SHARP/NEC

NEC PA1004UL Laser Projector



Datasheet





A new class of silent projection

Now even larger spaces can benefit from NEC's innovation in super-silent technology with the 10,000 lumens PA1004UL laser projector, ensuring all attention is focused on the stunning image delivery.

Featuring unprecedented White Point performance, factory pre-calibrated for the perfect white, 12-bit colour signal processing and wide colour space, the audience will experience extraordinarily vivid colour saturation and contrast levels.

With the newly designed sealed optical engine there is no possibility of dust contaminating the LCD panels for long-term picture stability and brilliant colour brightness. What's more, with our unique filterless LCD projector design and no lamp replacement, service costs are dramatically reduced for a low cost of ownership and up to 20,000 hours life-time.

Fully compatible with previous generation lamp-based PA Series mechanical lenses, NEC customers can easily make the transition to benefit from the latest laser technology. The PA1004UL is a professional installation projector featuring advanced installation capabilities as demanded by higher education, leisure and museum applications.

Benefits

No lamp replacement - up to 20,000 h maintenance free operation possible due to Laser Light Source.

No filter service required – a completely sealed optical laser LCD engine allows a filter-free design. Brilliant colour brightness is maintained and servicing costs need no longer feature in your budget.

Super Silent operation – patented sealed light engine incorporating innovative fan design not only protects against dust ingress but dramatically reduces noise.

Impress with vivid colour & contrast - brilliant white and wide colour space with high dynamic contrast supporting HDR10 standard via HDMI interface.

Incredible visualisation capabilities – impressive free tilt and portrait installation capability, unique geometric adjustment, picture in picture, tiling, 3D support and camera based blending/stacking up to 4K.

Product Information

Product Information		
Product Name	NEC PA1004UL	
Product Group	Laser Projector	
Order Code	60004512 (WH), 60005160 (BK)	
Image		
Projection Technology	3LCD Technology	
Native Resolution	1920 x 1200 (WUXGA)	
Aspect Ratio	16:10	
Contrast Ratio ¹	3000000:1	
Brightness ¹	9000 ANSI Lumen (approx. 80% in Eco Mode), with std. optional lense	
Brightness (Boost Mode)	10000 ANSI Lumen	
Lamp	Laser Light Source	
Light Source Life [hrs]	20000 ²	
Lens	4 motorized lens options; 5 manual lens options	
Lense Adjustment	Motorized and manual (depending on lens)	
Lens shift	H:±20, V:+10,-50	
Keystone correction	+/- 40° manual horizontal / +/- 40° manual vertical	
Projection Factor	depending on lens selection (std. option NP41ZL at 1.3-3.02:1)	
Projection Distance [m]	0.7 - 50.9	
Screen Size (diagonal) [cm] / [inch]	Maximum: 1,270 / 500"; Minimum: 101.6 / 40"	
Zoom	Motorized and manual (depending on lens)	
Focus Adjustment	Motorized and manual (depending on lens)	
Supported Resolutions	1080i/50/60; 2048 x 1080 (2k); 480p/60; 720p/60 1080p/24/25/30/50/ 2560 x 1600 576i/50; 60; (WQXGA); 576p/50; 1920x1200 (WUXGA) 4096 x 2160 (4k); 720p/50; - 640x480 (VGA); 480i/50;	
Frequency	Horizontal: analog: 15/24-100 kHz, digital: 15/24-153 kHz; Vertical: analog: 48-120 Hz, digital: 48-120 Hz	
Connectivity		
RGB (analog)	Input: 1 x Mini D-sub 15-pin, compatible to component (YPbPr)	
Digital	Input: 1 x DisplayPort; 1 x HDBaseT; 2 x HDMI™ supporting HDCP 2.2 Output: 1 x HDBaseT supporting HDCP 2.2	
Audio	Input: 1 x DisplayPort Audio support; 1 x HDBaseT audio support; 2 x 3.5 mm Stereo Mini Jack for Computer analog; 2 x HDMI audio support Output: 1 x 3.5 mm Stereo Mini Jack (variable)	
Control	Input: 1 x 3.5 mm Stereo Mini Jack (Wired Remote); 1 x D-Sub 9 pin (RS-232), Ethernet	
LAN	1 x RJ45	
USB	1 x Type A (USB 2.0 high speed)	
3D Sync	Output: 1 x Mini DIN 3pin	
Remote Control		
Remote Control	Audio Control; Digital Zoom; DisplayPort; Geometric Correction; HDMI; ID Select; ID set; Keystone Correction; Picture Adjust; Picture Mute; PIP Function; Power (On-OFF); Select (up, down, left, right); Source Select; Zoom/Focus and Lens Shift Control	
Electrical		
Power Supply	100-240 V AC; 50 - 60 Hz	

