

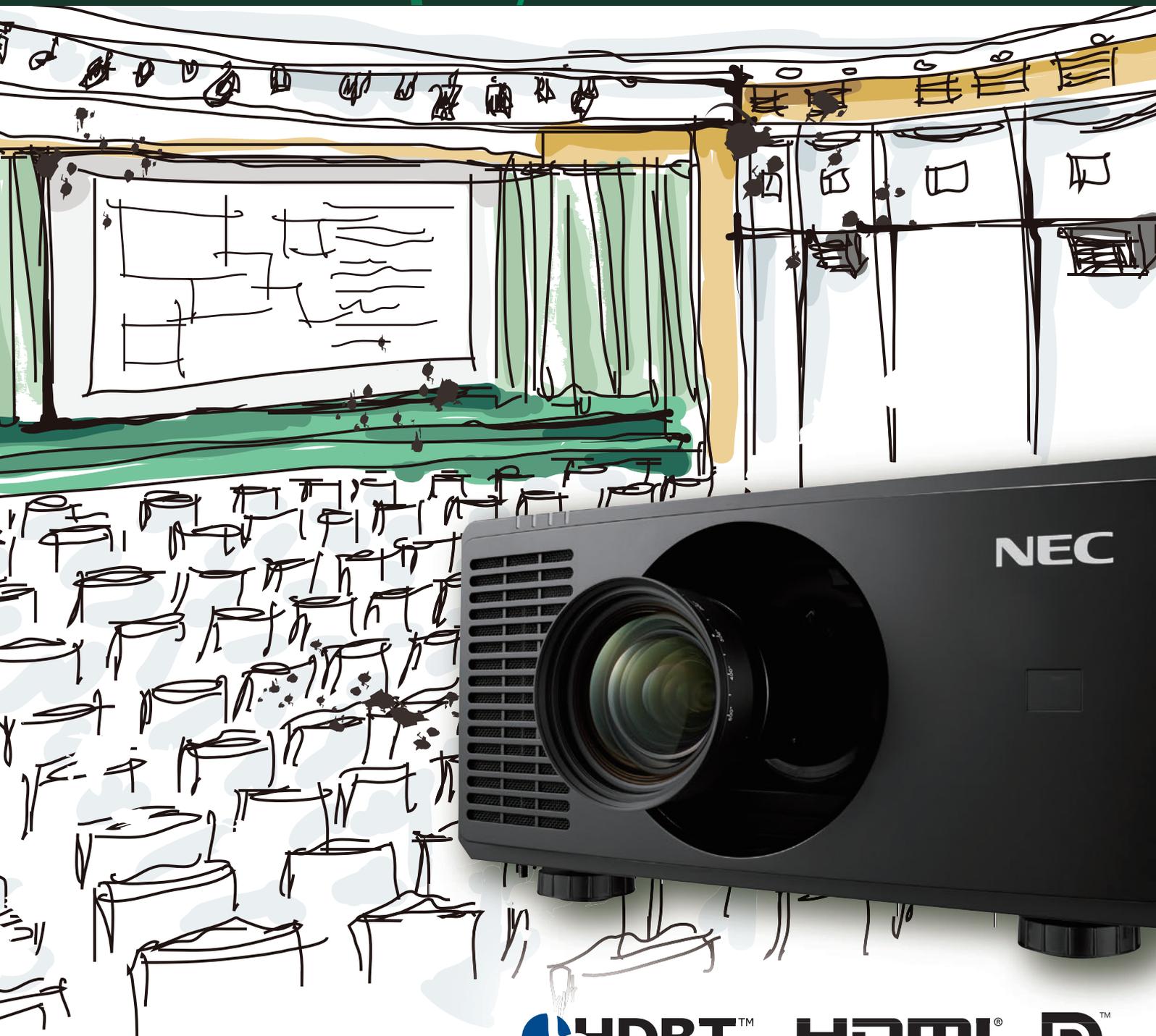
Installation Projector

Orchestrating a brighter world

NEC

Compact, 20,000-lumen, 1-chip DLP laser projector
RB laser with red boost for vivid colour performance

PX2000UL



 **HDBT**™
ASE

HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

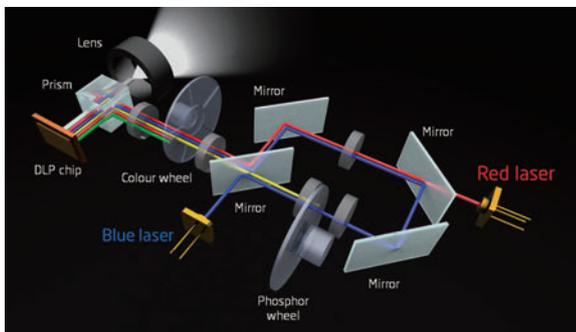
 **D**™

With attractive performance and low maintenance, this single-chip, 20,000-lumen laser projector delivers large venue projection at near 3-chip imaging performance.

