

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.

The enhanced sealed optical engine allows a filter-free design, IP5X rated against dust ingress - no possibility of dust contaminating the LCD panels for long-term picture stability and brilliant colour brightness. What's more, with our 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 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/24/25/30/50/60; 2560 x 1600 (WQXGA); 576i/50; 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; Geometric Correction; ID Select; ID set; Power (On-OFF); Select (up, down, left, right); Shutter function; Source Select; Test Picture; Zoom/Focus and Lens Shift Control
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Electrical

Power Supply	100-240 V AC; 50 - 60 Hz
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Power Consumption [W] 725 (Normal) / 395 (Eco) / 0.8 (Network Stand-by) / 0.28 (Stand-by)

Mechanical

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

Safety and Ergonomics CE; EAC; ErP; RoHS; TUEV Type Approved

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 (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)

¹ Compliance with ISO21118-2012

² 50% of initial brightness at the end of specified laser life time at 25 degree ambient temperature.



CE



TUEV Type
Approved



ErP



RoHS

This product has been equipped with a laser module and is classified as Class1 of IEC60825-1 Ed3 2014 and is classified as RG3 of IEC62471-5 Ed1 2015.

DO NOT LOOK DIRECTLY INTO THE BEAM.

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