JVC
PROFESSIONAL

D-ILA® PROJECTOR

DLA-QX1G

Incredible film-like image reproduction
with the world's first QXGA projector

So advanced it might just be the first in the universe — JVC presents the world's first ultra-high resolution QXGA projector for super natural color reproduction and clear, sharp details on a large screen

With the introduction of JVC's DLA-QX1G, video image projection takes a quantum leap into the future. Thanks to JVC's original D-ILA® device, the DLA-QX1G is the world's first projector able to deliver the long-awaited ultra-high resolution images that match the depth and true-to-life presence of film. With its QXGA resolution, 7000 ANSI lumens and 1000:1 contrast, the DLA-QX1G delivers images with the super contrast, subtle gradations, and crisp detail which are ideal for projection of workstation graphics, e-cinema productions, HDTV images, and pre-recorded media such as a D-VHS. With QXGA, even the ultra-high-resolution requirements of CAD/CAM images are more than satisfied — image quality is superb with excellent reproduction of even the smallest details.
Ideal for use in a wide range of applications — from ultra-high resolution command/control, medical imaging, or GIS/mapping displays to HDTV theaters, electronic cinemas, simulations, 3D imaging, post production and commercial distribution
— the DLA-QX1G is the total image projection solution for the 21st century.

1000:1
Super Contrast

7000
ANSI Lumens

Native
QXGA
3.2M pixels
(2048 x 1536 pixels)

Film-like
Picture

High resolution

- **World's first native QXGA resolution**
  Provides the world's first native QXGA (2048 x 1536 pixels) ultra-high resolution, ensuring picture-perfect image reproduction With 3.2M pixels, QXGA offers 4 times the XGA resolution of 800K pixels.

QXGA

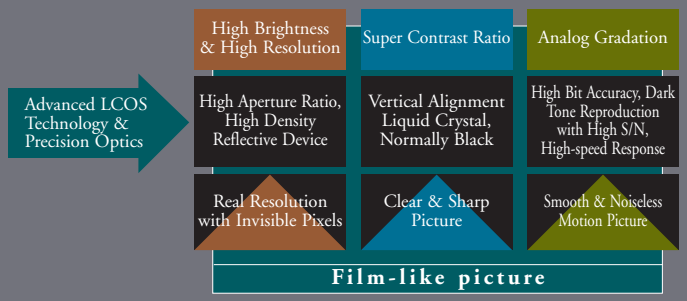
- **Full HDTV resolution**
  QXGA spectacular resolution capability enables it to easily encompass the full HD specifications of 1920 x 1080, allowing projection of full-spec HDTV images without resizing.
- **Ultra-high resolution display**
  Ultra-high resolution CGI and CAD/CAM images can be clearly displayed with vivid detail and crisp contrast.

High brightness

- **7,000 ANSI lumens**
  With its powerful 2 kW xenon lamp and new optical system design, the DLA-QX1G achieves outstanding brightness of 7,000 ANSI lumens, enabling projection of dazzling, easy-to-see, high-quality images even under high ambient light.

7000 ANSI Lumens

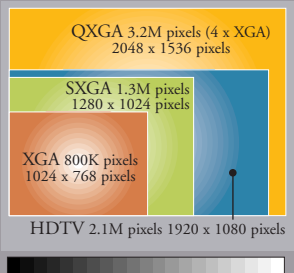
D-ILA® High-quality Picture Technology

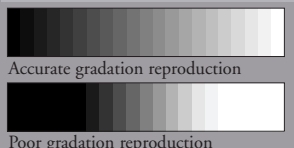


D-ILA® technology

- **New D-ILA® device**
  The new QXGA D-ILA® device has evolved from the 0.9-inch D-ILA® device and features 2048 x 1536 pixels, providing a total of 3.2M pixels arranged on a 1.3-inch panel. A separate D-ILA® device is used for each color (R/G/B), bringing the total number of pixels to 10 million. The result is resolution 2.4 times that of an SXGA device and four times that of an XGA device. With this new QXGA device, HDTV signals (1920 x 1080) can be projected at full resolution without resizing, ensuring silky-smooth images with ultra-fine detail and no visible pixelization.

