

JVC[®]
PROFESSIONAL

D-ILA[™] PROJECTOR
DLA-DS1

True SXGA in The World's Smallest and Lightest Package



SXGA

Ready for the future: Introducing JVC's DLA-DS1, the world's smallest and lightest projector with true SXGA capability

Over the next few years, demand for SXGA resolution is expected to increase rapidly. In the near future, this high-resolution format is likely to account for half the display market, making it the dominant display standard. Clearly, then, SXGA capability is critical to meeting the image display demands of the future.

Now you can take advantage of true SXGA resolution without having to commit to a big, expensive permanent projector installation. Thanks to JVC's original 1PBS optical engine, the high-resolution DLA-DS1 D-ILA™ projector not only delivers full-quality SXGA pictures, it's also smaller and lighter than any other projector in its class — small enough to set up just about anywhere, and light enough to move easily from room to room as required.

With its virtually unlimited information processing potential, D-ILA™ technology is destined to become the premier display technology for digital cinema and other high-end applications in the future. This technology has already made our current D-ILA™ device the leader in the market for high-performance large-screen display projectors. Now we are developing a new generation of D-ILA™ devices (0.7" SXGA+ device, 1.3" QXGA device, etc.) that will pave the way for even more exciting applications in the future.



"D-ILA™ Quality"— natural, smooth image with optimized contrast

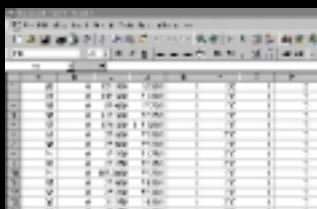
JVC's original D-ILA™ technology for unsurpassed image quality

JVC's D-ILA™ (Direct Drive Image Light Amplifier) technology features a high-density, reflective liquid crystal structure that provides you with today's optimal combination of brightness, resolution, contrast and color for the big screen. Thanks to a 93% aperture ratio, it also provides the highest native resolution with the least visible pixels, making images as smooth and natural as film.

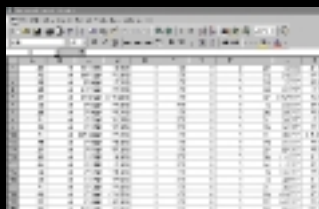
1,365 x 1,024 native resolution for true SXGA resolution without compression plus UXGA compatibility

With extra-high resolution of up to 1,365 x 1,024 pixels, the DLA-DS1 easily handles even the super-sharp clarity of an SXGA (1,280 x 1,024 pixels) image. It reproduces the picture without the scaling or loss of quality typically associated with projection of high-resolution computer graphics and CAD/CAM images. With video resolution of 1000 TV lines, small text, characters, icons and cursors are clearly legible even at the corners of the projected image.

Moreover, the DLA-DS1 has input capability up to 105 kHz, making it compatible with resolutions as high as UXGA (1,600 x 1,200).



Ordinary resolution



SXGA resolution

Technologies for enhanced image quality

The powerful image reproduction performance of the DLA-DS1 is enhanced by an array of unique JVC imaging technologies that assure the best possible results with any image source.

- **Adaptive DPC (Digital Pixel Conversion) Technology**

This optimizes image scaling to best match the D-ILA™'s pixels, eliminating the annoying jagged edges found with other digital technologies. As a result, you can obtain smooth and natural images regardless of the source resolution (up to 105 kHz).

- **Digital Gamma Correction**

With accurate color reproduction capability, this circuitry provides superior color performance by ensuring accurate gray scale, from sheer black to shining white. That's critical for all your images, from subtle skin tones in home theater screenings to the complex coloration of workstation graphics.

- **Color Enhancement Technology**

This compensates for color contours to eliminate blur for crisper and sharper video images.

- **200 W UHP lamp**

The superb **1,300 ANSI lumen** image of the D-ILA™ picture shines through even in a brightly lit room thanks to the powerful new **200 W UHP lamp**.

