**\Orchestrating** a brighter world



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

# **PA** Series



Powerful installation projectors equipped to take on the most demanding integration projects

# **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 HDR10, BT.2020 signal format applicable for use with the "Ultra HD Blu-ray" and "4K TV broadcasting" Project uncompressed FHD video with integrated HDBaseT™
- High performance video processing/scaling creates life-like images
- Integrated software applications such as AMX Beacon, Crestron Roomview, Extron XTP and PJ Link allow for complete interactivity and control
- Basic control of competitors product reducing the need for reprogramming of a control system. (call NEC for complete list)

# Flexible

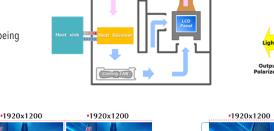
- Enjoy greater installation flexibility with a complete line of optional bayonet style lenses 8) for guick and easy exchange. Lens throw distances range from 2.5 to 68.5 ft
- Tilt-free installation capabilities make these projector ideal for almost any install environment, including portrait orientation
- Up to 60% vertical lens shift and +/- 30% horizontal lens shift capabilities make alignment easy

# **Filter Free**

- Worlds first filter free LCD projector
- Unique Jet impingement cooling method prevents external contaminants from being deposited on the LCD panel
- No degradation of image brightness due to dust
- Maintenance free resulting in lowering TCO

## **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.





•1920x1200

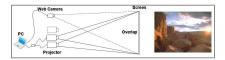


•1920x1200

Screen Splitter (Multi Display) by Daisy Chain

## **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 32,000 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**

•1080

This function seamlessly blends multiple projected images to display a single highresolution image.



# MultiPresenter

Utilization of the optional MultiPresenter Stick provides those looking for a network connection easy connection with up to 12 devices at once. (Win, MAC, Android, iOS) Screen mirroring for Android and Win. Simple annotation software.



### **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.



#### Input panel cover

This optional 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.



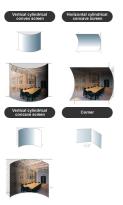
## 3D

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.



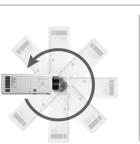
## **Geometric Correction**

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.



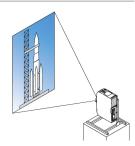
## **Tilt-free**

The projector can be rotated freely (360°) to orient the image depending on the installation requirements



## Portrait mode

Allows the projector to be rotated (and screen if necessary) to a vertical alignment so that portrait content can be viewed without black bars on the side when landscape mode is used.



# Preliminary

### **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<sup>™</sup> 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 3-year parts (excluding consumables) and labor warranty including the first year of InstaCare. InstaCare provides the original owner one year of either limited 3 business day repair/return or next business day exchange.

#### IN THE BOX

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

#### ACCESSORIES

	XPAND X105-RF-1     3D Glasses       XPAND AD025-RF-X1     RF Emitter       PA600CM     Ceiling mount       AEC006009     Adjustable Extension Column, 6" - 9"       AEC012018     Adjustable Extension Column, 12" - 18"       AEC0305     Adjustable Extension Column, 2' - 3'       AEC0305     Adjustable Extension Column, 3' - 5       NP01PW1     Power Cord       RGBCBL-PJPX     RGB Signal Cable       NECEW2-1     Extends term of parts and labor warranty to 4 years       ADVEXON1-1     Extends term of InstaCare service program to 2 years       ADVEXON2-1     Extends term of InstaCare service program to 3 years
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#### ORDERING MODEL NUMBERS

NP-PA653UL NP-PA803UL



		PA653UL	PA803UL	
Display Technology		0.76" LCD w MLA		
Light Output (lumens)		6500 normal	8000 normal	
	Native	WUXGA 1920 x 1200		
Resolution Maximum		4K 4096 x 2160		
Contrast Ratio (up to)		8.000:1 with auto iris		
Laser Life (up to)		20,000 hours		
Screen Size (diagonal)		50 to 500 in. / 1.27 to 12.7m, NP40ZL, NP412	ZL. NP42ZL	
NP40ZL		0.79 - 1.14		
Throw Ratio	NP41ZL	1.30 - 3.08		
	NP42ZL	2.88 - 6.06		
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		
	Zoom	Powered		
	Zoom Ratio	Variable		
	Focus	Powered		
Lens	NP40ZL	Power zoom / Power focus, F=2.0 to 2.5, f= 13.3 to 18.6mm, 4.2lbs. / 1.9 kg		
	NP41ZL	Power zoom / Power focus, F=2.2 to 2.3, I= 13.3 to 18.0mm, 4.2lbs. / 1.9 kg		
	NP42ZL	Power zoom / Power focus, F=2.2 to 2.6, f= 49.7 to 99.8mm, 4.1 lbs. / 1.8 kg		
	Shift	Powered +0.5/-0.1 vertical, +/-30 horizontal		
Keystone Correction	Sint	+/- 40° horizontal, +/- 40° vertical		
noysione concellon	Horizontal	Analog: 15-100kHz, Digital: 15-153kHz		
Synchronization Range	Vertical	Analog: 48-120Hz, Digital: 13-133kHz Analog: 48-120Hz, Digital: 24-120Hz		
Supported Video Standar		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM		
		1080p, 1080i, 720p, 576p, 576i, 480p, 480i	LCAIM	
SD/HD Video Signal Compatibility				
PC Signal Compatibility		VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA Yes		
Macintosh Compatibility	RGB1 (analog)	VGA 15 pin D-sub, Component video using AI	NP CV1E adaptor	
	RGB2 (digital)			
	RGB3 (digital)	HDMI (V1.4) w/HDCP (V2.2)		
Input Terminals	RGB4 (digital)	HDMI (V1.4) w/HDCP (V2.2)		
	-	DisplayPort w/HDCP (V1.4)		
	RGB5 (digital) Audio1	HDBaseT w/HDCP (V2.2) Stereo Mini Jack		
	Monitor Out	HDBaseT	·	
Output Terminals	Audio Out			
Output Terminals	3D Sync Line	Stereo Mini Jack		
,		3Pin D		
Audio				
External Control		RS-232, IR, HDBaseT, DDC/CI, RJ-45		
Sync Compatibility		Separate Sync / Composite Sync / Sync on G		
Power Requirements		100 - 240V AC, 50/60Hz		
Input Current Power Concurrention		TBD	TBD	
Power Consumption		TBD	TBD	
(ECO off/ECO Mode/Standby/Standyby-Power Saving)		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear		
Installation Orientation				
Dimensions (WxDxH)		22.8 x 19.3 x 8.2 in. / 580 x 490 x 208mm		
NetWeight		39.7 lbs. / 18.02 kg		
Fan Noise		39 dB normal / 33 dB eco		
Regulations		USA: UL 1950 FCC Class B, Canada: CSA950 (C-UL), NOM		
Operating Temperature		41° - 104°F / 5° - 40°C		
Humidity		20-80% non-condensing		
Storage		-14° - 122°F / -10° - 50°C		
(ECO off/ECO Mode/Standby/Standyby-Power Saving)		506W/390W/0.7W/0.3W 566W/390W/0.7W/0.3W		
Installation Orientation		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear		
Dimensions (WxDxH)		19.8 x 16.2 x 6.6 in. / 503 x 411 x 168mm		
Net Weight		22.5 lbs. / 10.2 kg		
Fan Noise		39 dB normal / 33 dB eco		
Regulations		USA: UL 1950 FCC Class B, Canada: CSA950 (	L-UL), NOM	
Operating Temperature		41° - 104°F / 5° - 40°C		
Humidity		20-80% non-condensing		
Storage		-14° – 122°F / -10° – 50°C		

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



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