Graphical Depiction of Resolution





- **10-bit digital signal processing**
  Signal processing is improved from 8 bits to 10 bits for maximum suppression of signal degradation and noise.
- **93% aperture ratio**
  As the D-ILA® device's design allows unlimited reduction of the space between pixels, a high aperture ratio of 93% is achieved, making it possible to project natural-looking images with pixelization almost completely eliminated.
- **Super contrast of 1000:1**
  Using reflective LCOS (Liquid Crystal on Silicon) and vertical alignment liquid crystals, super contrast of more than 1000:1 is achieved by the device itself.

Experience the ultimate in projection performance with film-quality QXGA images, high brightness, super contrast, and comprehensive pro-standard adjustment functions

Film-like Picture

Film-like picture projection – high-quality picture display equivalent to a movie theater

- **1000:1 contrast ratio**

  A reflective, vertical alignment liquid crystal system and new optical system achieve a super contrast ratio of 1000:1.

1000:1 Super Contrast

- **Silky-smooth picture quality with invisible pixelization**

  The driving IC is located behind the liquid crystal layer, enabling the D-ILA® device to achieve a very high aperture ratio. Since the space between pixels is virtually eliminated, images are smooth and natural-looking.

- **Normally black reproduction**

  With the D-ILA® device, liquid crystals are modulated by applying a low or high voltage. As normally black — black at no modulation — is achieved, true black reproduction is possible.

- **Analog gradation**

  Analog gradation allows accurate reproduction of subtle color tones and delicate shades. Gradation characteristics for dark areas are excellent.

- **Xenon lamp**

  By using a xenon lamp — which has spectrum characteristics close to that of natural light, the DLA-QX1G can faithfully reproduce the original characteristics of images.

Professional adjustment functions

- **Three reference white point settings**

  Color temperature can be switched between three settings (D65/D55/user) according to the input source.

- **Gamma mode presets**

  Three preset gamma tables are selectable and can be customized.

- **Built-in test signal and self-diagnosis function**

  The test signal can be used to adjust the image and the self-diagnosis function warns of problems with the unit.

Enhanced flexibility

- **Wide range of inputs**

  Designed to handle today's diverse range of signal formats, the DLA-QX1G can accept input signals with horizontal frequencies from 31.5 kHz to 135 kHz and vertical frequencies from 48 Hz to 120 Hz , as well as HDTV vertical frequencies of 24 Hz and 30 Hz.

- **Projection of full HDTV signals**

  HDTV signals of 720P, 1080i, 1080/24sF, 1080/24P can be projected with full resolution.

- **Two optional HDTV input boards**

  The HD analog video input card converts interlaced HDTV signals to progressive signals. The HD-SDI input card converts HDTV signals to digital signals with less degradation.

- **Two optional zoom lenses & two short-focus fixed lenses**

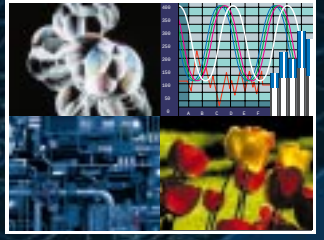
  Four optional lenses are available for various installation environments. In addition, up/down/left/right lens shift function (GL-MQ1023SZG/ GL-MQ1015SG) and digital keystone function are provided for more versatile setup.

- **Stackable design**

  When two DLA-QX1Gs are stacked, brightness of 14,000 ANSI lumens can be obtained.

