Professional projectors of high performance and brighter LCD models that are lightweight and compact

Professional Installation Projector

PA803U / PA723U / PA653U
PA853W / PA703W / PA903X
A compact projector solution for large venue applications and vertical markets boasts Ultra HD support, wider colour space, scaling, resolution and reduced maintenance.

### A High-efficiency Design with High-brightness Projection and Reduced Maintenance

**The Lightest and Most Compact WUXGA Projector Over 8000 lumens (NP-PA803U)**

- A lightweight and compact WUXGA projector (NP-PA803U) of 10.2 kg, 33.33 liters and 8000 lumens brightness with NEC’s unique cooling system for the LCD panel (patented) and the lamp.

*Not including lens, according to our research as of January 2017*

**NEC’s unique LCD cooling method**

### Energy-saving Design with Standby Power Consumption

- When the on-screen menu’s standby mode is set to “NORMAL”, power consumption in standby mode with power management on is 0.15 W (100 – 130 V) / 0.21 W (200 – 240 V) and 0.11 W (100 – 130 V) / 0.16 W (200 – 240 V) when the LAN is off.

### Reduce Maintenance and Expenses

- When Eco mode is used, lamp replacement time is extended to a maximum of 5,000 hours*. At the same time, the maximum usage time for the filter is 10,000 hours**. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing total cost of ownership.

*This time is not guaranteed.

**Varies by projector installation conditions.

### The Lightest and Most Compact WUXGA Projector Over 8000 lumens (NP-PA803U)*

### Supports High-definition Processing of Both Digital and Analogue Inputs

- 10-bit high-definition signal processing is possible with all digital and analogue inputs. An image can be projected with an excellent contrast of 1024 gradations and over 1 billion colours in 4K images.

### 4K Ready

- The New PA series supports HDR10 and BT.2020 signals for various 4K content (including next generation “Ultra HD Blu-ray” and “4K TV broadcasting”).

### Multiple Input Terminals for HDMI and DisplayPort and Input and Output Terminals for HDBaseT

- **The First Projector Available Worldwide with Built-in HDBaseT (IN/OUT) Support (NP-PA803U)**

Simplify your installations with HDBaseT. The projector is optimized for video applications and supports uncompressed full HD digital video, audio, Ethernet, power and control signals. With only a single cable (up to 100 m) to run, infrastructure and labour 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.

*Passed the examination of the testing agencies approved by the HDBaseT Alliance as of December 15th, 2016. Release of HDBaseT Alliance at HDBaseT unipolarized watch.

### A Wide Selection of Digital Inputs such as HDMI and DisplayPort

- Among the PA Series’ wide selection of inputs are dual HDMI with HDCP and DisplayPort with HDCP for connecting to high-definition sources such as Blu-ray players, cable boxes, satellite receivers and personal computers.

### 3D Sync Terminal

- 3D SYNC Terminal (Mini DIN 3 Pin)

### Terminal Diagram

- HDMI 1 IN
- HDBaseT IN / Ethernet Port
- HDBaseT OUT / Ethernet Port
- PC CONTROL Port (D-Sub 9 Pin)
- COMPOSITE RGB (Component Input Terminal)
- MINI D-SUB 15 Pin (Mini D-SUB 15 Pin)
- AUDIO OUT Mini Jack (Stereo Mini)
- LAN Port (RJ-45)
- REMOTE Terminal (Stereo Mini)
- AUDIO IN Mini Jack (Stereo Mini)
- USB-A Port (Type A)
- COMPUTER AUDIO IN Mini Jack (Stereo Mini)

*3000 lumens brightness with NEC’s unique cooling system for the LCD panel (patented) and the lamp.

**Not including protruding parts

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*SweetVision” newly supports 4K 60 Hz input signals and has been upgraded to support HDR10 and Rec.2020 signal inputs. It offers a high definition image by raising the contrast in the boundary parts of an image by using the “Craik-O’Brien-Cornsweet effect”.

