



Professional Installation Projectors ideal for corporate, higher education and museum applications

## **PA Series**





# LCD laser installation projectors extreme brightness captivates audiences in conference rooms, auditoriums and sanctuaries

#### **Powerful Tools**

- Multi-display support with Picture by Picture/Picture Out Picture
- TileMatrix (internal multi-screen splitter) enables 4Kx2K resolution utilizing 4 projectors without the need for external hardware
- Built-in daisy chain capabilities support multi-display applications
- Seamlessly blend multiple images with integrated edge blending capabilities

#### **Integrated**

 4K Ready - Display stunning 4K 60P content using NEC's proprietary high performance video processing/scaling chip without the loss of critical details. HDR10 and BT.2020 signals from "Ultra HD Blu-ray" and "4K TV broadcasting" are supported on all digital inputs



- Integrated software applications such as AMX Beacon, Crestron Roomview, Extron XTP and PJ Link allow for complete control system support
- Lower the cost of your installation by eliminating the need for costly reprogramming of a control system. (supports competitors commands, call NEC for complete list)

#### Flexible

- Enjoy greater installation flexibility with powered motorized bayonet style lenses providing quick and easy exchanges. Lens throw distances range from 2.5 to 68.5 ft
   New NP44ML-01LK UST lens placing the projector above the screen and out of site (installation may place the projector above the ceiling line)
- Roll-free installation capabilities make these projector ideal for almost any install environment, including portrait orientation
- Up to 60% vertical lens shift and +/- 30% horizontal lens shift capabilities make alignment easy



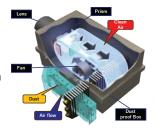
#### Laser

- Images appear immediately after power on due to instantaneous start up of the laser
- Dual blue laser systems provide best in class white balance over the life of the projector
- Inorganic optical components create longer lifetime and greater peace of mind

#### **Filter Free**

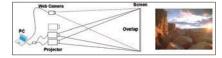
- · Filter free LCD projector
- Sealed LCD cooling system prevents dust from reaching the optics and eliminates the need for a filter
- External air never reaches the optical path
- No dust artifacts or decrease in brightness
- LCD Laser Projector that is maintenance free!

NEC's Unique LCD Panel Cooling Design



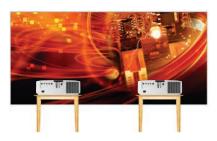
#### **Stacking correction**

The industry's first built-in stacking correction capabilities (up to four projectors) allows the projectors to boost an image's brightness up to 40,000 lumens, 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.



### **Edge blending**

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



#### ProAssist™

Projector management software for installation professionals provides full projector control for multiple screens to create the perfect image. Controls such as input switching, picture, lens, edge blending, uniformity and gamma control are adjustable though the GUI.

ProAssist™



#### **Built-In HDBaseT Support**

Simplify your installations with HDBaseT. Optimized for video applications and supporting uncompressed full HD digital video, audio, ethernet, power and various control signals. With only a single cable (up to 100m) to run, infrastructure and labor costs are reduced, installations are significantly easier, and there is no cable clutter to manage. With uncompressed HD video support, images have never been more stunning. What's more, control signals are contained in the same cable.







#### **GET CONNECTED WITH A WIDE SELECTION OF INPUTS**

- Multiple Digital computer inputs ensure quick switching between presentations
- Five audio inputs (one mini stereo [HDMI1™ & HDMI2™, DisplayPort and HDBaseT) make it easy to add sound to enhance your presentations

#### **Remote control**

Wired and wireless backlit remote allows you to adjust for complete control of the projectors menu structure in a well lit or dark environment. Direct controls such as lamp mode, aspect ratio, volume and input selection eliminates multiple button pushes.



#### Digital Inputs

Among the PA Series' wide selection of inputs are dual HDMI w/HDCP and DisplayPort w/HDCP for connecting to high-definition sources such as Blu-ray players, cable boxes, satellite receivers and personal computers.



#### Cable Cover

This included accessory creates a clean look for your installation, while hiding signal cables and the power cord.





#### ADVANCED SOFTWARE FEATURES

#### **Cornerstone**

Enhanced keystone correction allows for horizontal, vertical and diagonal image correction for aligned images even when the projector is set up at an angle to the screen.



#### 3D

When combined with active shutter glasses and 3D emitter, the PA Series Projectors create 3D images from a computer or Blu-ray player. The PA Series utilize the 3D sync line output from the

projector to connect to the 3D emitter. Optional 3D glasses and emitters from XPAND are available from NEC.