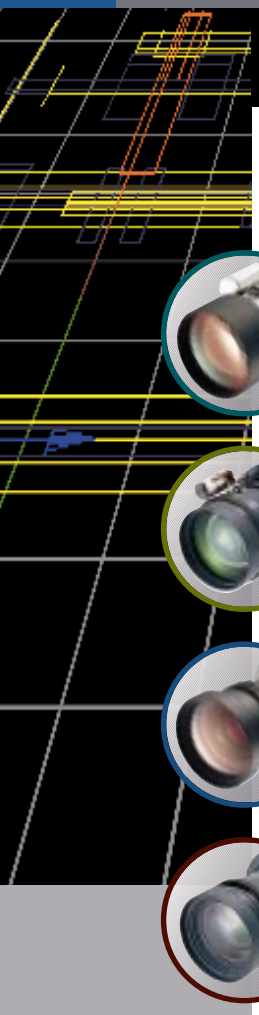
- **Multi-screen projection**

  As the DLA-QX1G projector's QXGA resolution is four times that of XGA, it is possible to set up a four-screen native XGA system.



Ultra-high resolution large-screen image in command/control tower

High-definition images make a powerful impact on visitors in a mall.



GL-MQ1023SZG
3 – 7:1 Zoom Lens
(±50% vertical/±30% horizontal shift)

GL-MQ1020ZG
2.1 – 4.8:1 Zoom Lens
(Limited shift depending on aspect ratio)

GL-MQ1015SG
1.5:1 Fixed Lens
(±50% vertical/±30% horizontal shift)

GL-MQ1010G
1:1 Fixed Lens
(On axis)

Setting the standard for projection quality in more ways than ever

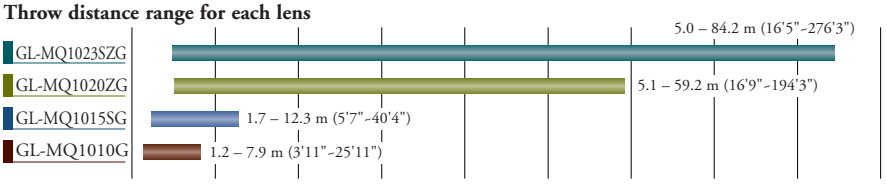
A variety of options

Various options including lenses and input cards make it easy to configure the projector to suit the requirements of different installation environments and applications.

- **Optional lenses**

Two fixed lenses (1:1, 1.5:1) and two zoom lenses (2.1 to 4.8:1, 3 to 7:1) are available.

Throw distance range for each lens



Throw distance vs. screen width

Screen width		GL-MQ1023SZG zoom (3 – 7:1)				GL-MQ1020ZG zoom (2:1 – 4.8:1)				GL-MQ1015SG fixed (1.5:1)		GL-MQ1010G fixed (1:1)	
		Wide		Tele		Wide		Tele					
m	t/inch	m	ft/inch	m	ft/inch	m	ft/inch	m	ft/inch	m	ft/inch	m	ft/inch
1.45	57"	—	—	10.1	33'6"	—	—	—	—	2.1	6'11"	1.5	4'1"
1.70	67"	5.21	7'1"	11.8	38'9"	—	—	—	—	2.5	8'2"	1.8	5'11"
1.83	72"	5.6	18'4"	12.8	41'12"	—	—	9.0	29'6"	2.7	8'10"	1.9	6'3"
1.92	80"	6.2	20'4"	14.2	46'7"	—	—	10.0	32'10"	3.0	9'10"	2.1	6'11"
2.44	96"	7.5	24'7"	17.0	55'9"	5.3	17'5"	11.9	39'1"	3.6	11'10"	2.6	8'6"
3.05	120"	9.3	30'6"	21.2	69'7"	6.5	21'4"	14.9	48'11"	4.5	14'9"	3.2	10'6"
3.66	144"	11.1	36'5"	25.4	83'4"	7.8	25'7"	17.9	58'9"	5.5	18'1"	3.9	12'10"
4.27	14'	12.9	42'4"	29.6	97'1"	9.1	29'10"	20.8	68'3"	6.4	20'12"	4.6	15'1"
4.88	16'	14.8	48'7"	33.8	110'11"	10.4	34'1"	23.8	78'1"	7.3	23'11"	5.2	17'1"
6.10	20'	18.4	60'4"	42.2	138'5"	13.0	42'8"	29.7	97'5"	9.2	30'2"	6.6	21'8"
7.32	24'	22.1	72'6"	50.6	166'	15.5	50'10"	35.6	116'10"	11.1	36'5"	7.9	25'11"
7.93	26'	23.9	78'5"	54.8	179'9"	16.8	55'1"	38.5	126'4"	12.0	39'4"	—	—
8.24	27'	24.8	81'4"	56.9	186'8"	17.55	57'5"	40.0	131'3"	—	—	—	—
9.15	30'	27.5	90'3"	63.2	207'4"	19.4	63'8"	44.5	145'12"	—	—	—	—
9.76	32'	29.4	96'5"	67.4	221'2"	20.7	67'11"	47.4	155'6"	—	—	—	—
10.98	36'	33.0	108'3"	75.8	248'8"	23.2	76'1"	53.3	174'10"	—	—	—	—
12.20	40'	36.6	120'1"	84.2	276'3"	25.8	84'8"	59.2	194'3"	—	—	—	—