Outstanding Picture through Advanced Laser Technology

Vivid Colour Performance

Producing richly intense colours far beyond that previously possible with 1-chip DLP technology through additional red laser technology, the PX2000UL achieves a wide colour spectrum covering the REC709 standard with unsurpassed brightness for the ultimate experience.



No More Lamp Replacements

Up to 20,000 hours* of maintenance-free operation is possible due to the laser light source while enjoying a Lower TCO. This projector has the ability to control brightness, creating a stable image over longer time periods.

* Actual hours may vary depending on usage conditions.

Dust-proof due to the Cycle Cooling System

PX2000UL has a dust-proof design to prevent the staining of optical components from the ingress of dust and the deterioration of brightness and image quality.

Advanced Installation Capabilities

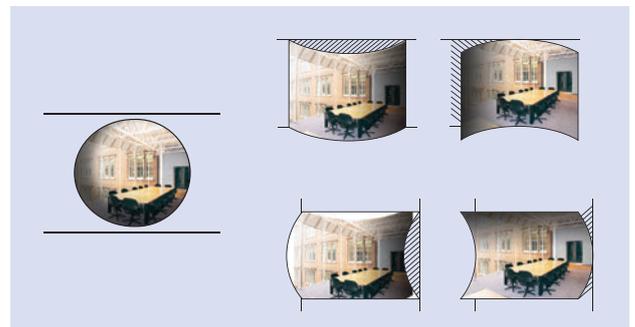
360° Positioning in Any Direction

This projector can be installed universally at any angle. Tilt-free, roll-free and portrait installations are supported. The projector can be rotated freely (360°) to point up or down depending on the installation requirements and can be rotated and installed on its side to create a portrait image.



Geometric Correction

Projection is not confined to a standard flat screen or wall. Geometric correction allows this model to project an image on spheres, cylinders, and many more non-standard surfaces.



Edge Blending Function

The function seamlessly blends multiple projected images to display a single high-resolution image.



Stacking Correction

The feature allows the projectors to boost an image's brightness up to 80,000 lumens (centre), which is ideal for larger-sized screens and environments with heavy ambient light. This feature also prevents the complete loss of an image, which can happen when using only one projector.

Optional Lenses and Lens shift

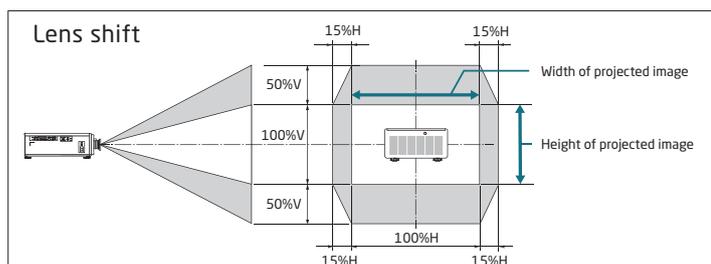
Enjoy greater installation flexibility with a complete line of motorized optional lenses (5).

Lens throw distances range from 1 m to 74 m. Wide vertical and horizontal lens shift (50% or 45% vertically and 15% horizontally) is available.

	NP45ZL	NP46ZL	NP47ZL	NP48ZL	NP49ZL
Lens type	Zoom lens (Short)	Zoom lens (Short)	Zoom lens (Standard)	Zoom lens (Long)	Zoom lens (Long)
Zoom / Focus	Motorized				
Zoom ratio	1.33	1.3	1.33	2.0	1.75
Throw ratio @ 100"	0.9 to 1.21 : 1	1.2 to 1.58 : 1	1.49 to 2.0 : 1	2.0 to 3.93 : 1	4.0 to 6.98 : 1
Screen size ^{*1}	50 to 500 inches	40 to 500 inches	40 to 500 inches	40 to 500 inches	50 to 500 inches
Light output ^{*2}	18,400 lumens	18,200 lumens	19,000 lumens	18,400 lumens	18,400 lumens
Lens shift	Vertical	+45%V to -45%V			
	Horizontal	+50%V to -50%V 15%H (Both sides)			
Weight	2.7 kg	2.0 kg	2.0 kg	2.7 kg	2.0 kg

*1: Mechanically adjustable range

*2: [PRESET] mode is [HIGH-BRIGHT] and [LIGHT MODE] is [BOOST].