NEC’s Unique High-definition Functionality with the 4th Generation of “SweetVision” for 4K Content

- “SweetVision” supports 4K 60 Hz, 4K 60 Hz, and 4K 60 Hz signal inputs and has been upgraded to support HDR10 and Rec.2020 signal inputs. It offers a high definition image by raising the contrast in the boundary parts of an image by using the “Craik-O’Brien-Cornsweet effect”.

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Excellent Ease of Installation and Functionality in Various Uses and Applications

Multi-screen Function
Multi-display capabilities and tiling technologies are integrated. The projector is also equipped with multiple digital input and HDBaseT output terminals that can connect multiple projectors in a digital daisy chain. These cutting-edge functions produce a beautiful high-resolution image, including a 4K high-resolution display using 4 projectors and various picture-in-picture and picture-by-picture configurations.

Screen Splitter
NEC is committed to bringing the latest and greatest innovations to projectors. Multi-display capabilities and Tiling Matrix technologies are integrated into these projectors by using the HDBaseT repeater function (IN/OUT). This processing is all done internally and therefore eliminates the additional hardware typically required to produce a beautiful 4K resolution image.

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

New Optional Lenses with Peripheral Motorised Focus Features and Advanced Dust-proof Construction
Eight types of optional lenses are available along with the new NP40ZL, NP41ZL and NP43ZL as dust proof lenses with motorised zoom/defocus and with a memory function. They correspond to screen sizes from 30 to 500 inches. A selection of wide zoom lenses with wide vertical and horizontal lens shift and control code emulation are available, guaranteeing hassle-free installation and replacement of existing installation projectors.

The NP40ZL and NP41ZL projectors are also equipped with peripheral motorised focus, and focus adjustment is possible in 2 stages by the centre and the periphery, which offers excellent image quality. Lenses can be mounted and removed with one touch.

Tilt-free and Portrait Installation Support
The projector can be rotated freely (360°) to point up or down depending on the installation requirements and can be rotated and installed on its side to create a portrait image.

Other Useful Functions and Features
- Cornerstone
- Geometric correction to project an image on more non-standard surfaces
- Stacking correction to boost image brightness
- Centre lens design for easy setup
- Lens memory
- Carbon meter to check the amount of reduction of CO2 in eco mode
- Seamless switch function for smoother screen changes when switching the signal
- Network control
  - Naviset Administrator 2
  - PC control
  - Alert mail
  - CRESTRON ROOMVIEW
  - AMX BEACON
  - PJLink
  - HTTP server (projector adjustment)
- Wall colour correction
- PIN security / control panel lock / security bar / security slot
- DICOM simulation

Optional Lens specifications

<table>
<thead>
<tr>
<th>Lens Type</th>
<th>Throw Ratio</th>
<th>Zoom Ratio</th>
<th>Lens Type</th>
<th>Throw Ratio</th>
<th>Zoom Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Short Throw Lens</td>
<td>0.79:1</td>
<td>13.2</td>
<td>Zoom Lens</td>
<td>1.14 – 1.52:1</td>
<td>19.4 – 25.3</td>
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<tr>
<td>Manual Focus</td>
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<td></td>
<td>Zoom Lens</td>
<td>2.0 – 2.5:1</td>
<td>49.7 – 99.8</td>
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<tr>
<td>Motorised Focus</td>
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<td></td>
<td>Zoom Lens</td>
<td>2.2 – 2.6:1</td>
<td>21.8 – 49.7</td>
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<tr>
<td>Lens Memory</td>
<td></td>
<td></td>
<td>Zoom Lens</td>
<td>1.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Note) For the PA803U/PA723U/PA653U, the horizontal lens shift range is 0.15H at 150” with the NP13ZL lens. (WUXGA model only)

* Lens shift range of desktop and front projection is same.
* Value in parentheses ( ) indicates with NP13ZL.

