

**\Orchestrating** a brighter world



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

# PA Series



Powerful laser 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
- 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

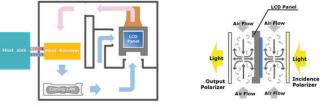
## Laser

- 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**

- World's first filter free LCD projector
- Sealed circulating cooling duct structure for LCD panel cooling
- External air never reaches the optical path
- No dust artifacts or decrease in brightness
- LCD SSL Projector that is maintenance free!

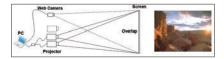




NEC's Unique LCD Panel Cooling Design

## **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 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

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**

multiple button pushes.

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

## 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.



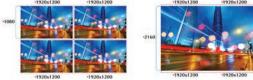
**Geometric Correction** 

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

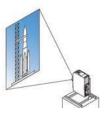
## Tilt-free

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<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 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<br>Optional Lenses<br>DS1-MP10RX1<br>XPAND X105-RF-1<br>XPAND AD025-RF-X1<br>PA600CM<br>AEC006009<br>AEC012018<br>AEC0203<br>AEC0203<br>AEC0305<br>NP01PW1<br>RGBCBL-PJPX<br>NECEW2-1<br>ADVEX0N1-1<br>ADVEX0N1-1 | Replacement Remote Control<br>NP40ZL, NP41ZL, NP43ZL, NP44ML-01LK<br>MultiPresenter Stick<br>3D Glasses<br>RF Emitter<br>Ceiling mount<br>Adjustable Extension Column, 6" - 9"<br>Adjustable Extension Column, 12" - 18"<br>Adjustable Extension Column, 2' - 3'<br>Adjustable Extension Column, 2' - 3'<br>Adjustable Extension Column, 3' - 5<br>Power Cord<br>RGB Signal Cable<br>Extends term of parts and labor warranty to 4 years<br>Extends term of InstaCare service program to 2 years |
|--|--|
| ADVEXON2-I   | Extends term of InstaCare service program to 3 years   |
|  |  |