DLA-DS1

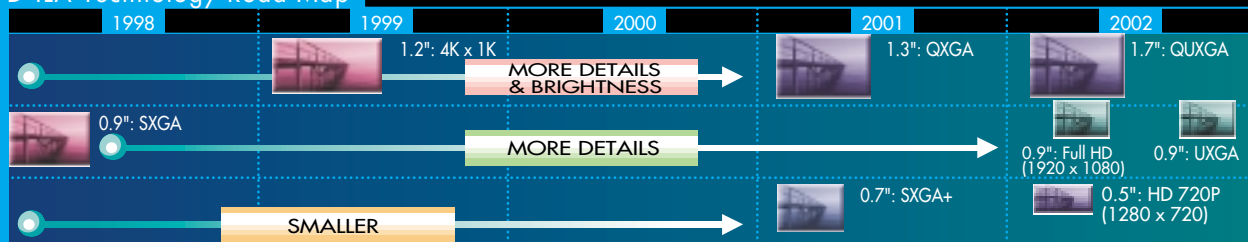
JVC current LCD projector

Comparison of gradation characteristics

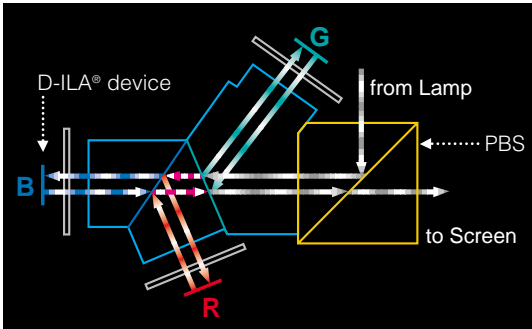
Compatibility with the future

The continued advance of digital technologies means that more visual information is processed, and more details have to be displayed. As a result, both desktop and notebook PCs are moving towards the SXGA display standard, digital camera resolutions are increasing into the mega-pixel range, and high-quality video sources like HDTV are making their way into many homes. With its true SXGA-based design, the DLA-DS1 can accurately project images from any of these sources. And, with "Class B" classification, the DLA-DS1 is completely suitable for home use. The ideal home theater projector, it is also fully compatible with digital TV — 480i, 480p, 720p and 1080i, making it the right choice for the future.

D-ILA™ Technology Road Map



World's smallest and lightest



1PBS system — patent pending

In order to incorporate the high performance of its D-ILA® projection technology into a compact unit that can be installed anywhere, JVC developed a completely new optical system that uses **only one PBS (Polarized Beam Splitter)**. As a result, the DLA-DS1 weighs a **mere 13.2 lbs (6.0 kg.)**. As easy to move around as a notebook computer, the DLA-DS1 can go anywhere, anytime, assuring a top-quality, high-impact presentation every time.



A straight blue line on the top panel runs parallel to the lens axis to make it easier to correctly align the unit's direction.



Quick lamp & filter replacement

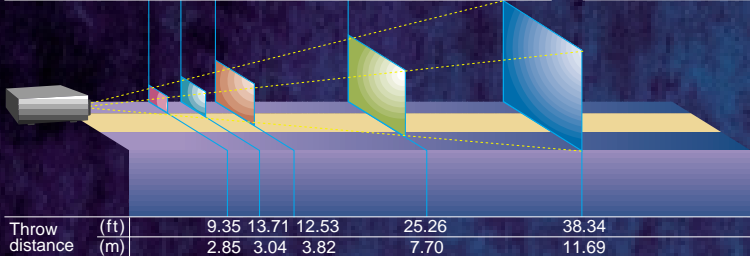
Easy-to-use and user-friendly design

Installation is a snap. Setup is just a matter of plug and play — align the blue line (optical axis) on the unit vertically with the screen surface and you're ready to go. The **quick alignment** function automatically sets up the projector's phase/tracking/position in a matter of seconds. **A cooling vent located on the front directs warm exhaust forward, where it's less likely to bother anyone.** Acoustic **noise** generation is **minimal** — almost below the threshold of normal hearing. **The lamp and filter can be replaced from the front** so there's no need to move or lift the projector. And when you do need to move the projector, **the belt handle** is provided for easy carrying.

