



# **PA Series**

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

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

### Powerful Tools

- Multi-display support with Picture by Picture/Picture in 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

### Integrated

 4K Ready - Display stunning 4K 60P content using NEC's proprietary high performance video processing/scaling chip without the loss of



- Integrated software applications such as AMX Beacon, Crestron Roomview, Extron XTP and PJ Link allow for complete control system support
- Learning of basic control of competitors product reduces the need for reprogramming of a control system lowering 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 motorized bayonet style lenses providing quick and easy exchanges. Lens throw distances range from 4.25 to 141ft
- Roll-free installation capabilities make these projector ideal for almost any install environment, including portrait orientation

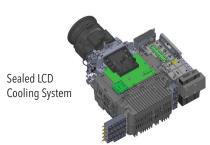
### Laser

- 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
- IP5X certified Sealed LCD cooling system prevents dust from reaching the optics and eliminates the need for a filter
- External air never enters the optical path
- Dust artifacts cannot influence picture quality or decrease image brightness
- LCD Laser Projector that is virtually maintenance free!

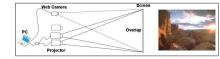






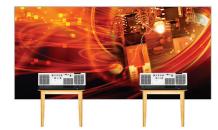
# Stacking correction

The industry's first built-in stacking correction capabilities (up to four projectors) allows the projectors to boost an image's brightness up to 68,000 lumens, which is ideal for largersized 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 highresolution 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





# 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
- Three audio inputs (HDMI1TM & HDMI2TM 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 HDBaseT w/HDCP for connecting to high-definition sources such as Bluray 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**

### **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.















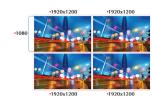




HDMI

# 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.

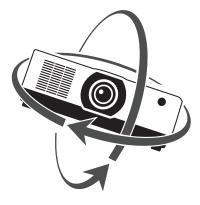




Screen Splitter (Multi Display) by Daisy Chain

# **Roll Free**

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



### **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-PJ40 Replacement Remote Control Optional Lenses NP53ZL, NP54ZL, NP55ZL IPJ2000CM Ceiling Mount

AEC006009 Adjustable Extension Column, 6" - 9"

