

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 - 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
- Basic control of competitors product reducing the need for reprogramming of a control system. (call NEC for complete list)

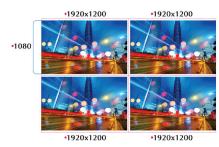
# Flexible

- Enjoy greater installation flexibility with a complete line of optional bayonet style lenses 8) for quick 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

# **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





# **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 36,000 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.

# Wed Camera Screen PC Overlap Projector

# **Edge blending**

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









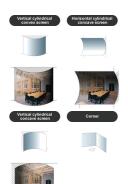
## 3D

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.



#### 10,000-hour filter life

NEC is committed to designing its products to provide long lifecycles. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing total cost of ownership.

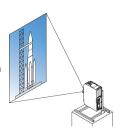
## Tilt-free

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.



# 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 3-year parts and labor warranty including the first year of InstaCare. The lamp is covered for one year or 500 hours, whichever comes first. 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**

NP42LP Replacement Lamp RMT-PJ37 Replacement Remote Control Optional Lenses NP11FL, NP12ZL, NP13ZL, NP14ZL, NP30ZL, NP40ZL, NP41ZL, NP42ZL, NP43ZL

DS1-MP10RX1 MultiPresenter Stick NP10CV Terminal Cover NP06FT Replacement Filter 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" Adjustable Extension Column, 2' - 3' AEC0203 Adjustable Extension Column, 3' - 5 AEC0305

NP01PW1 Power Cord RGBCBL-P.JPX RGB Signal Cable

Extends term of parts and labor warranty to 4 years NECEW2-I ADVEXON1-I Extends term of InstaCare service program to 2 years ADVEXON2-I Extends term of InstaCare service program to 3 years

# ORDERING MODEL NUMBERS

NP-PA653U NP-PA803U NP-PA853W NP-PA903X



Light Output (Jumans)			6500 normal	8000 normal	8500 normal	9000 normal
Light Output (lumens	1			0000 HUIIIIai		
Resolution	Native		WUXGA 1920 x 1200 WXGA 1280 x 800 XGA 1024 x 768			
Maximum			4K 4096 x 2160			
Contrast Ratio (up to)			8,000:1 with auto iris 10,000:1 with auto iris			
Lamp Life (up to)			4000 hours normal / 5000 hours eco 3000 hours normal / 5000 hours eco			
Screen Size (diagonal)			40 to 500 in. / 1.02 to 12.7m, NP40ZL, NP41ZL, NP43ZL (50 to 500 in. / 1.27 to 12.7m)			
	NP11FL		0.79:1			
Throw Ratio	NP30ZL		0.79 - 1.04:1			
	NP12ZL		1.16 - 1.52:1			
	NP13ZL		1.46 - 2.95:1			
	NP14ZL		2.90 - 4.68:1			
	NP40ZL		0.79 - 1.11			
	NP41ZL		1.30 - 3.02			
	NP43ZL		2.99 - 5.93			
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			
			Powered / Manual			
	Zoom		roweled / Malitual			
	Zoom Ratio	NP11FL	-			
		NP30ZL	1.3:1			
		NP12ZL	1.3:1			
		NP13ZL	2.0:1			
		NP14ZL	1.6:1			
		NP40ZL	1.4:1			
		NP41ZL	2.3:1			
		NP43ZL	2.0:1			
Lens	Focus		Powered / Manual			
	NP11FL		Manual zoom / Manual focus, F= 2.3, f= 13.2mm, 2.6 lbs. / 1.2 kg			
	NP30ZL		Manual zoom / Manual focus, F= 1.9 to 2.1,f= 13.2 to 17.2mm, 2.6 lbs. / 1.2 kg			
	NP12ZL		Manual zoom / Manual focus, F = 2.2 to 2.69, f = 19.4 to 25.3mm, 2.6 lbs. / 1.2 kg			
	NP13ZL		Manual zoom / Manual focus, F = 1.7 to 2.37, f= 24.2 to 48.6mm, 1.9 lbs. / 0.84 kg			
	NP14ZL		Manual zoom / Manual focus, F = 2.2 to 2.64, f= 48.5 to 77.6mm, 2.6 lbs. / 1.2 kg			
	NP40ZL		Power zoom / Power focus, F=2.0 to 2.5, f= 13.3 to 18.6mm, 3.6lbs. / 1.63 kg			
	NP41ZL		Power zoom / Power focus, F= 1.7 to 2.0, f= 21.8 to 49.8mm, 3.9 lbs. / 1.75 kg			
	NP43ZL		Power zoom / Power focus, F=2.2 to 2.6, f= 49.7 to 99.8mm, 3.9 lbs. / 1.77 kg			
Shift			Powered +0.5/-0.1 vertical, +/-30 horizontal			
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			1080p, 1080i, 720p, 576p, 576i, 480p, 480i			
PC Signal Compatibility			VGA, SVGA, XKGA, SXGA+, UXGA, WUXGA			
Macintosh Compatibility			Yes			
	RGB1 (analog)		VGA 15 pin D-sub, Component video using ADP-CV1E adapter			
	RGB2 (digital)		HDMI (V2.0) w/HDCP (1.4/V2.2)			
			HDMI (V2.0) W/HDCP (V1.4/V2.2)  HDMI (V2.0) W/HDCP (V1.4/2.2)			
Input Terminals	RGB3 (digital)		DisplayPort w/HDCP (V1.4/2.2)			
	RGB4 (digital)		DISPIBIYET WHDCP (V1.4/2.2)			
	RGB5 (digital) Audio1		Stereo Mini Jack			
	Monitor Out		Stereo Willi Jack HDBaseT			
Output Terminals						
	Audio Out		Stereo Mini Jack			
	3D Sync Line		3Pin D			
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			5.6A - 2.7A	6.2A - 3.1A		
Power Consumption						
(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 (C-UL), NOM			
Operating Temperatu	re		41° - 104°F / 5° - 40°C			
Humidity			20-80% non-condensing			
Storage			-14° - 122°F / -10° - 50°C			
Storage			221710 300			

PA653U

0.76" LCD w MLA

Display Technology

\* 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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