*Optical shift function is not available on the GL-MQ1020ZG and GL-MQ1010G lenses.

Medical procedure is shown in vivid detail with faithful color reproduction. The images can be displayed in real time at sites around the world.

- **Optional input cards**

  In addition to the provided RGB analog input card, two optional HDTV input cards are available. The HD analog video input card provides compatibility with legacy analog HDTV devices and includes an on-board de-interlacer for interlaced HDTV sources. The HD-SDI input card allows a convenient, industry standard, direct digital to digital input for HD-SDI sources.

RGB analog input card (provided)

HDTV analog input card

HD-SDI input card

Supplied accessories

- **Wireless/wired remote control**

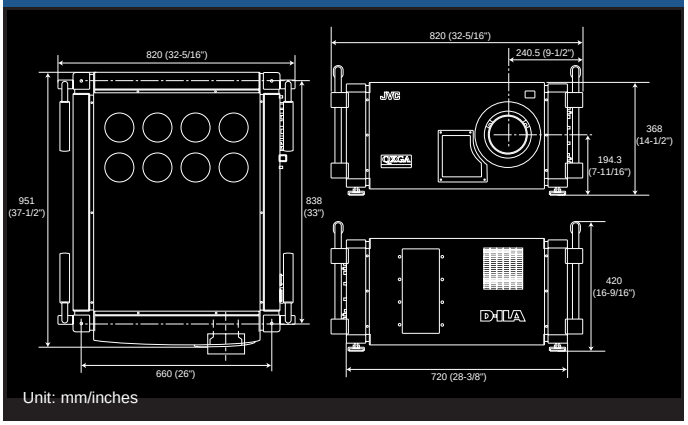
  Convenient and easy-to-use, this remote control lets you operate the DLA-QX1G from a distance. For greater reliability, you can also connect this remote control directly to the DLA-QX1G with the provided 15-m cable.

- **Detachable handles**

Major specifications

Image Device	3 D-ILA® Devices (1.3 Inches Diagonal)
Lamp	2 kW, Xenon
Brightness	7000 ANSI Lumens
Resolution	2048 x 1536 Pixels (4:3 Aspect Ratio)
Contrast Ratio	Greater than 1000:1 (Sequential)
Uniformity	Greater than 85%
Sync Frequency	
Horizontal	31.5 kHz – 135 kHz
Vertical	24 Hz, 30 Hz, 48 Hz – 120 Hz (24 Hz and 30 Hz for HDTV)
Data Clock	Up to 280 MHz
Color Processing	10 Bits/Color RGB (approx. 1 billion colors)
DTV Formats Supported	720/60P, 1080/24P/24sf/30P, 1080/60i/50i (with HD-SDI Module)
Input Signal	RGB Analog – RGBHV – VGA thru QXGA (Progressive only) HDTV Analog – Y, Pb, Pr HD-SDI – HDTV 24P, 30P, 60i
Input	3 Input Module Slots
Electronic Keystone Correction	±15° (Vertical)
Color Temperature	3 Settings
Gamma	3 Settings, 12-Bit Processing
Remote Control	RS-232C (Mini D-sub 9 pin) x 2 (IN/OUT) Wired Remote (Stereo mini ø3.5) x 1
Projection Lens (Optional)	1:1 Fixed Lens 1.5:1 Fixed Lens, ±50% Vertical/±30% Horizontal Shift 2.1 – 4.8:1 Zoom Lens 3 – 7:1 Zoom Lens, ±50% Vertical/±30% Horizontal Shift
Power Requirement	AC 200 V – 240 V, 50/60 Hz (Single Phase)
Power Consumption	2,800 W
Dimensions (W x H x D)	720 x 368 x 951 mm (28-3/8" x 14-1/2" x 37-1/2") (without Lens/Handle)
Weight	85 kg (187.4 lbs) (without Lens/Handle)
Options	HD-SDI Input Module HDTV Analog Input Module
Supplied Accessories	RGB Analog Input Module Detachable Handles Wired/Wireless Remote Control
Approvals	FCC (Class A), UL, CE