Throw distance vs. Screen size

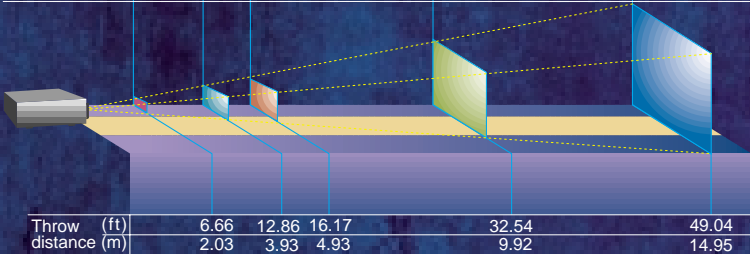
Wide

Screen size (ft)	4.99	5.35	6.66	13.32	19.98
<Width> (m)	1.52	1.63	2.03	4.06	6.09



Tele

Screen size (ft)	2.79	5.35	6.66	13.32	19.98
<Width> (m)	0.85	1.63	2.03	4.06	6.09



Meeting the need for true SXGA capability and affordable convenience

The DLA-DS1 can faithfully reproduce all the details of the original image when it is connected to an SXGA resolution notebook PC, digital camera or JVC digital presenter.

SXGA

Notebook PC

SXGA~UXGA

Digital camera

SXGA

AV-P1000 digital presenter
(replaces OHP system)

W-VHS High-Definition VCR

Powerful presentation support system

• Digital keystone correction

Keystone correction of $\pm 20^\circ/35^\circ$ * with the direct button.



Before correction

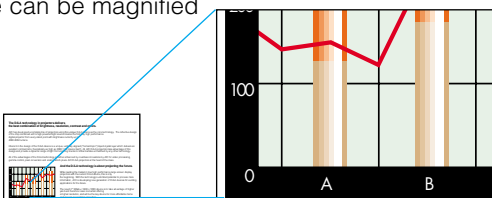
After correction

Before correction

* Setting is possible via the RS-232C interface.

• 1.3x optical zoom/16x digital zoom function

The picture can be magnified up to 16x.



• Freeze frame

Lets you freeze the current image (still picture), so you can set up the next presentation.

• User selectable color temperature

The optimum color temperature can be set for each media source (PC/TV, Cinema), making images more natural and smooth.

• User channel presets

For the most specialized applications, up to 40 user channels can be preset (freq./phase/H Pos./V Pos./HV resolution/tone selection) for flexibility and ease of use.

• Hide buttons

• Environment-friendly fluorescent remote control

• Remote control signal reception window on the rear panel for easier control over presentations



Major Specifications

SYSTEM

Image Device	3 D-ILA™ (0.9 inches diagonal)
Projection Lens	1.9 to 2.5 : 1 (Throw distance: Screen width), F3.6, manual zoom/focus, 50% fixed offset
Brightness	1,300 ANSI lumens
Native Resolution	1,365 x 1,024 pixels
Source Resolution	Up to 1,600 x 1,200, 1000 TV lines (4:3, vertical, video input)
Uniformity	85% or more
Scan Frequency	
Horizontal	15 – 105 kHz
Vertical	50 – 90 Hz
Data Clock	160 MHz
Screen Size	Wide 4.99 ft – 19.98 ft (1.52 m – 6.09 m) (width)
Tele	2.79 ft – 19.98 ft (0.85 m – 6.09 m) (width)
Throw Distance	Approx. 6.56 ft – 49.2 ft (2 m – 15 m)
Lamp	200 watts, UHP
Speaker	1.0 W, monaural

SOURCES

Computer	VGA, SVGA, XGA, SXGA, UXGA, MAC, SUN, SGI, etc.
Video	PAL, SECAM, NTSC/NTSC 4.43
DTV (Digital TV)	480i, 480p, 720p, 1080i
Audio	2 sources (RCA, mini jack)

CH SETTING

CH Auto Search	130 sources (VGA to UXGA)
User CH Setting Source	40 CH
User CH Setting	Freq./phase/H Pos./V Pos./HV resolution/tone selection
Quick Alignment	CH auto tracking (phase/tracking/position)
External Switcher Control	User CH switcher No. setting (10 CH) ON/OFF hide CH selection

GENERAL

Power Requirement	100 – 240 V, 50/60 Hz AC
Power Consumption	270 W
Dimensions (W x H x D)	11.4" x 5.2" x 13.8" (excluding lens) (290 x 132 x 350 mm)
Weight	13.2 lbs. (6.0 kg)

REAR PANEL



INPUTS

1 RGBHV (BNC)	Computer and DTV
1 Component (Y, Pr, Pb)	Video and DTV (1 RGBHV and 1 Component inputs use a common connector.)
1 RGB (15-pin VGA)	Computer
1 Composite	
1 S-Video	

EXTERNAL CONTROL

Control Terminal	Serial: 1 source (RS-232C, D-sub 9-pin) Remote: 1 source (wired remote, mini jack)
IR Remote Control	Fluorescent type

