

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)

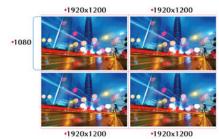
# Flexible

- 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





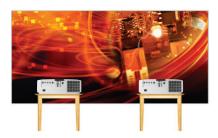
# **Stacking correction**

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 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.

# 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.

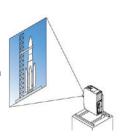
#### Tilt-free

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 quide, product registration card.

#### **ACCESSORIES**

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

DS1-MP10RX1 MultiPresenter Stick NP10CV Terminal Cover NP04FT 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



|   |                | PA653U   | PA803U  | PA853W          | PA903X         |
|---|----------------|--|---|-----------------|----------------|
| Display Technology  |                | 0.76" LCD w MLA  |   |                 |                |
| Light Output (lumens)                                       |                | 6500 normal  | 8000 normal   | 8500 normal     | 9000 normal    |
|   | Native         | WUXGA 1920 x 1200  |   | WXGA 1280 x 800 | XGA 1024 x 768 |
| Resolution  | 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)   |                | 3000 hours normal / 5000 hours eco   |   |                 |                |
| Screen Size (diagonal)                                      |                | 40 to 500 in. / 1.02 to 12.7m, NP40ZL, NP41ZL, NP42ZL (50 to 500 in. / 1.27 to 12.7m)        |   |                 |                |
| Throw Ratio   | NP11FL         | 0.81:1   |   |                 |                |
|   | 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 - 1.10  |   |                 |                |
|   | NP41ZL         | 1.30 - 3.02  |   |                 |                |
|   | NP42ZL         | 2.99 - 5.98  |   |                 |                |
| 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  |   |                 |                |
| Lens  | Zoom           | Powered / Manual   |   |                 |                |
|   | Zoom Ratio     | Variable   |   |                 |                |
|   | 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 2.43, f= TBD, 4.4 lbs. / 2.0 kg                           |   |                 |                |
|   | NP41ZL         | Power zoom / Power focus, F=1.7 to 2.0, f= 21.8 to 49.8mm, 4.1 lbs. / 1.85 kg                |   |                 |                |
|   | NP42ZL         |  | Power zoom / Power focus, F=2.2 to 2.3, f=TBD, 4.1 lbs. / 1.85 kg |                 |                |
| Shift   |                | Powered +0.5/-0.1 vertical, +/-30 horizontal   |   |                 |                |
| Keystone Correction   |                | +/- 40° horizontal, +/- 40° vertical   |   |                 |                |
| Synchronization Range                                       | Horizontal     | Analog: 15-100kHz, Digital: 15-153kHz  |   |                 |                |
| Vertical Video Chardenda                                    |                | Analog: 48-120Hz, Digital: 24-120Hz  |   |                 |                |
| Supported Video Standards  SD/HD Video Signal Compatibility |                | NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM  1080p, 1080i, 720p, 576p, 576i, 480p, 480i |   |                 |                |
|   |                |  |   |                 |                |
| PC Signal Compatibility  Macintosh Compatibility            |                | VGA, SVGA, XGA, SXGA+, UXGA, WUXGA Yes   |   |                 |                |
| wacintosii compatibility                                    | RGB1 (analog)  |  |   |                 |                |
| Input Terminals   | RGB2 (digital) | VGA 15 pin D-sub, Component video using ADP-CV1E adapter  HDMI (V1.4) w/HDCP (V2.2)          |   |                 |                |
|   | RGB3 (digital) | HDMI (V1.4) w/HDCP (V2.2)  |   |                 |                |
|   | RGB4 (digital) | DisplayPort w/HDCP (V1.4)  |   |                 |                |
|   | RGB5 (digital) | HDBaseT w/HDCP (V2.2)  |   |                 |                |
|   | Audio1         | Stereo Mini Jack   |   |                 |                |
|   | Monitor Out    | HDBaseT  |   |                 |                |
| Output Terminals  | Audio Out      | Stereo Mini Jack   |   |                 |                |
|   | 3D Sync Line   | 3Pin D   |   |                 |                |
| Audio   |                | 10W mono   |   |                 |                |
| 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<br>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  |   |                 |                |
| 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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