# P Series

## P401W, P451X, P451W and P501X digital projectors

Easy to use and at the right price, P Series projectors provide all the essential features that you need to connect with your audience. Highlighted by enhanced connectivity and bright images, these models are ideal for entry-level integration environments such as corporate boardrooms, higher education classrooms and government training rooms.

## Essential Features for Integration

- With XGA and WXGA native resolutions, high brightness up to 5000 lumens and patented NEC technologies, P Series projectors display impressive image quality
- Remarkable contrast ratio (4000:1) enhances your image
- Powerful 16-watt speaker provides volume needed for large rooms
- Vertical lens shift provides for flexible installation
- Terminal cover easily hides cables to create a clean environment while deterring unintentional access
- Versatile, color-coded connections to computer, video sources and external monitor

## Designed with the Environment in Mind

- Extended lamp life with ECO Mode™ technology increases lamp life up to 6000 hours, while lowering power consumption
- Power management enables projector to automatically turn off when an incoming signal is not detected from any of the inputs
- Auto Power On via the RGB (15-pin) input connector when a signal is detected from a computer
- Carbon savings meter calculates the positive effects of operating the projector in ECO Mode, which is encouraged by an optional message at startup. A green ECO Mode button on the remote control makes the switch easy.
- Quick start (3 to 4 seconds) lets you begin presenting in seconds while quick shutdown (immediate power off with no cooling required after shutdown) ensures efficient energy usage
- Sleep timer can be set to automatically turn off the projector at set countdown times
- Low power consumption (0.2W in stand-by mode) minimizes energy costs
- Direct power off provides instantaneous shutdown of the projector

**Top cover lamp change**

This feature provides for easy lamp changes without removal of the projector from the mount.

**Active lens cover**

This cover enables presenters to immediately mute the audio and video, then seconds later lower the lamp brightness to 25% for a short period of time.
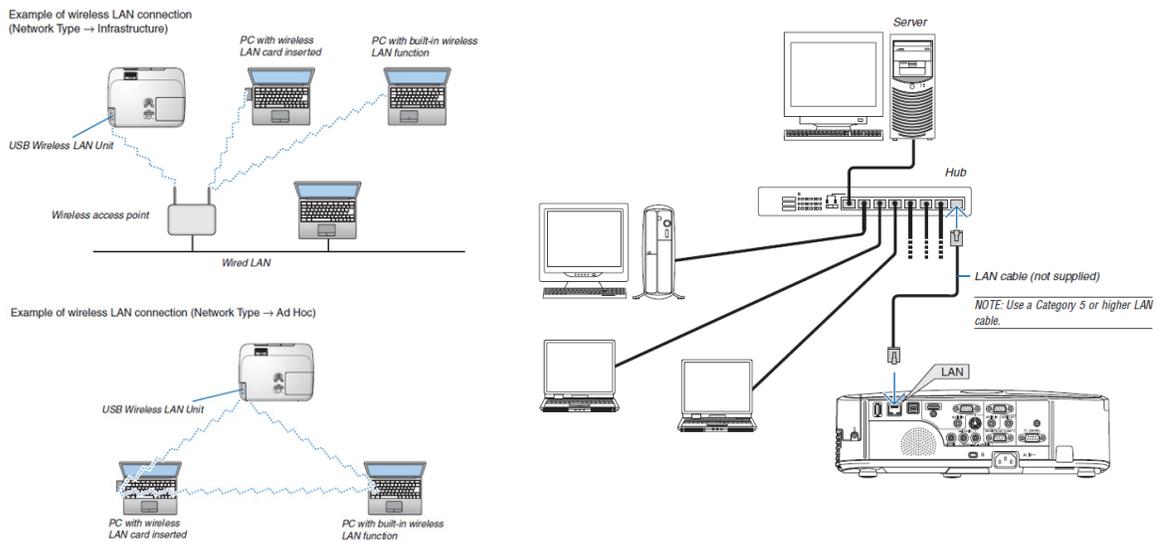
**6000-hour filter life**

NEC is committed to designing its products to provide long lifecycles. This commitment even extends to components within its products, including the improved filter. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing your total cost of ownership.

