Unveiling a filter-free LCD laser-based professional installation projector with high performance

PA803UL / PA653UL
Realise efficient use and low-maintenance operation in an LCD laser-based projector while producing high-quality images

**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.

**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**

Three types of new optional lenses for the NP40ZL, NP41ZL and NP43ZL are available as dust-proof lenses with motorised zoom and focus and a memory function. They correspond to screen sizes from 50 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 lenses are also equipped with peripheral motorised focus, and focus adjustment is possible in two stages by the centre and the periphery, which offers excellent image quality. Lenses can be mounted and removed with one touch.

**Screen Splitter**

NEC is committed to bringing the latest and greatest innovations to projectors. Multi-display capabilities and TileMatrix 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.

**Multi-display capabilities and Tiling technologies**

Using four WUXGA projectors to project videos with a resolution of 4K (3,840 × 2,160 pixels) [TILING]

1. Operate the on-screen menu using the four respective projectors to divide the image into four portions.
2. Adjust the lens shift of each projector to fine-tune the boundaries of the screen.

**Highly Flexible Installation Options with 360° Positioning in any Direction.**

This projector can be installed universally at any angle. Tilt-free, roll-free and portrait installations are supported. 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.

**A High-definition Design to Meet the Era of High-resolution Content and Devices**

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

“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”.

**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 1,024 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”).
Reduced Maintenance Through a High-efficiency Design with the World's First Filter-free LCD Projector*

NEC uses a sealed calculative-cooling system for LCD panel cooling. Sections important for optical performance (optical engine, optical unit, and LCD panel cooling unit) are sealed to provide outstanding dust proofing. Designed with minimal maintenance in mind, the new projector also boasts a fully-sealed optical engine, allowing brightness levels to remain high and consistent without risk of dust-based ingress and image degradation.

An Energy-saving Design for Low Power Consumption

When the on-screen menu's standby mode is set to "NORMAL", power consumption in standby mode using power management is 0.15 W (100 – 130 V AC) / 0.21 W (200 – 240 V AC) and it is 0.11 W (100 – 130 V AC) / 0.16 W (200 – 240 V AC) when the LAN function is off. The projector is equipped with a "LIGHT MODE" to reduce power consumption during use. Furthermore, when the [ECO1], [ECO2] or [LONG LIFE] option is on, the power-saving effect is converted into the amount of reduction of CO2 emissions, and this amount is listed in the confirmation message displayed when the power is turned off and under [INFORMATION] on the on-screen menu (Carbon Meter).

The Brightness can be Adjusted Over a Wide Range

NEC’s unique optical layout delivers high-reliability and responsiveness. Unlike with ordinary light sources, the brightness can be adjusted from 25 to 100% in 1% increments. When “CONSTANT BRIGHTNESS” mode is selected, sensors inside the projector detect and automatically adjust the output, thereby maintaining constant brightness throughout the life of the light module. If the brightness output is set at the maximum, the brightness will decrease with use.

An Energy-saving Design for Low Power Consumption

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

The World’s First Filter-free LCD Projector

We provided effective cooling by adding NEC’s unique jet impingement cooling method and finally realized the world’s first filter-free LCD projector. Our new laser-based LCD projector takes low-maintenance operation to a new level. No required filter-cleaning means a better TCO.

NEC’s unique LCD cooling method

A Wide Selection of Digital Inputs such as HDMI and DisplayPort

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.

The SSL Projector Available with Built-in HDBaseT (IN/OUT) Support*

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.

A Wide Selection of Digital Inputs such as HDMI and DisplayPort

Terminals

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
• Seamless switch function for smoother screen changes when switching the signal
• Network control - Easy to connect
- PC control
- Alert mail
- CRESTON ROOMVIEW
- AMX BEACON
- PJLink
- HTTP server (projector adjustment)

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Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>NP-P43ZL</th>
<th>NP-P42ZL</th>
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<tr>
<td>Display</td>
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<td>120Hz</td>
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<tr>
<td>Cabinet dimensions</td>
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</table>

Remote control

Options

Cabinet dimensions

Optional Lens specifications

Throwing distance and Screen size

**Specifications**

- **Model**: NP-P43ZL / NP-P42ZL
- **Display**: 120Hz
- **Colour specifications**: HDBaseT, HDMI, Component
- **Computer / Component**: Yes
- **Audio input**: Yes
- **Audio output**: Yes
- **Video input**: Yes
- **Video output**: Yes
- **Power supply**: 285 W
- **Power consumption**: 520 W
- **Energy Star**: Yes
- **EPEAT Gold**: Yes
- **Remote control**: Yes
- **Options**: Yes
- **Cabinet dimensions**: | |

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- **Throwing distance and Screen size**

**Remote control**

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- **Cabinet dimensions**

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