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

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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.

New Optional Lenses with Peripheral Motorised Focus

- The new ultra short throw lens of the NP44ML can eliminate space challenges with shorter projection distances. Three types of optional lenses with wide vertical and horizontal lens shift and control code emulation are available, guaranteeing hassle-free installation and replacement of existing installation projectors.

Edge Blending

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

Edge Blending

- High quality images achievable with wide vertical and horizontal lens shift and control code emulation.

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

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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 video signals. It offers a high-definition image by raising the contrast in the boundary parts of an image by using the “Ooirako-Bien-Corssweet effect”.

Supported High-definition Processing of Both Digital and Analogue Inputs

- 10-bit high-definition signal processing is possible with both digital and analogue inputs. An image can be projected with an excellent contrast of 1024 graduations 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*

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NEC uses a sealed calculating-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.

**The World’s First Filter-free LCD Projector**

- NEC’s unique optical layout delivers high-reliability and responsive¬ness. 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. The brightness output is set at the maximum, the brightness will decrease with use.

Other Useful Functions and Features

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- Cornerstone
- Geometric correction to project an image on more non-standard surfaces
- Blackening 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 - Navix/Net Administrator 2
- PC control
- Alert mail
- CRESTRON ROOMVIEW
- AMX BEACON
- PJLink
- HTTP server (projector adjustment)

**The Right Solution for Your Needs**

- Wall colour correction
- PIN security / control panel lock / security bar / security slot
- DIOCOM simulation
- Cable cover included as an accessory

**Multipurpose Input Terminals for HDBaseT**

- HDMI 2 IN Terminal
- COMPUTER IN / Component Input Terminal
- COMPUTER AUDIO IN Mini Jack
- REMOTE Terminal (Stereo Mini)
- LAN Port (RJ-45)
- USB-A Port (Type A)
- COM/CONTROL Port (D-Sub 9 Pin)
- DisplayPort
- HDMI OUT (Type A)
- HDBaseT OUT (Type A)
- USB-A Port (Type A)

**Terminal**

- HDBaseT (IN/OUT) Support*
- Simplify your installations with HDBaseT. The projector is optimized for video applications and supports uncompressed H/LD 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***

- Eliminates the need for separate network cable, physical switches, and amplifiers. The SSL Projector is a projector with HDBaseT built-in, allowing for seamless integration into any network-powered setup.

**Other Features**

- 10-bit signal processing
- Supports 4K 60 Hz input signals
- Support for HDR10 and Rec.2020
- 1024 graduations and over 1 billion colours in 4K images

**The Brightness can be Adjusted Over a Wide Range**

- Life of the lamp: standard mode 2,000 hours, economy mode 3,000 hours
- According to our research as of March 2017

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**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.

**Other Useful Functions and Features**

- Cornerstone
- Geometric correction to project an image on more non-standard surfaces
- Blackening correction to boost image brightness
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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.

Screen Splitter
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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 optional lenses for the NP14ZL and NP43ZL are available as dust proof lenses with motorised zoom and focus and a memory function. A selection of these 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 new ultra-short throw lens of the NP44ML can eliminate space challenges with shorter projection distances. (100” at only 0.7 m distance) The NP44ZL, NP41ZL, and NP44ML lenses are also equipped with peripheral motorised focus, and focus adjustment is possible in two stages by the centre and the peripheral, which offers excellent image quality.

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.

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Supports High-definition Processing of Both Digital and Analogue Inputs
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Reduced Maintenance Through a High-efficiency Design with the World’s First Filter-free LCD Projector*

Implements a Fully-sealed Optical Engine for Minimal Maintenance
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 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 contract significantly important when the power is turned off and under [INFORMATION] on the on-screen menu (Carbon Meter).

The World’s First Filter-free LCD Projector
We provided effective cooling by adding NEC’s unique jet impingement cooling method and finally realised 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.

The Brightness can be Adjusted Over a Wide Range
NEC’s unique optical layout delivers high-reliability and responsive-ness. 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 lamp. If the brightness output is set at the maximum, the brightness will decrease with use.

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

The SSL Projector Available with Built-in HDBaseT (IN/OUT) Support*
Simplify your installations with HDBaseT. The projector is optimized for video applications and supports uncompressed UH-DH 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.

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.

Other Useful Functions and Features
- Cornerstone
- Geometric correction to project an image on more non-standard surfaces
- Blackening 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 - NavioNet Administrator 2 - PC control - Alert mail - CRESTION ROOMVIEW - AMX BEACON - PJLink - HTTP server (projector adjustment)
### Remote control

- Model: MP-PF10RA

### Options

- Model: NP01LK

### Cabinet dimensions

- **Dimensions**: 80% – 200 inch
- **Height**: 208
- **Width**: 25.4 – 50.8
- **Depth**: 9.6 – 19.1

### Throwing distance and Screen size

- **Throwing Distance**: 0.8 – 1.2
- **Screen Size**: 25.4 – 50.8

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

**PA803UL / PA653UL**

When using the special software, the remote can be used to control the projector and the independently controlled projector. Refer to the manual for more details.

**Lenses**
- NP40ZL
- NP44ML

**Lens support kit**
- NP01LK

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>NP-PA803UL</th>
<th>NP-PA653UL</th>
</tr>
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<tr>
<td>Name</td>
<td>MP-PF10RA</td>
<td>MP-PF10RA</td>
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<tr>
<td>Dimensions</td>
<td>208 x 25.4 – 50.8 x 9.6 – 19.1</td>
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<tr>
<td>Weight</td>
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**Features**

- **Contrast ratio**: 5,070 lumens
- **Colourimetry Support**: Support 4K, 3D, HDCP
- **Power supply**: 100 – 240 V AC, 50/60 Hz
- **Usage environment**: Ambient temperature: –10 to 50°C, Storage humidity: 20 to 80 % (with no condensation)

**Video input**

- HDMI: Supports HDCP2.2/1.4
- DisplayPort: Supports HDCP1.4
- HDBaseT: Supports HDCP2.2/1.4

**Audio output**

- Cardioid condenser microphone

**Lens shift range**

- Full shift (with NP60ZL, NP30ZL, NP20ZL): 0.8 – 1.2

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

- **NP-PA803UL**
- **NP-PA653UL**

**Optional Lens specifications**

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**Lens shift range**

- 0.8 – 1.2

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

- **NP-PA803UL**
- **NP-PA653UL**

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