# Advanced Networking Capabilities

- Integrated RJ45 connection for quick connection to the LAN (10/100 base-T capability)
- Integrated high-speed wireless LAN IEEE 802.11b/g/n (Wireless LAN module optional)
- Remote diagnostics enable the user to monitor and make adjustments to the projector remotely
- PC CTL 4.0 controls the power switching input selection and other functions while managing lamp usage and a variety of other vital information over the network. Email notification and projector scheduling for better asset management is included with the software.
- Image Express Utility dedicated projector software (IEU 2.0; compatible with Windows or Mac operating systems) provides wired and wireless data transmission via peer-to-peer or over the network
- Broadcast mode allows you to send information from one computer to several projectors
- Image Express Lite dedicated projector software provides wired and wireless data transmission via peer-to-peer or over the network
- Windows Network Projector function within Windows Vista connects directly to networked projectors without the need for additional proprietary software
- Windows Remote Desktop function allows you to control a networked computer by connecting a USB mouse and keyboard directly to the projector's USB input
- Windows Media Connection and Network Drive functions display multimedia files (.jpeg, .bmp, .png, .mpeg2 or .wmv9) stored on the Windows Media Connect server, in the Windows shared folder, or on a local network using the Viewer function—all without bringing your PC into the conference room
- Crestron Roomview



Example of wireless LAN connection (Network Type → Infrastructure)

PC with wireless LAN card inserted

PC with built-in wireless LAN function

USB Wireless LAN Unit

Wireless access point

Wired LAN

Example of wireless LAN connection (Network Type → Ad Hoc)

USB Wireless LAN Unit

PC with wireless LAN card inserted

PC with built-in wireless LAN function

Server

Hub

LAN cable (not supplied)

NOTE: Use a Category 5 or higher LAN cable.

LAN

# Built-In Software

## Built-in wall color correction presets
These provide for adaptive color tone correction to display properly on non-white surfaces.
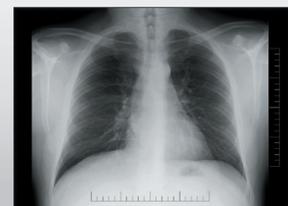
On a green wall…



BEFORE auto wall correction



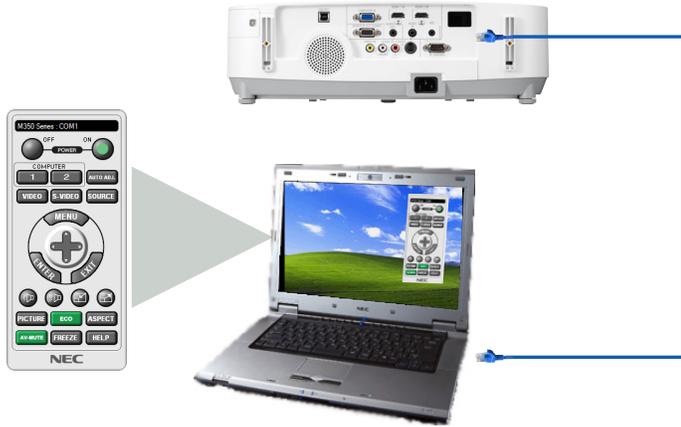AFTER auto wall correction



## DICOM SIM
DICOM Simulation enables users in medical environments to display accurate diagnostic images.
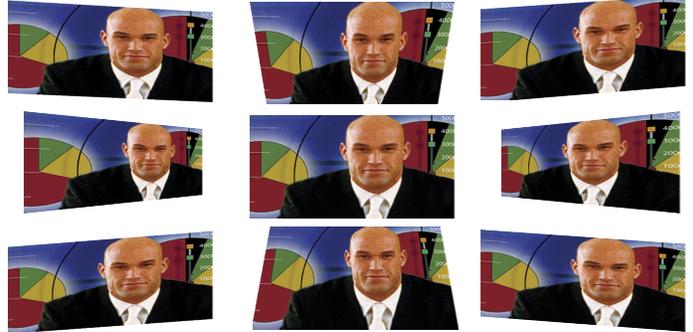
# Advanced Software Features

## Virtual Remote™

Used via a network connection (wired/wireless), you can control the projector directly from a computer without the need for additional control cables.