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Dimensions (W x H x D) [mm]	599 x 208 x 490 (without lens and feet)
Weight [kg]	24.4
Fan Noise [dB (A)]	32 / 35 (Eco / Normal)
Colour Versions	Black; White

Environmental Conditions

Operating Temperature [°C]	0 to 40
Operating Humidity [%]	20 to 80 non-condensing
Storage Temperature [°C]	-10 to 50
Storage Humidity [%]	20 to 80 non-condensing

Ergonomics

52, 2.1.6, 2.1.7, 1.6.1.6, 1.2.1.1, per Application	Safety and Ergonomics	CE; EAC; ErP; RoHS; TUEV Type Approved
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Additional Features

Special Characteristics	3D ready; 4K/60Hz interfaces; Active 3D; AMX Beacon; Built-in Display/Multiscreen Splitter;
	Cinema Quality Picture (CQP) Processing for best image quality; Crestron RoomView; DICOM
	simulation; Digital 3D Reform™; Direct Power-Off Function; Edge Blending Function; Free Tilt;
	Geometric Correction; HDBaseT; HDBaseT-out signal connection; HDR10 Support; High
	Altitude Mode; Hollywood Quality Video Processing for best image quality; HTTP Browser
	Control; Keystone Correction (H=±40°, V=±40°); LAN control; Lens Memory; Lens Shift
	(vertical ± 0.5 max/ ± 0.1 max, horizontal ± 0.3 max.); Light Source Adjustment; Manual Wall
	Color Correction; Multi-Screen compensation mode; NaViSet Administrator 2; Optional User
	Logo; OSD with 27 languages; Password Security System; PIP/Side by Side, HDMI - Input; PJ
	LINK; Portrait Setting; Rec2020 to Rec709 colour conversion; RS-232 Control; Seamless
	Switching; Stacking Function; Test Pattern; Timer-Function; UHD player support; Up to 20,000
	hrs Light Source Life: Virtual Remote for direct PC control

Green Features

Energy Efficiency	ECO scheduler; Intelligent Power Management; Less than 0.3W Stand-By power; Longer Light Source Life; Software scheduling; Timer-Function
Ecological Materials	100% recyclable packaging; Downloadable manuals
Ecological Standards	ErP compliant

Warranty

Projectors	3 years pan-European service
Light Source	3 years or 10000h (whatever comes first)

Shipping Content

Shipping Contents	IR Remote Control (RD-480E); Power Cord; Projector; Quick Setup Guide; Users Manual on CD-
	ROM

Optional Accessories

Optional Accessories	10 optional bayonet lenses; Cable Cover (NP13CV-W, NP13CV-B); Universal Ceiling Mounts (PJ01UCM, PJ02UCMPF)
Lenses - motorized	NP40ZL (0.79-1.11:1); NP41ZL (1.3-3.02:1); NP43ZL (2.99-5.93:1); NP44ML-PA4 (0.32:1); NP50ZL (0.6-0.75:1)
Lenses - manual	NP11FL (0.79:1); NP12ZL (1.16-1.52:1); NP13ZL (1.46-2.95:1); NP14ZL (2.9-4.68:1); NP15ZL (4.59-7.02:1)

