**\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 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

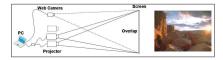
NEC is committed to bringing the latest and greatest innovation to projectors. Multi-display capabilities and TileMatrix technologies are integrated into the new PA series projectors. This processing is all done internally and therefore eliminates the additional hardware typically required to produce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

**Tilt-free** 

The projector can

be rotated freely

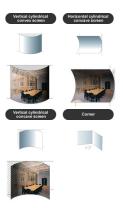
requirements

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

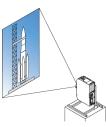
NEC is committed to designing its products to provide long lifecycles. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing total cost of ownership.





#### **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.



#### 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 ast 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 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 RMT-PJ37 Optional Lenses	Replacement Lamp Replacement Remote Control NP11FL, NP12ZL, NP13ZL, NP14ZL,
DS1-MP10RX1	NP30ZL, NP40ZL, NP41ZL, NP42ZL, NP43ZL 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"
AEC0203	Adjustable Extension Column, 2' - 3'
AEC0305	Adjustable Extension Column, 3' - 5
NP01PW1	Power Cord
RGBCBL-PJPX	RGB Signal Cable
NECEW2-I	Extends term of parts and labor warranty to 4 years
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



			PA653U	PA803U	PA853W	PA903X	
Display Technology			0.76" LCD w MLA				
Light Output (lumens	)		6500 normal	8000 normal	8500 normal	9000 normal	
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)				
Throw Ratio	NP11FL		0.79:1				
	NP30ZL		0.79 - 1.04:1				
	NP12ZL		1.16 - 1.52:1 1.46 - 2.95:1				
	NP13ZL NP14ZL		2.90 - 4.68:1				
	NP142L 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				
	Zoom		Powered / Manual				
		NP11FL					
		NP30ZL	1.3:1				
		NP12ZL	1.3:1				
	Zoom Ratio	NP13ZL	2.0:1				
	Loominatio	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 Manual zoom / Manual focus, F = 2.2 to 2.64, f = 48.5 to 77.6mm, 2.6 lbs. / 1.2 kg				
	NP14ZL NP40ZL		Manual zoom / Manual rocus, F= 2.2 to 2.64, T= 48.5 to / /.6mm, 2.6 Ibs. / 1.2 kg 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 locus, F=2.0 to 2.5, i= 13.3 to 18.6min, 3.6lbs. / 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 Stan			NTSC, NTSC4.43, PAL-60, PAL-M, PAL-N, SECAM				
SD/HD Video Signal Compatibility			1080p, 1080i, 720p, 576p, 576i, 480p, 480i				
PC Signal Compatibility			VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA				
Macintosh Compatibility			Yes				
	RGB1 (analog)		VGA 15 pin D-sub, Component video using ADP-CV1E adapter HDMI (V2.0) w/HDCP (1.4/V2.2)				
	RGB2 (digital) RGB3 (digital)		HDMI (V2.0) WHDCP (1.4/V2.2) HDMI (V2.0) WHDCP (V1.4/2.2)				
Input Terminals	RGB4 (digital)		DisplayPort w/HDCP (V1.4)				
	RGB5 (digital)		HDBaseT w/HDCP (V1.4/2.2)				
	Audio1		Stereo Mini Jack				
Output Terminals	Monitor Out		HDBaseT				
	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		50/JW/200W/0 70//0 200	E/ (W/2000/02 70/02 000				
(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 Temperature		41° - 104°F / 5° - 40°C					
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.necdisplay.com for details.



-14° - 122°F / -10° - 50°C

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Storage

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