## 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.

# Get Connected with a Wide Selection of Inputs

- Dual computer inputs ensure quick switching between presentations
- Four audio inputs (two mini stereo, R/L and HDMI) make it easy to add sound to enhance your presentations

## Remote control

Easy control from remote allows you to adjust lamp mode, aspect ratio, volume and image all with the touch of a button.

## Dual HDMI inputs

The introduction of dual HDMI (w/HDCP) inputs allows for simultaneous digital connection of high-definition sources such as Blu-ray players, cable boxes, satellite receivers and personal computers.

## Variable audio-out

This input 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.

## USB Viewer

In instances when you'd prefer to leave your laptop behind for a presentation, P Series projectors can deliver a solution. Using the presentation conversion software included with your projector, simply place your file onto a USB drive and plug it into the projector's USB port. This allows you to display images stored as .jpgs from optional USB memory.
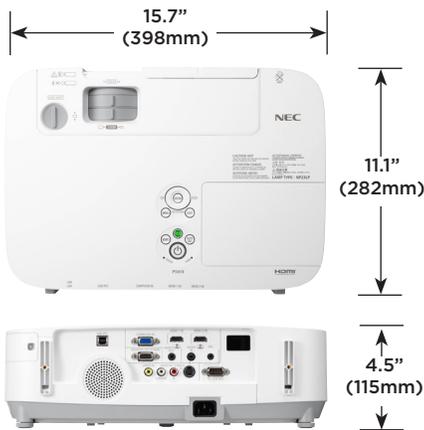
## USB input

Your connection options go even further with the P Series. Connect your laptop or PC directly to the projector using the USB port and a standard USB cable.

## Input panel cover

This optional accessory creates a clean look for your installation, while hiding signal cables and the power cord.

# Specifications for P401W/P451X/P451W/P501X

## OPTICAL

| | |
|---|---|
| Display Technology | P451X/P501X: 0.63" LCD with MLA<br>P401W/P451W: 0.59" LCD with MLA |
| Light Output (lumens) | P401W: 4000<br>P451X/P451W: 4500<br>P501X: 5000 |
| Resolution | |
|   Native | P451X/P501X: XGA 1024 x 768<br>P401W/P451W: WXGA 1280 x 800 |
|   Maximum | UXGA 1600 x 1200 |
| Contrast Ratio (up to) | 4000:1 |
| Lamp Type | P401W/P451X: 240W AC<br>P451W/P501X: 270W |
| Lamp Life (up to) | P401W/P451X: 4000 hours normal / 6000 hours eco<br>P451W/P501X: 3500 hours normal / 6000 hours eco |
| Screen Size (diagonal) | 25 - 300 in., 0.64 - 7.6m |
| Throw Ratio | 1.3 - 2.2 |
| Projection Distance | P451X/P501X: 1.9 - 45.3 ft. / 0.6 - 13.8m<br>P401W/P451W: 2.3 - 47.8 ft. / 0.69 - 14.6m |
| Projection Angle | 0 - 9.8° tele / 0 - 16.5° wide |
| Lens* | |
|   Zoom | 1.7 |
|   Focus | Manual |
|   F-#, f-# | F=1.7 - 2, f=17.4 - 29mm |
|   Shift (vertical) | P451X/P501X: 0 - 0.5V<br>P401W/P451W: 0 - 0.6V |
| Keystone Correction | Manual +/- 30° |