Dimensions



Control panel and connectors

Operation buttons

Connector boards (provided)

Allowable input signals

	Signal name	fH [kHz]	fV [Hz]	Pixel CLK [MHz]	Number of horizontal pixels		Number of vertical lines		Tracking
					Total	Effective	Total	Effective	
DTV	480P	31.469	59.940	27.000	858	720	525	483	858
	720_60P	45.000	60.000	74.250	1650	1280	750	720	1650
	1080_60P*1	67.500	60.000	148.500	2200	1920	1125	1080	2200
VGA	VGA_60	31.469	59.940	25.175	800	640	525	480	800
	VGA_75	37.500	75.000	31.500	840	640	500	480	840
	VGA_85	43.269	85.008	36.000	832	640	509	480	832
	MAC13	35.000	66.667	30.240	864	640	525	480	864
SVGA*2	SVGA_72	48.077	72.188	50.000	1040	800	666	600	1040
	SVGA_75	46.875	75.000	49.500	1056	800	625	600	1056
	SVGA_85	53.674	85.061	56.250	1048	800	631	600	1048
	MAC16	49.725	74.550	57.283	1152	832	667	624	1152
XGA	XGA_60	48.363	60.004	65.000	1344	1024	806	768	1344
	XGA_70	56.476	70.069	75.000	1328	1024	806	768	1328
	XGA_75	60.023	75.029	78.750	1312	1024	800	768	1312
	XGA_85	68.677	84.997	94.500	1376	1024	808	768	1376
	MAC19	60.241	74.927	80.000	1328	1024	804	768	1328
	MAC21	68.681	75.062	100.000	1456	1152	915	870	1456
SXGA	SXGA_60	63.981	60.020	108.000	1688	1280	1066	1024	1688
	SXGA_75	79.976	75.025	135.000	1688	1280	1066	1024	1688
	SXGA_85	91.146	85.024	157.500	1728	1280	1072	1024	1728
	SXGA_67	70.780	67.003	120.000	1696	1280	1056	1024	1696
	SXGA_76	81.206	76.179	140.000	1724	1280	1066	1024	1724
UXGA	UXGA_60	75.000	60.000	162.000	2160	1600	1250	1200	2160
	UXGA_65	81.250	65.000	175.500	2160	1600	1250	1200	2160
	UXGA_70	87.500	70.000	189.000	2160	1600	1250	1200	2160
	UXGA_75	93.750	75.000	202.500	2160	1600	1250	1200	2160
	UXGA_85	106.250	85.000	229.500	2160	1600	1250	1200	2160
QXGA	QXGA_60	95.340	59.960	246.750	2588	2048	1590	1536	2588
	QXGA_60max	95.760	60.000	280.000	2924	2048	1596	1536	2924

● Typical input signals used for this table.
*1 1080_60P is possible only using RGB analog input.
*2 Signals lower than 72 Hz for SVGA cannot be handled.

Design and specifications subject to change without notice.

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