#### ORDERING MODEL NUMBERS

NP-PA653UL NP-PA703UL NP-PA803UL



|  |                |   | PA653UL   | PA703UL             | PA803UL      |  |
|--|----------------|---|---|---------------------|--------------|--|
| DMD Specifications   |                |   | 0.76" LCD w/ MLA  |                     |              |  |
| Light Output (lumens)  |                |   | 6500 normal   | 7000 normal         | 8000 normal  |  |
|  | Native         |   | WUXGA 1920 x 1200   |                     |              |  |
| Resolution Maximum   |                | 4K 4096 x 2160  |   |                     |              |  |
| Contrast Ratio (up to)   |                |   | 2,500,000:1 with light adjust   |                     |              |  |
| Lamp Life (up to)  |                |   | 20,000 hours  |                     |              |  |
| Screen Size (diagonal)   |                |   | 40 to 500 in. / 1.02 to 12.7m, NP40ZL, NP41ZL, NP43ZL (50 to 500 in. / 1.27 to 12.7m),<br>NP44ML-01LK (100 to 400 in. / 2.54 to 10.16m) |                     |              |  |
| NP44ML-01LK  |                | 0.32:1  |   |                     |              |  |
|  | NP40ZL         | LIX   | 0.79 - 1.11:1   |                     |              |  |
| Throw Ratio  | NP41ZL         |   | 1.30 - 3.02:1   |                     |              |  |
|  | NP43ZL         |   | 2.99 - 5.93   |                     |              |  |
| Projection Distance  |                | 2.5 to 68.5 ft. / 0.74 to 20.9m                                   |   |                     |              |  |
| Projection Distance<br>Projection Angle  |                |   | 10.3 to 10.8° tele / 13.7 to 14.5° wide   |                     |              |  |
| · · · J · · · · · · · · · · · · · · · ·  | Zoom           |   | Motorized   |                     |              |  |
|  |                | NP44ML-01LK   |   |                     |              |  |
|  | Zoom           | NP40ZL  | 1.4x  |                     |              |  |
|  | Ratio          | NP41ZL  | 2.3x  |                     |              |  |
|  |                | NP43ZL  | 2.0x  |                     |              |  |
|  | Focus          |   | Motorized   |                     |              |  |
| Lens   |                | NP44ML-01LK   | Power zoom / Power focus, F=2.0, f= 6.27, 7.1 lbs. / 3.2 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          |   | +50/-10% Vertical, +/-30% Horizontal  |                     |              |  |
|  | Shutter        |   | Laser Shutter   |                     |              |  |
| Keystone Correction  |                |   | +/- 40° horizontal, +/- 40° vertical  |                     |              |  |
| Synchronization  |                |   | Analog: 15-100kHz, Digital: 15-153kHz   |                     |              |  |
| Range  |                |   | Analog: 48-120Hz, Digital: 24-120Hz   |                     |              |  |
| Supported Video Star   |                |   | 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 Compatibil   | ity            |   | VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA  |                     |              |  |
| Macintosh Compatibility  |                | Yes   |   |                     |              |  |
| RGB1 (analog)  |                | og)   | VGA 15 pin D-sub, Component video using ADP-CV1E adapter  |                     |              |  |
| Input Terminals  | RGB2 (digital) |   | HDMI (V2.0) w/HDCP (V1.4/2.2)   |                     |              |  |
|  | RGB3 (digital) |   | 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  |   |                     |              |  |
| Output Terminals<br>External Control<br>Monitor Out<br>Audio Out<br>3D Sync Line<br>External Control |                | t   | HDBaseT w/HDCP (V1.4/2.2)   |                     |              |  |
|  |                |   | Stereo Mini Jack<br>3Pin Din  |                     |              |  |
|  |                | RS-232, IR, HDBaseT, DDC/CI, RJ-45, USB (USB 2.0)                 |   |                     |              |  |
|  |                |   | Separate Sync / Composite Sync / Sync on G  |                     |              |  |
| Sync Compatibility<br>Power Requirements   |                |   | 100-240V AC, 50/60 Hz   |                     |              |  |
| Input Current  |                |   | 10.2A - 4.5A  | 10.5A - 4.5A        | 11.8A - 5.2A |  |
| Power Consumption  |                |   | 10.24 4.54  | 10.57 4.57          | 11.04 3.24   |  |
| (ECO off/ECO Mode/Standby/Standyby-Power Saving)   |                | 627W / 470W / 0.64W   | 647W/414W/0.64W   | 798W / 437W / 0.64W |              |  |
|  |                | .,  | /0.11W<br>Eloor/Front Eloor/Rear Ce   | / 0.11W             | /0.11        |  |
| Installation Orientation Product Dimensions (WxDxH) Net Weight                                       |                |   | Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear<br>22.8 x 19.4 x 8.2 in. / 580 x 494 x 208mm                                       |                     |              |  |
|  |                |   | 40.1 lbs./ 18.2 kg  |                     |              |  |
| Shipping Dimension:  | s (WxDxH)      |   | 28.8 x 35.8 x 12.7 in. / 731 x 909 x 322 mm   |                     |              |  |
| Gross Weight   |                |   | 53.8 lbs. / 24.4 kg   |                     |              |  |
| Fan Noise  |                |   | 39 dB normal / 33 dB eco 42 dB normal / 34 dB eco 45 dB normal / 35 dB eco  |                     |              |  |
| US   |                | USA UL60950-1: 2nd edition, FCC Part15 Subpart B(ANSI C63.4.2014) |   |                     |              |  |
| Regulations  | Canada         |   | CAN/CSA C22.2 No.60950-1-07,2nd Edition,2014, ICES-003 Issue6(ANSI C63.4:2014)  |                     |              |  |
|  | Temperatur     | e   | 50-96°F / 10-35°C   |                     |              |  |
| Operating  | Humidity       |   | 20-80% non-condensing   |                     |              |  |
| Temperature  |                |   | 14-122°F / -10 50°C   |                     |              |  |
| Storage  | Humidity       |   | 10% - 85% (non-condensi   | ng)                 |              |  |
|  |                |   | NP-PA703UL  | NP-PA703UL          | NP-PA803UL   |  |

**8**.2" (208mm) ۷

\* 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.

ATT EcoCare InstaCare

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