Compatible with Diverse Signal Sources

Equipped with a wide range of inputs, such as HDMI[®] × 2, DisplayPort[™], HDBaseT[™], SDI, Computer, DVI-D, and BNC terminals.

Supports HDMI 3D format

Watch videos in 3D using commercially-available 3D emitters that support XPAND 3D and active shutter-type 3D eyewear. Also compatible with 3D images in the DLP[®] Link format.

HDBaseT Support

Simplify your installations with HDBaseT, which is optimized for video applications and supports uncompressed full HD digital video, audio, Ethernet, power and various control signals.

Terminals



Other Useful Functions and Features

- Eco mode and light source power adjustment
- Centre lens design for easy setup
- Remote control ID
- Direct power on/off, auto power on/off

Network Control

- NaViSet Administrator 2
- CRESTRON ROOMVIEW
- AMX BEACON
- PJLink
- HTTP server (projector adjustment)



PX2000UL

19,000 lm 20,000 lm (Centre)	WUXGA	51 kg
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Brightness using PX2000UL with NP47ZL.
Weight does not include lens.



Specifications

Model		NP-PX2000UL		
Projector Type		1 chip DMD reflection type		
Specifications of main parts	Main panel	Size	0.96 inch DMD (aspect ratio: 16:10)	
		Resolution	WXGA (1,920 dots × 1,200 lines)	
		Pixels ¹	2,304,000 pixels	
	Projection lenses ²	Zoom/Focus	Motorized	
		Lens shift	Refer to Lens specifications	
	Light source	Blue laser diode / Red laser diode		
Light source (laser diode) life ²	20,000 hours			
Optical unit	C/W type (DLP)	Colour separation by colour wheel; time-multiplexing colour wheel method		
	Boost mode	19,000 lumens / 20,000 lumens (centre)		
Light output ^{3,4}	Normal mode	18,000 lumens / 19,000 lumens (centre)		
Contrast ratio ⁴ (all white/all black)		10,000:1 with dynamic contrast		
Screen size		Please refer to the specifications of option lens		
Colour reproduction		10-bit signal processing (approx. 1.07 billion colours)		
Quietness (ECO mode / ECO mode off)		43 dB/45 dB		
Scanning frequency (Synchronization)	Horizontal	15 kHz, 24 to 153 kHz		
	Vertical	24 Hz, 25 Hz, 30 Hz, 48 Hz, 50 to 85 Hz, 100 Hz, 120 Hz		
Max. display resolution (horizontal × vertical)		Digital: 2,560 × 1,600 (WQXGA) / Analogue: 1,920 × 1,200 (WUXGA)		
Keystone correction	Horizontal	Manual, Approx. ± 60 Max degrees		
	Vertical	Manual, Approx. ± 40 Max degrees		
Input/output connectors	HDMI [®]	Video input	HDMI [®] Connector type A × 2 Deep Color (colour depth): 8-/10-/12-bit compatible Colorimetry: RGB, YCbCr444, YCbCr422, YCbCr420, REC2020, REC709, REC601 Supports HDCP ⁵	
		DisplayPort [™]	DisplayPort × 1 Data rate: 5.4 Gbps/2.7 Gbps/1.62 Gbps, No. lanes: 1 lane/2 lanes/4 lanes Deep Color (colour depth): 8-/10-/12-bit compatible Colorimetry: RGB, YCbCr444, YCbCr422, REC709, REC601 Supports HDCP ⁵	
	HDBaseT [™] / LAN port	Video input	RJ-45 × 1, 10BASE-T/100BASE-TX Deep Color (colour depth): 8-/10-/12-bit compatible Colorimetry: RGB, YCbCr444, YCbCr422, YCbCr420, REC709, REC601 Supports HDCP ⁵	
		Video input	BNC × 1 Input signals: SMPTE259M, SMPTE292M, SMPTE424M Colorimetry: RGB, YCbCr444, YCbCr422, REC709, REC601	
	SDI (3G/HD/SD)	Video input	BNC × 1	
		Video output	BNC × 1	
	Computer	Video input	Mini D-Sub 15 Pin × 1, BNC × 5	
		Video output	Mini D-Sub 15 Pin × 1	
	DVI-D		DVI-D × 1	
	3D Sync	In	BNC × 1, synchronized signal input for 3D use 1920 × 1200 RB 120 Hz, Frame sequential	
		Out	BNC × 1, synchronized signal output for 3D use	
	Trigger 1/2		Stereo mini jack × 2	
	PC control connector		D-Sub 9-pin × 1, 9600 bps	
	Remote connector		Stereo mini jack × 1	
	Usage environment ⁶		Operating temperature: 5 to 40°C ⁷ , operating humidity: 0 to 80% (with no condensation) Storage temperature: -10 to 60°C, storage humidity: 0 to 80% (with no condensation) Operating altitude: 0 to 4,200 m	
	Power requirement		200-240 V AC, 50/60 Hz	
Power consumption	Light mode - Boost	1,922 W		
	Light mode - Normal	1,779 W		
	Light mode - ECO	1,461 W		
	STANDBY (ON)	0.48 W		
	STANDBY (OFF)	0.4 W		
Input current		9.7 A		
Dimensions (W × H × D)		530 × 248 × 745 mm (not including protruding parts)		
Weight		51 kg (not including lens)		