#### **Geometric Correction**

Projecting an image isn't confined to a standard flat screen or wall with the NEC PA Series. Geometric correction allows these models to project an image on spheres, cylinders, corner angles and many more non-standard surfaces.



#### **Screen Splitter**

NEC is committed to bringing the latest and greatest innovation to projectors. Multi-display capabilities and TileMatrix technologies are integrated into the new PA series projectors. This processing is all done internally and therefore eliminates the additional hardware typically required to produce a beautiful 4K resolution image.

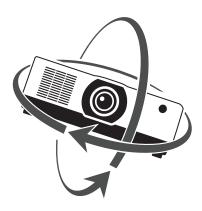




Screen Splitter (Multi Display) by Daisy Chain

#### **Roll Free**

When installation requirements dictate the projector needs to be placed at different angles the PA1004UL with Roll Free capabilities assures it is the correct projector of choice.



**Preliminary** Specifications

#### **UNIQUE FEATURES**

Variable audio-out enables the remote control to be used to adjust volume of self-powered external speakers that are connected to the projector. In stand-by mode, the audio-out stays active, allowing the last input used to pass to the self-powered external speakers.

Advanced AccuBlend™ ensures detailed images when nonnative resolution sources are connected to the projector

64-step image magnification with location control

**Built-in HTTP page** for control and monitoring over a LAN network. Email notification of error messages or lamp end-of-life can be sent to remote locations.

#### WARRANTY

Registered owners receive a five (5) years or 20,000 hours (whichever comes first) parts and labor warranty including InstaCare next business day exchange.

#### IN THE BOX

Remote control, batteries, power cord, cable cover, user's manual on CD-ROM, quick start guide, product registration card.

#### **ACCESSORIES**

RMT-PJ37 Replacement Remote Control Optional Lenses NP11FL, NP12ZL, NP13ZL, NP14ZL,

NP15ZL, NP40ZL, NP41ZL, NP43ZL, NP44ML-01LK

XPAND X105-RF-1 3D Glasses XPAND AD025-RF-X1 RF Emitter NC1100CM Ceiling mount

Adjustable Extension Column, 6" - 9" AFC006009 AEC012018 Adjustable Extension Column, 12" - 18" Adjustable

