

## NEC PA1004UL

Professional Advanced LCD Laser Installation 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 | Professional Advanced LCD Laser Installation Projector |
| Order Code    | 60004512 (WH), 60005160 (BK)                           |

## Image

|                                      |  |
|--------------------------------------|--|
| Projection Technology                | 3LCD Technology  |
| Native Resolution                    | 1920 x 1200 (WUXGA)  |
| Aspect Ratio                         | 16:10  |
| Contrast Ratio <sup>1</sup>          | 3000000:1  |
| Brightness <sup>1</sup>              | 9000 ANSI Lumen (approx. 80% in Eco Mode), with std. optional lens   |
| Brightness (Boost Mode)              | 10000 ANSI Lumen   |
| Lamp                                 | Laser Light Source   |
| Light Source Life [hrs]              | 20000 <sup>2</sup>   |
| 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<br>1080p/24/25/30/50/60; 2560 x 1600 (WQXGA); 576i/50; 576p/50;<br>1920x1200 (WUXGA) 4096 x 2160 (4k); 720p/50;<br>- 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<br>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<br>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 |
|----------------|--|

## Electrical

|              |                          |
|--------------|--------------------------|
| Power Supply | 100-240 V AC; 50 - 60 Hz |
|--------------|--------------------------|

Power Consumption [W] 725 (Normal) / 395 (Eco) / 0.8 (Network Stand-by) / 0.28 (Stand-by)

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## Mechanical

Dimensions (W x H x D) [mm] 599 x 208 x 490 (without lens and feet)

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Weight [kg] 24.4

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Fan Noise [dB (A)] 32 / 35 (Eco / Normal)

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Colour Versions Black; White

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## Environmental Conditions

Operating Temperature [°C] 0 to 40

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Operating Humidity [%] 20 to 80 non-condensing

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Storage Temperature [°C] -10 to 50

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Storage Humidity [%] 20 to 80 non-condensing

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## Ergonomics

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

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## Green Features

Energy Efficiency ECO scheduler; Intelligent Power Management; Less than 0.3W Stand-By power; Longer Light Source Life; Software scheduling; Timer-Function

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Ecological Materials 100% recyclable packaging; Downloadable manuals

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Ecological Standards ErP compliant

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## Warranty

Projectors 3 years pan-European service

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Light Source 3 years or 10000h (whatever comes first)

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## Shipping Content

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

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## Optional Accessories

Optional Accessories 10 optional bayonet lenses; Cable Cover (NP13CV-W, NP13CV-B); Universal Ceiling Mounts (PJ02UCMPF)

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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)

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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)

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<sup>1</sup> Compliance with ISO21118-2012

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

\* 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.



CE



TUEV Type  
Approved



ERP  
COMPLIANT

ErP



RoHS

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