AEC012018 Adjustable Extension Column, 12" - 18" Adjustable

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

RGBCBL-PJPX RGB Signal Cable

### **Ordering Model Numbers**

NP-PA1505UL-B NP-PA1705UL-B NP-PA1505UL-W NP-PA1705UL-W



LASER APERTURE DUVERTURE LASEI



Eight Output (Umenen)   Center   1,000   1,				NP-PA1505UL	NP-PA1705UL	
bight Output (lumens)		Center		15 000	17 000	
Recolution	Light Output (lumens)					
Repolition						
Persistant (up to is   150 miles						
Science Fide [riginary   152 or 127 m, PS521, MP547, MP	Resolution		4K 4096 x 2160			
Soreen Size (diagonal)         MPS32L NPS32L, NPS32L, NPS32L, NPS42L, NPS42L				3,000,000:1 (with Dynamic Contrast)		
NP53ZL   12.4 - 2.01:1   NP54ZL   12.4 - 2.01:1   NP54ZL   1.98 - 3.95:1   NP54ZL   1.98 - 3.95:1   NP54ZL   1.98 - 3.95:1   NP54ZL   1.98 - 3.95:1   NP54ZL   1.62 × NP54Z				20,000 hours		
Projection Distance	Screen Size (diagonal)			1.52 to 12.7m, NP53ZL, NP54ZL, NP55ZL		
Projection Distance		NP53ZL		0.86 - 1.25:1		
Projection Distance	Throw Ratio	NP54ZL		1.24 - 2.01:1		
Projection Angle			NP55ZL	1.98 - 3.95:1		
Network	Projection Distance			3.58 to 141 ft. / 1.09 to 43m		
Page	Projection Angle			5.8 to 18.1° tele / 11.4 to 25.8° wide		
Lens	Lens			Motorized		
Lens		Zoom	NP53ZL	1.45x		
Lens			NP54ZL	1.62x		
Ensemble   Focus			NP55ZL	1.99x		
Focus				Motorized		
NP5SZL   Motorized zoom / focus, F=1.84 to 2.58, f= 43.8 × 87.2mm, 3.7 lbs. / 5.4 kg		Focus	NP53ZL	Motorized zoom / focus, F=1.8 to 2.24, f= 19.0 - 27.6mm, 3.7 lbs. / 5.3 kg		
Shift			NP54ZL	Motorized zoom / focus, F=1.8 to 2.24, f= 27.7 - 44.9mm, 3.7 lbs. / 4.5 kg		
Shutter			NP55ZL	Motorized zoom / focus, F=1.84 to 2.58, f= 43.8 - 87.2mm, 3.7 lbs. / 5.4 kg		
Keystone Correction         4f-40° horizontal, +/- 30° vertical           Synchronization Range         Horizontal         24-153kHz           Vertical         24-153kHz           Vertical         50-120Hz           Supported Video Signal Compatibility         A806, 480p, 576i, 576p, 720p, 1080i, 1080p, 4K           V CS SydA, XGA, XKGA, XKGA, XKGA, XKGA, WUXGA, Quad HD           Macintosh Compatibility         Y CS, XGA, SXGA, SXGA, YUXGA, WUXGA, Quad HD           Macintosh Compatibility         Y CS, XGA, SXGA, SXGA, XKGA, WUXGA, Quad HD           Macintosh Compatibility         Y CS, XGA, SXGA, SXGA, SXGA, WUXGA, Quad HD           Macintosh Compatibility         Y CS           R GB1 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R GB2 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R GB3 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R GB3 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R GB4 (digital)         A GS DI (signal)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R GB4 (digital)         A GS DI (signal)						
Synchronization Range         Horizontal Vertical         24-153kHz           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, SXGA+, UXGA, WUXGA, Quad HD           Macintosh Compatibility         Yes           R6B1 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           R6B2 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           RGB3 (digital)         HDBasef w/HDCP (V1.4/2.2)           RGB4 (digital)         3G SDI (SMPTE ST 424M / SMPTE 292M)           Monitor Out         HDBasef Repeater           Audio Out         Steroe Mini. Jack           External Control         RS.232, IR, Wired Remote, HDBasef, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100-240V AC, 50/60 Hz           Input Curent         116.46 -5.1A         12.8A - 5.6A           Power Consumption         116.45 -5.1A         12.8A - 5.6A           Rower Consumption         Floor/Front, Floor/Rear, Ceiling/Rear           (Normal/Silent Mode/Network Standby/Standby)         960W / 85SW / 0.4W / 0.15W         10.35W / 85SW / 0.4W / 0.15W           Installation Orientation <td colspan="2"></td> <td></td> <td colspan="3"></td>						
Synchronization Range         Vertical         S0-120Hz           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         Yes           Monitors Compatibility         Yes           RGB1 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           RGB2 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           RGB3 (digital)         HDBaseT w/HDCP (V1.4/2.2)           RGB4 (digital)         36 SDI (SMPTE ST 424M / SMPTE 292M)           Output Terminals         Monitor Out         HDBaseT Repeater           Additional Stereo Mini Jack           External Control         SE232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100.240V AC, 50/60 Hz           Input Current         11.64 -5.1A         12.8A -5.6A           Power Consumption           (Normal/Silent Mode/Network Standby/Standby)         960W / 85SW / 0.4W / 0.15W         10.35W / 85SW / 0.4W / 0.15W           Installation Orientation						
Vertical   S0-120Hz	Synchronization Range					
SD/HD Video Signal Compatibility	Vertical					
PC Signal Compatibility						
Mediatosh Compatibility         Yes           RGB1 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           RGB2 (digital)         HDMI (V2.0) w/HDCP (V1.4/2.2)           RGB3 (digital)         HDBaseT w/HDCP (V1.4/2.2)           RGB4 (digital)         3G SDI (SMPTE ST 424M / SMPTE 292M)           Output Terminals         Monitor Out         HDBaseT Repeater           Audio Out         Stereo Mini Jack           External Control         RS-232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100-240V AC, 50/60 Hz           Input Current         11.6A - 5.1A         12.8A - 5.6A           Power Consumption           (Normal/Silent Mode/Network Standby/Standby)         960W/ 855W / 0.4W / 0.15W         1035W / 855W / 0.4W / 0.15W           Input Current         Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Front, Ceiling/Rear           Power Consumption           (Normal/Silent Mode/Network Standby/Standby)         960W/ 855W / 0.4W / 0.15W         1035W / 855W / 0.4W / 0.15W           Input Current         Floor/Front, Floor/Front, Floor/Front, Floor/Front, Ceiling/Front, Cei						