*1: Effective pixels are more than 99.99%. *2: Time at which the laser light source is at half brightness; not a guarantee time.
*3: This is the light output value that results from setting [LIGHT MODE] to [NORMAL] and setting [PRESET] to [HIGH-BRIGHT] while using the NP47ZL lens (sold separately). The light output value is lower when setting the [LIGHT MODE] to [ECO].
*4: If any other mode is selected as the [PRESET] mode, the light output value may drop slightly.
*5: Compliant with ISO21118-2012. *6: If you are unable to view material via the HDMI, DisplayPort or HDBaseT input, this does not necessarily mean the projector is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community. (Digital Content Protection, LLC).
*6: Depending on the altitude and temperature, the projector goes into "Forced ECO Mode".

Remote control

(Included accessory)



Options

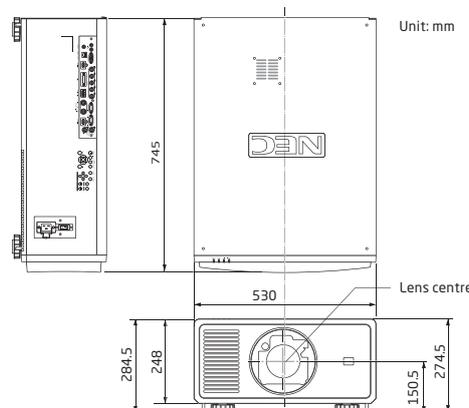
- Lenses
- NP45ZL (Throw ratio 0.9 - 1.2)
 - NP46ZL (Throw ratio 1.2 - 1.56)
 - NP47ZL (Throw ratio 1.5 - 2.0)
 - NP48ZL (Throw ratio 2.0 - 4.0)
 - NP49ZL (Throw ratio 4.0 - 7.0)

Throw distance and screen size

Screen size (W × H)	Lens model name				
	NP45ZL	NP46ZL	NP47ZL	NP48ZL	NP49ZL
50" (1.08 × 0.67)	0.9-1.3	1.2-1.6	1.6-2.1	2.2-4.3	4.4-7.6
70" (1.51 × 0.94)	1.3-1.8	1.8-2.3	2.2-3.0	3.1-6.0	6.1-10.6
100" (2.15 × 1.35)	1.9-2.6	2.6-3.4	3.2-4.3	4.3-8.5	8.6-15.0
120" (2.59 × 1.62)	2.3-3.2	3.1-4.1	3.9-5.2	5.1-10.1	10.3-18.0
150" (3.23 × 2.02)	3.0-4.0	3.9-5.2	4.9-6.5	6.4-12.6	12.8-22.5
180" (3.88 × 2.42)	3.6-4.8	4.8-6.2	5.9-7.8	7.6-15.1	15.4-26.9
200" (4.31 × 2.69)	4.0-5.3	5.3-6.9	6.5-8.7	8.5-16.8	17.1-29.9
250" (5.39 × 3.37)	5.0-6.7	6.7-8.7	8.2-10.9	10.5-21.0	21.3-37.3
300" (6.46 × 4.04)	6.0-8.0	8.0-10.4	9.8-13.1	12.6-25.1	25.5-44.8

*Stated projection distances are standard values from lens or mirror surface to screen centre.
*For a stack installation, the recommended projection distances will be different.
*The values in the table are design values and may vary.

Cabinet dimensions



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All specifications and the product's design are subject to change without notice. March 2020

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- Do not stare into the lens while in use.
- This product is equipped with a laser module.
CLASS 1 LASER PRODUCT conforming to IEC 60825-1, Third edition, 2014, and RG3 of IEC/EN 62471-5, First edition, 2015.
- The projector can be unplugged during its cool down period after it is turned off. Parts of the projector become heated during operation. Use caution when picking up the projector immediately after it has been operating.