<table>
<thead>
<tr>
<th>Model</th>
<th>Brightness</th>
<th>Display</th>
<th>Weight</th>
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<tbody>
<tr>
<td>NP-PA903X</td>
<td>8,500 lumens</td>
<td>WUXGA 10.2kg</td>
<td></td>
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<tr>
<td>NP-PA853X</td>
<td>6,700 lumens</td>
<td>WXGA 10.2kg</td>
<td></td>
</tr>
<tr>
<td>NP-PA703W</td>
<td>5,300 lumens</td>
<td>WXGA 10.2kg</td>
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<tr>
<td>NP-PA653U</td>
<td>5,000 lumens</td>
<td>WXGA 10.2kg</td>
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<tr>
<td>NP-PA723U</td>
<td>7,200 lumens</td>
<td>WUXGA 10.2kg</td>
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<tr>
<td>NP-PA803U</td>
<td>9,000 lumens</td>
<td>XGA 10.2kg</td>
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</table>
Specifications

<table>
<thead>
<tr>
<th>Lens unit model name</th>
<th>NP13ZL</th>
<th>NP14ZL</th>
<th>NP40ZL</th>
<th>NP41ZL</th>
<th>NP43ZL</th>
<th>NP11FL</th>
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<tbody>
<tr>
<td>Lens material</td>
<td>Optical Glass</td>
<td>Optical Glass</td>
<td>Optical Glass</td>
<td>Optical Glass</td>
<td>Optical Glass</td>
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<td>Sensor type</td>
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<td>Lens mounting</td>
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<tr>
<td>Lens mounting position</td>
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<tr>
<td>Projection lens</td>
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<td>10000:1</td>
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<tr>
<td>Light output (Lumens)</td>
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<td>4,800</td>
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<tr>
<td>Light output (Black)</td>
<td>5,100</td>
<td>5,100</td>
<td>5,100</td>
<td>5,100</td>
<td>5,100</td>
<td>5,100</td>
</tr>
</tbody>
</table>

Remote control

Options

- Replacement lamp NP42LP
- Replacement filter NP05FT
- Cable Cover NP10CV

Cabinet dimensions

Throwing distance and Screen size

Specifications of main parts

- Liquid crystal panel
  - Side: 0.76 (with MLA) x 3 (without MLA) / 0.70 (with MLA) x 3 (without MLA)
- Power: 3.0W DC (1,020 ~ 1,200 W/m² / 100W - 120W)
- Contrast ratio: 10k:1 with Iris Lamp Adj
- Colourimetry: RGB, YCbCr444, YCbCr422, YCbCr420, Rec.2020, Rec.709, Rec.601

Usage environment

- Box size (L x W x H): 400” (8.62 × 5.39), 300” (6.46 × 4.04), 240” (5.17 × 3.23), 200” (4.31 × 2.69), 120” (2.59 × 1.62), 80” (1.72 × 1.08)
- DisplayPort: 20 pin connector × 1, Deep Colour (colour depth): Support 8bits, 10bits, 12bits, YCbCr444, YCbCr422, YCbCr420, Rec.2020, Rec.709, Rec.601
- Support 4K, 3D, HDCP*10

Lens unit model name

- NP13ZL
- NP14ZL
- NP40ZL
- NP41ZL
- NP43ZL
- NP30ZL
- NP11FL
- NP06FT
- NP10CV
- NP-PA853W / NP-PA703W (WXGA)
- NP-PA903X (XGA)

Screen Size

- 400” (8.62 × 5.39)
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Contrast ratio*8 (all white / all black)

- 10k: 1 with Iris Lamp Adj
- 5,000: 1 with Iris Lamp Adj

Resolution

- SVGA: 800 × 600 pixels
- XGA: 1,024 × 768 pixels
- WXGA: 1,280 × 800 pixels
- 4K: 4,096 × 2,160 pixels
- 8K: 8,192 × 4,320 pixels

Dimensions (W × H × D)

- STANDBY: 499 × 164 × 406 mm (Net dimensions, not including protruding parts), 591 × 259 × 491 mm (Gross dimensions)
- ECO mode: 420 W AC
- ECO mode OFF: 370 W AC

Remote control

- Manual, Approx. ± 40 Max degrees
- Yes
- No

Remote control

- Yes
- No

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  - NP-PA903X (XGA)
  - NP-PA102X (WXGA)
- Lens unit model name
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  - NP40ZL
  - NP41ZL
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