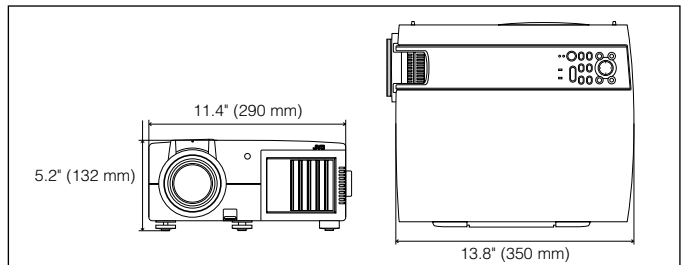
Allowable input signals

Signal		Number of pixels (dots)	Horizontal frequency H (kHz)	Vertical frequency V (Hz)
Video system	Video	HDTV (1035i) 60Hz	33.75	60.00
		HDTV (1035i) 59Hz	33.72	59.94
		480p	31.47	59.94
		720p 60Hz	45.00	60.00
		720p 59Hz	44.96	59.94
		1080i 60Hz	33.75	60.00
		1080i 59Hz	33.72	59.94
		NTSC	15.734	60
		PAL	15.625	50
		SECAM	15.625	50
PC system	PC96 PC/AT DOS/V	VESA350	37.86	84.13
		PC98	24.83	56.42
		VGA 60Hz	31.47	59.94
		VGA 72Hz	37.86	72.81
		VGA 75Hz	37.50	75.00
		VGA 85Hz	43.27	85.01
		SVGA 56Hz	35.16	56.25
		SVGA 60Hz	37.88	60.32
		SVGA 72Hz	48.08	72.19
		SVGA 75Hz	46.88	75.00
		SVGA 85Hz	53.67	85.06
		XGA 43Hz	35.52	43.48
		XGA 60Hz	48.36	60.00
		XGA 70Hz	56.48	70.07
		XGA 75Hz	60.02	75.03
		XGA 85Hz	68.68	85.00
		SXGA 43Hz	46.43	43.44
		SXGA 60Hz	63.98	60.02
		SXGA 75Hz	79.98	75.03
		SXGA 85Hz	91.15	85.02
		UXGA 60Hz	75.00	60.00
	Mac	MAC 13	640x480	35.00
		MAC 16	832x624	49.73
		MAC 19	1024x768	60.24
		MAC 21	1152x870	68.68

Notes

- The resolution for the input signals is listed in the above table.
- Even signals in the frequency range that can be input may not be displayed normally depending on the type of the signal.
- When a signal other than listed above is input, the image could be partially erased or an unneeded fold-over image could appear.
- Some signals other than listed above can be displayed. But they may require adjustment.
- Even some of the signals listed above may require adjustment depending on the video board used.
- Composite sync (Ca) and G on Sync signals cannot be handled depending on the devices connected.
- The VGA signal of the PC system could be displayed in 480p mode of the VIDEO system. (In this case, the projector enters video menu mode when the MENU button is pressed.)

Dimensions



AV-P1000 digital presenter



- High-resolution 1,280 x 960 pixels equivalent to SXGA images
- RGB (SXGA to VGA) or NTSC/PAL output
- Simultaneous display
- 3-picture memory
- Smooth transitions with freeze function
- 20x zooming (4x electronic zoom combined with 5x power zoom)
- 2 zoom presets
- Camera/PC input selector
- Pointer indication
- Book holder

Design and specifications subject to change without notice.

JVC®

DISTRIBUTED BY

JVC PROFESSIONAL PRODUCTS COMPANY

DIVISION OF JVC AMERICAS CORP.
1700 Valley Road, Wayne, N.J. 07470
TEL: 973-315-5000, 1-800-526-5308 FAX: 973-315-5030
<http://www.jvc.com/pro>

JVC CANADA INC.

21 Finchdene Square, Scarborough Ontario M1X 1A7
TEL: 416-293-1311 FAX: 416-293-8208
<http://www.jvcpro.com>

D-ILA is a trademark of Victor Company of Japan, Limited.
MAC is a trademark of Apple Computer, Inc.
SUN is a trademark of Sun Microsystems, Inc.
SGI is a trademark of Silicon Graphics, Inc.

Copyright © 2001, Victor Company of Japan, Limited (JVC).
All Rights Reserved.