## SIGNAL COMPATIBILITY/ CONNECTIVITY

| | |
|---|---|
| Scan Rate | |
|   Horizontal | 15 - 100 kHz |
|   Vertical | 50 - 120 Hz |
| Supported Video Standards | NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM |
| SD/HD Video Signal Compatibility | 1080i, 1080p, 720p, 576p, 576i, 480p, 480i,Y/Cb/Cr component (with optional adapter – ADP-CV1E) |
| HDMI Signal Compatibility | VGA, SVGA, XGA, WXGA, SXGA, 480p, 576p, 720p, 1080i, 1080p |
| PC Signal Compatibility | VGA, SVGA, XGA, SXGA, SXGA+, UXGA |
| Macintosh Compatibility | Yes |
| Input/Output Terminals | |
|   RGB1 (analog) | 15 pin, Component video using ADP-CV1E adapter |
|   RGB2 (digital) | HDMI w/HDCP |
|   RGB3 (digital) | HDMI w/HDCP |
|   RGB4 (digital) | USB A Type |
|   Video 1 | RCA |
|   Video 2 | S-Video |
|   Audio 1 | L/R RCA (shared by video sources) |
|   Audio 2 | 1/8 in. stereo |
|   Audio 3 | 1/8 in. stereo |
|   Audio Out | mini stereo (Variable audio out) |
|   Monitor Out | Yes |
| Audio | 16W speaker |
| External Control | RS-232, IR, LAN, DDC/CI, USB, Wireless LAN |
| Sync Compatibility | Separate Sync / Composite Sync / Sync on G |
| Microphone | 1/8 in. stereo |
| Wireless LAN | Optional |

## ELECTRICAL

| | |
|---|---|
| Power Requirements | 100 - 240V AC, 50/60Hz |
| Input Current | P401W/P451X: 3.9 - 1.7A<br>P451W/P501X: 4.2 - 1.7A |
| Power Consumption (ECO Mode off/<br>ECO Mode/Standby/Standby-Power Saving) | P401W/P451X: 325W / 231W / 10W / 0.2W<br>P451W/P501X: 357W / 231W / 10W / 0.2W |

## MECHANICAL

| | |
|---|---|
| Installation Orientation | Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear |
| Dimensions (WxDxH) | 15.7 x 11.1 x 4.5 in. / 398 x 282 x 127mm |
| Net Weight | 9 lbs. / 4.1 kg |
| Fan Noise | P401W/P451X: 36 dB normal / 30 dB eco<br>P451W/P501X: 37 dB normal / 30 dB eco |
| Regulations | UL60950-1, CSA60950-1, FCC Part 15 Class B, ICES-03 Class B, NOM-001-SCFI-1993 |

## ENVIRONMENTAL

| | |
|---|---|
| Operating Temperature | 41° - 104°F / 5° - 40°C |
| Humidity | 20-80% non-condensing |
| Storage | 14° - 122°F / -10° - 50°C |

## ACCESSORIES

| | |
|---|---|
| NP01MR | IR receiver enables PJ remote to control PC and MAC functions |
| NP02LM1 | 802.11b/g/n wireless LAN adapter |
| NP03CV | Input panel cover |
| SPKR30 | Amplified 30 watt speaker |
| ADP-CV1E | Component video to VGA adapter |
| MP300CM | Ceiling mount |
| NP01UCM | Universal ceiling mount for projectors weighing less than 40 pounds |
| AEC00609 | 6 to 9 inch adjustable extension column for use with projector mount |
| AEC012018 | 12 to 18 inch adjustable extension column for use with projector mount |
| AEC0203 | 2 to 3 foot adjustable extension column for use with projector mount |
| AEC0305 | 3 to 5 foot adjustable extension column for use with projector mount |
| SCP200 | Adjustable suspended ceiling plate for use with ceiling mount |
| NP23LP | Replacement lamp |
| RMT-PJ31 | Replacement remote control |
| NECEW2-I | Extends term of parts and labor warranty to 4 years |
| ADVEXON2-I | Extends term of InstaCare service program to 3 years |

Additional accessories are available, including screens, carts, mount accessories and replacement cables.
Visit www.necdisplay.com for details.

---

15.7"
(398mm)

11.1"
(282mm)

4.5"
(115mm)

## UNIQUE FEATURES

**Advanced AccuBlend™** ensures detailed images when non-native resolution sources are connected to the projector

**64-step image magnification** with location control

**Countdown sleep timer** can be set to automatically turn off the projector

## 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.

## SHIPS WITH

Remote control, batteries, power cord, RGB signal cable, built-in lens cover, user's manual on CD-ROM, quick start guide, product registration card, security sticker

## ORDERING MODEL NUMBERS

NP-P401W
NP-P451X
NP-P451W
NP-P501X