

# Datasheet





#### A new class of silent projection

Now even larger spaces can benefit from NEC's innovation in super-silent technology with the 8,200 lumens PA804UL 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 PA804UL 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	PA804UL
Product Group	Laser Projector
Order Code	60005035 (WH), 60005161 (BK)

#### Image

3LCD Technology			
1920 x 1200 (WUXGA)			
16:10			
3000000:1			
7500 ANSI Lumen (ap	prox. 80% in Eco Mode),	with std. optional	l lense
8200 ANSI Lumen			
Laser Light Source			
20000 <sup>2</sup>			
4 motorized lens optic	ons; 5 manual lens optior	IS	
Motorized and manua	l (depending on lens)		
H:±20, V:+10,-50			
+/- 40° manual horizo	ontal / +/- 40° manual vei	rtical	
depending on lens se	lection (std. option NP412	ZL at 1.3-3.02:1)	
0.7 - 50.9			
Maximum: 1,270 / 50	0"; Minimum: 101.6 / 40"		
Motorized and manua	l (depending on lens)		
Motorized and manua	l (depending on lens)		
4096 x 2160 (4k); 2560 x 1600 (WQXGA); 2048 x 1080 (2k);	1920x1200 (WUXGA) - 640x480 (VGA); 1080i/50/60; 1080p/24/25/30/50/ 60;	720p/60; 720p/50; 576i/50; 576p/50;	480p/60; 480i/50
Horizontal: analog: 15 digital: 48-120 Hz	5/24-100 kHz, digital: 15/2	24-153 kHz; Verti	cal: analog: 48-120 Hz,
Input: 1 x Mini D-sub	15-pin, compatible to con	nponent (YPbPr)	
•	; 1 x HDBaseT; 2 x HDMI	• • •	CP 2.2
Input: 1 x DisplayPort Output: 1 x HDBaseT Input: 1 x DisplayPort for Computer analog;	; 1 x HDBaseT; 2 x HDMI supporting HDCP 2.2	<sup>™</sup> supporting HD(	CP 2.2 t; 2 x 3.5 mm Stereo Mini Jack
Input: 1 x DisplayPort Output: 1 x HDBaseT Input: 1 x DisplayPort for Computer analog; Output: 1 x 3.5 mm S	; 1 x HDBaseT; 2 x HDMI supporting HDCP 2.2 Audio support; 1 x HDBa 2 x HDMI audio support	<sup>™</sup> supporting HDO seT audio suppor	t; 2 x 3.5 mm Stereo Mini Jack
Input: 1 x DisplayPort Output: 1 x HDBaseT Input: 1 x DisplayPort for Computer analog; Output: 1 x 3.5 mm S	; 1 x HDBaseT; 2 x HDMI supporting HDCP 2.2 Audio support; 1 x HDBa 2 x HDMI audio support tereo Mini Jack (variable)	<sup>™</sup> supporting HDO seT audio suppor	t; 2 x 3.5 mm Stereo Mini Jack
Input: 1 x DisplayPort Output: 1 x HDBaseT Input: 1 x DisplayPort for Computer analog; Output: 1 x 3.5 mm Ste Input: 1 x 3.5 mm Ste	; 1 x HDBaseT; 2 x HDMI supporting HDCP 2.2 Audio support; 1 x HDBa 2 x HDMI audio support tereo Mini Jack (variable) reo Mini Jack (Wired Rem	<sup>™</sup> supporting HDO seT audio suppor	t; 2 x 3.5 mm Stereo Mini Jack
	1920 x 1200 (WUXGA)   16:10   3000000:1   7500 ANSI Lumen (ap   8200 ANSI Lumen (ap   8200 ANSI Lumen (ap   8200 ANSI Lumen   Laser Light Source   20000 <sup>2</sup> 4 motorized lens optic   Motorized and manual   H:±20, V:+10,-50   +/- 40° manual horized   depending on lens set   0.7 - 50.9   Maximum: 1,270 / 500   Motorized and manual   4096 x 2160 (4k);   2560 x 1600 (WQXGA);   2048 x 1080 (2k);   Horizontal: analog: 15	1920 x 1200 (WUXGA)   16:10   3000000:1   7500 ANSI Lumen (approx. 80% in Eco Mode),   8200 ANSI Lumen   Laser Light Source   20000 <sup>2</sup> 4 motorized lens options; 5 manual lens option   Motorized and manual (depending on lens)   H:±20, V:+10,-50   +/- 40° manual horizontal / +/- 40° manual ver   depending on lens selection (std. option NP412   0.7 - 50.9   Maximum: 1,270 / 500"; Minimum: 101.6 / 40"   Motorized and manual (depending on lens)   Motorized and manual (depending on lens)   Motorized and manual (depending on lens)   4096 x 2160 (4k); 1920x1200 (WUXGA)   2560 x 1600 - 640x480 (VGA);   (WQXGA); 1080i/50/60;   2048 x 1080 (2k); 1080p/24/25/30/50/   60; Horizontal: analog: 15/24-100 kHz, digital: 15/2	1920 x 1200 (WUXGA)   16:10   3000000:1   7500 ANSI Lumen (approx. 80% in Eco Mode), with std. optiona   8200 ANSI Lumen   Laser Light Source   20000 <sup>2</sup> 4 motorized lens options; 5 manual lens options   Motorized and manual (depending on lens)   H:±20, V:+10,-50   +/- 40° manual horizontal / +/- 40° manual vertical   depending on lens selection (std. option NP41ZL at 1.3-3.02:1)   0.7 - 50.9   Maximum: 1,270 / 500"; Minimum: 101.6 / 40"   Motorized and manual (depending on lens)   Motorized and manual (depending on lens)   Motorized and manual (depending on lens)   4096 x 2160 (4k); 1920x1200 (WUXGA) 720p/60;   2560 x 1600 - 640x480 (VGA); 720p/50;   (WQXGA); 1080i/50/60; 576i/50;   2048 x 1080 (2k); 1080p/24/25/30/50/ 576p/50;   Horizontal: analog: 15/24-100 kHz, digital: 15/24-153 kHz; Verti

### **Remote Control**

Remote Control	3D Setup; Aspect Ratio; Audio Control; Auto Adjust; DisplayPort; Eco Mode Control; Edge-
	Blending; Freeze-function; Geometric Correction; HDMI; Help-function; Keystone Correction;
	Magnify-function; Multiscreen; Page (up, down); PBP/POP Function; Picture Adjust; Picture
	Mute; PIP Function; Power (On-OFF); Select (up, down, left, right); Source Select; Test Picture

#### Electrical

Power Supply	100-240 V AC; 50 - 60 Hz
Power Consumption [W]	615 (Normal) / 350 (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]	24.1
Fan Noise [dB (A)]	28 / 30 (Eco / Normal)
Colour Versions	Black; White

## **Environmental Conditions**

Operating Temperature [°C]	5 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	
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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 <sup>™</sup> ; 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 ( $H=\pm 40^\circ$ , $V=\pm 40^\circ$ ); 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; 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)
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)

<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.

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