RGB1 (digital)						
Input Terminals   RGB2 (digital)   HDMI (V2.0) w/HDCP (V1.4/2.2)     RGB3 (digital)   HDBaseT w/HDCP (V1.4/2.2)     RGB4 (digital)   3G SDI (SMPTE ST 424M / SMPTE 292M)     Output Terminals   Monitor Out   HDBaseT Repeater     Audio Out   Stereo Mini Jack						
RGB3 (digital)   HDBaseT w/HDCP (V1.4/2.2)	Input Terminals					
RGBA (digital)         3 G SDI (SMPTE ST 424M / SMPTE 292M)           Output Terminals         Monitor Out HDBaseT Repeater           Audio Out         Storage           External Control         RS-232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100-240V AC, 50/60 Hz           Input Current         11.6A - 5.1A         12.8A - 5.6A           Power Consumption         (Normal/Silent Mode/Network Standby/Standby)         960W / 855W / 0.4W / 0.15W         1035W / 855W / 0.4W / 0.15W           Installation Orientation         Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear           Product Dimensions (WxDxH)         23.6 x 19.3 x 9.4 in. / 599 x 490 x 238 mm           Net Weight         63.7 lbs. / 28.9 kg           Shipping Dimensions (WxDxH)         29.1 x 24.8 x 15.0 in. / 739 x 629 x 382 mm           Gross Weight         71.9 bs. / 32.6 kg           Regulations         US AUC60950-1: 2nd edition, FCC Part15 Subpart B(ANSI C63.4-2014)           Canada <th ro<="" td=""><td colspan="2"></td><td colspan="2"></td></th>		<td colspan="2"></td> <td colspan="2"></td>				
Output Terminals         Monitor Out         HDBaseT Repeater           Audio Out         Stereo Mini Jack           External Control         RS-232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100-240V AC, 50/60 Hz           Input Current         11.6A - 5.1A         12.8A - 5.6A           Power Consumption         (Normal/Silent Mode/Network Standby/Standby)         960W / 855W / 0.4W / 0.15W         1035W / 855W / 0.4W / 0.15W           Installation Orientation         Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear           Product Dimensions (WxDxH)         23.6 x 19.3 x 9.4 in. / 599 x 490 x 238 mm           Net Weight         63.7 lbs. / 28.9 kg           Shipping Dimensions (WxDxH)         29.1 x 24.8x 15.0 in. / 739 x 629 x 382 mm           Gross Weight         71.9 lbs. / 32.6 kg           Fan Noise         38 dB normal / 35 dB silent mode         43 dB normal / 37 dB silent mode           Regulations         USA UL60950-1: 2nd edition, FCC Part15 Subpart B(ANSI C63.4:2014)           Canada         CAN/CSA C22.2 No.62368-1-18,3rd Edition, ICES-003 Issue 7(ANSI C63.4-2014)           Operating         Temperature         32·113°F / 0·45°C           Humidity         20% -80% (non-condensing)           Iemperatur						
Output Terminals         Audio Out         Stereo Mini Jack           External Control         RS-232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)           Sync Compatibility         Separate Sync / Composite Sync / Sync on G           Power Requirements         100-240V AC, 50/60 Hz           Input Current         11.6A - 5.1A         12.8A - 5.6A           Power Consumption         (Normal/Silent Mode/Network Standby/Standby)         960W / 855W / 0.4W / 0.15W         1035W / 855W / 0.4W / 0.15W           Installation Orientation         Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear           Product Dimensions (WxDxH)         23.6 x 19.3 x 9.4 in. / 599 x 490 x 238 mm           Net Weight         63.7 lbs. / 28.9 kg           Shipping Dimensions (WxDxH)         29.1 x 24.8x 15.0 in. / 739 x 629 x 382 mm           Gross Weight         71.9 lbs. / 32.6 kg           Fan Noise         38 dB normal / 35 dB silent mode         43 dB normal / 37 dB silent mode           Regulations         USA UL60950-1: 2nd edition, FCC Part15 Subpart B(ANSI C63.4-2014)           Canada         CAN/CSA C22.2 No.62368-1-18,3rd Edition, ICES-003 Issue 7(ANSI C63.4-2014)           Operating         Iemperature         32-113°F / 0-45°C           Humidity         20% - 80% (non-condensing)           Iemperature         14-122°F / -10 50°C <td colspan="2"></td> <td colspan="2"></td>						
RS-232, IR, Wired Remote, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)   Sync Compatibility   Separate Sync / Composite Sync / Sync on G	Output Terminals			•		
Separate Sync / Composite Sync / Sync on G						
Power Requirements						
Input Current						
Power Consumption	· · · · · · · · · · · · · · · · · · ·			12.8A - 5.6A		
Normal/Silent Mode/Network Standby/Standby  960W / 855W / 0.4W / 0.15W   1035W / 855W / 0.4W / 0.15W     Installation Orientation						
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Table   Tabl				63.7 lbs. / 28.9 kg		
Temperature   14-122°F / -10 50°C   38 dB normal / 37 dB silent mode   43 dB normal / 37 dB silent mode   43 dB normal / 37 dB silent mode   43 dB normal / 37 dB silent mode				29.1 x 24.8x 15.0 in. / 739 x 629 x 382 mm		
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Humidity 20% - 80% (non-condensing)  Temperature 14-122°F / -10 50°C	Operating	Temperature		32-113°F/0-45°C		
Storage	Operating	Humidity		20% - 80% (non-condensing)		
Humidity 20% - 80% (non-condensing)	Storage	Temperature		14-122°F/-10 50°C		
	Storage	Humidity		20% - 80% (non-condensing)		











\* Lens does not ship with the projector Additional accessories are available, including screens, carts, mount accessories and replacement cables.

Visit www.sharpnecdisplay.us.com for details.