 11 3/4 2.74	18 – 5 5.61	
90	50 :/, (1286)	103 1/4 (2623)	10 - 1 1/2 3.08	20 - 8 3/4 6.32	
100	56 1/4 (1429)	114 1/4 (2915)	11 – 3 1/4 3.43	23 - 1/2 7.02	
110	61 1/, (1572)	126 1/4 (3206)	12 – 5 3.78	25 – 4 1/4 7.73	
120	67 1/2 (1715)	137 1/4 (3498)	13 - 6 3/4 4.13	27 - 8 1/4 8.44	
130	73 1/, (1857)	149 1/1 (3789)	14 - 8 1/2 4.49	30 – 1/4 9.15	
140	78 3/4 (2000)	160 1/, (4081)	15 - 10 1/2 4.84	32 – 4 9.86	
150	84 3/, (2143)	172 1/, (4372)	17 – 1/2 5.19	34 – 8 10.57	
160	90 (2286)	183 :/, (4663)	18 – 2 1/2 5.55	37 – 1/4 11.28	
170	95 :/, (2429)	195 1/, (4955)	19 – 4 1/2 5.91	39 – 4 1/4 11.99	
174 1/4	98 (2490)	200 (5079)	19 – 10 ½ 6.06	40 – 4 1/4 12.30	

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

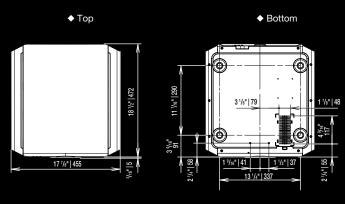
#### ■ Main Features

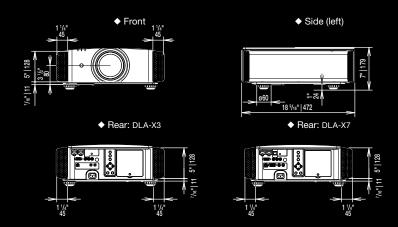
	DLA-X3	DLA-X7	
Clear Motion Drive	New Clear Motion Drive		
3D Viewing Compatibility	<b>√</b>		
Aperture	✓ (16 steps)		
Color Management	-	✓ (7-axis)	
Color Temperature (Xenon Lamp Mode)	-	✓	
Film Tone Adjustment	-	<b>✓</b>	
Darkness and Lightness Correction	-	<b>✓</b>	
Number of Screen Adjustment Modes	3 modes	94 modes	
THX Certified Display	-	✓ (THX 3D)	
ISF Certified	-	/	
Digital Keystone	<b>✓</b>		
Automatic Lens Cover	/		

#### ■ Specifications

		DLA-X3	DLA-X7	
Device		0.7-inch D-ILA x3		
Resolution		Full HD D-ILA device (1920 x 1080)		
Lens		2 x motorized zoom / focus		
		f=21.4mm - 42.8mm		
		F=3.2 - 4		
Projection size		60 - 200 inches (screen diagonal)		
Lens shift function		±80% Vertical and ±34% Horizontal (motorized)		
Light source lamp		220W Ultra-High Pressure Mercury Lamp		
		(lamp life: approx. 3000 hours when the lamp is in Normal mode)		
Brightness		1,300lm		
Contrast ratio		Native: 50,000:1	Native: 70,000:1	
Input terminals	Component	1 (RCA; Y, Рв/Св, Рг/Сг)		
	HDMI	2 (ver.1.4a, 3D, Deep Color CEC compatible)		
	Analog RGB (PC)	_	1 (D-sub 15-pin)	
Output terminals	Trigger	1 (mini jack, DC12V/100mA)		
	3D sync	1 (mini DIN 3-pin)		
Control terminals	RS232C	1 (D-sub 9-pin)		
	Remote	1 (mini jack)		
	LAN (RJ-45)	_	1	
Video input signal	Digital	480i/p, 576i/p, 720p 50/60, 1080i 50/60,		
formats		1080p 24/50/60		
	Analog	480i/p, 576i/p, 720p 50/60, 1080i 50/60		
PC input signal	HDMI	VGA, SVGA, XGA, WXGA, WXGA+, SXGA, WSXGA+, WUXGA		
	Analog RGB		VGA, SVGA, XGA, WXGA, WXGA+,	
	(D-sub 15-pin)	_	SXGA, SXGA+, WSXGA+,	
			1920 x 1080, MAC 13", 16", 19"	
3D format	Frame packing	1080p 24, 1080i 50/60, 720p 50/60		
	Side-by-side	1080p 50/60, 1080i 50/60		
	Top and bottom	1080p 24, 720p 50/60		
Noise level		20dB (when the lamp is in Normal mode)		
Power requirement		AC 110V-240V, 50/60 Hz		
Power consumption		350W (Stand-by: 0.9W)		
Dimensions: W x H x D, in / mm		17 <sup>7</sup> /s" x 7" x 18 <sup>1</sup> / <sub>2</sub> " / 455 x 179 x 472		
Weight, lbs. / kg		32.4 / 14.7	33.3 / 15.1	

#### ■ External Dimensions (unit: inches | mm)





• The projector 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 between individual lamps regarding how many hours they will operate before requiring replacement. • An additional payment is required for installation of a new lamp, if necessary. • The projector lamp requires periodic replacement and is not covered by warranty. • 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).

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