AEC0203 Extension Column, 2' - 3' AEC0305 Adjustable Extension Column, 3' - 5

NP01PW1 Power Cord RGBCBL-PJPX RGB Signal Cable

#### ORDERING MODEL NUMBERS

NP-PA1004UI-R NP-PA1004UL-B-41 NP-PA1004UL-W NP-PA1004UL-W-41





			NP-PA1004UL
LCD Specifications			0.76" LCD w/ MLA
LCD Specifications			10,000 maximum brightness
Light Output (lumens)  Native			WUXGA 1920 x 1200
Recolution			4K 4096 x 2160
Contrast Ratio (up to)			3,000,000:1 (with Dynamic Contrast)
Laser Life (up to)			20,000 hours
Screen Size (diagonal)			40 to 150 in. / 1.02 to 3.8m, NP11FL; 30 to 500 in. / 0.76 to 12.7m, NP12ZL; 40 to 500 in. / 1.02 to 12.7m, NP13ZL; 50 to 500 in. / 1.27 to 12.7m, , NP40ZL, NP41ZL, NP43ZL; 60 to 500 in. / 1.52 to 12.7m, NP14ZL, NP15ZL; 100 to 400 in. / 2.54 to 10.16m, NP44ML-01LK
NP11FL			0.79:1
		NP12ZL	1.16 - 1.52:1
		NP13ZL	1.46 - 2.95:1
NP14ZL Throw Ratio NP15ZL		NP14ZL	2.90 - 4.64:1
		NP15ZL	4.59 - 7.02:1
		NP44ML-01LK	0.32:1
		NP40ZL	0.79 - 1.11:1
		NP41ZL	1.30 - 3.02:1
		NP43ZL	2.99 - 5.93:1
Projection Distance			2.5 to 68.5 ft. / 0.74 to 20.9m
Projection Angle			10.3 to 10.8° tele / 13.7 to 14.5° wide
		NP11FL	Motorized
	Zoom	NP12ZL	1.3x
		NP13ZL	2.0x
		NP14ZL	1.6x
		NP15ZL	1.52x
		NP44ML-01LK	1.0x
Lens		NP40ZL	1.4x
		NP41ZL	2.3x
		NP43ZL	2.0x
		IVI 432L	Motorized
		NP11FL	F=2.3, f= 13.2mm, 2.6lbs. / 1.2 kg
		NP12ZL	Maual zoom / focus, F=2.2 to 2.69, f= 19.4 to 25.3mm, 2.6lbs. / 1.2 kg
	Focus	NP13ZL	Maual zoom / focus, F= 1.7 to 2.37, f= 24.2 to 48.6mm, 1.6lbs. / 0.84 kg
		NP14ZL	Maual zoom / focus, F= 2.2 to 2.64, f= 48.5 to 77.6mm, 2.2lbs. / 1.0 kg
		NP15ZL	Maual zoom / focus, F= 2.2 to 2.7, f= 76.6 to 116.5mm, 2.2lbs. / 1.0 kg
		NP44ML-01LK	Motorized zoom / focus, F=2.0, f= 6.27, 6.8 lbs. / 3.1 kg
		NP40ZL	Motorized zoom / focus, F=2.0 to 2.5, f= 13.3 to 18.6mm, 3.5lbs. / 1.6 kg
		NP41ZL	Motorized zoom / focus, F=1.7 to 2.0, f= 21.8 to 49.8mm, 3.7 lbs. / 1.7 kg
	Shift	NP43ZL	Motorized zoom / focus, F=2.2 to 2.6, f= 49.7 to 99.8mm, 3.7 lbs. / 1.7 kg +50/-10% Vertical, +/-30% Horizontal
	Shutter		Laser Shutter
Keystone Correction			+/- 40° horizontal, +/- 40° vertical
Synchronization Horizontal			Analog: 15-100kHz, Digital: 15-153kHz
Range Vertical			Analog: 48-120Hz, Digital: 24-120Hz
Supported Video Standards			NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM
SD/HD Video Signal Compatibility			480i, 480p, 576i, 576p, 720p, 1080i, 1080p, 4K
PC Signal Compatibility			VGA, SVGA, XGA, SXGA+, UXGA, WUXGA, Quad HD
Macintosh Compatibility			Yes
Input Terminals  Output Terminals	RGB1 (analog)		VGA 15 pin D-sub, Component video using ADP-CV1E adapter
	RGB2 (digital) RGB3 (digital)		HDMI (V2.0) w/HDCP (V1.4/2.2) HDMI (V2.0) w/HDCP (V1.4/2.2)
	RGB4 (digital)		DisplayPort w/HDCP (V1.4)
	RGB5 (digital)		HDBaseT w/HDCP (V1.4/2.2)
	Audio1		Stereo Mini Jack
	Monitor Out		HDBaseT w/HDCP (V1.4/2.2)
	Audio Out		Stereo Mini Jack
	3D Sync Line		3Pin Din
External Control			RS-232, IR, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)
Sync Compatibility			Separate Sync / Composite Sync / Sync on G
Power Requirements Input Current			100-240V AC, 50/60 Hz
Power Consumption			11.8A - 5.2A
(ECO off/ECO Mode/Standby/Standyby-Power Saving)			798W / 470W / 0.64W / 0.11
Installation Orientation			Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear
Product Dimensions (WxDxH)			23.6 x 8.5 x 19.3 in. / 599 x 216 x 490 mm
Net Weight			53.1 lbs. / 24.1 kg
Shipping Dimensions (WxDxH)			28.9 x 14.1 x 24.8 in. / 735 x 359 x 631 mm
Gross Weight Fan Noise			63.3 lbs. / 28.7 kg
Fan Noise US			35 dB normal / 32 dB eco
Regulations			USA UL60950-1: 2nd edition, FCC Part15 Subpart B(ANSI C63.4.2014)  CAN/CSA C22.2 No.60950-1-07,2nd Edition,2014, ICES-003 Issue6(ANSI
	Canada		CAN/GSA G22.2 NO.60950-1-07,200 Edition,2014, IGES-003 ISSU66(ANSI   C63.4:2014)
	Temperature		41-104°F / 5-40°C
Operating	Humidity		20-80% non-condensing
	Temperatur	е	14-122°F / -10 50°C
Storage	-   nullifully		
Storage Ordering Model Numb			20% - 80% (non-condensing) NP-PA1004UL-W

\* Lens does not ship with the projector Additional accessories are available, including screens, carts, mount accessories and replacement Visit www.necdisplay.com for details.











