

# 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.



## 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

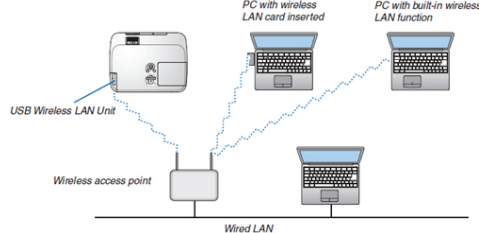
NEC is committed to designing its products to provide long lifecycles. This commitment even extends to components within its products, including the improved filter. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing your total cost of ownership.



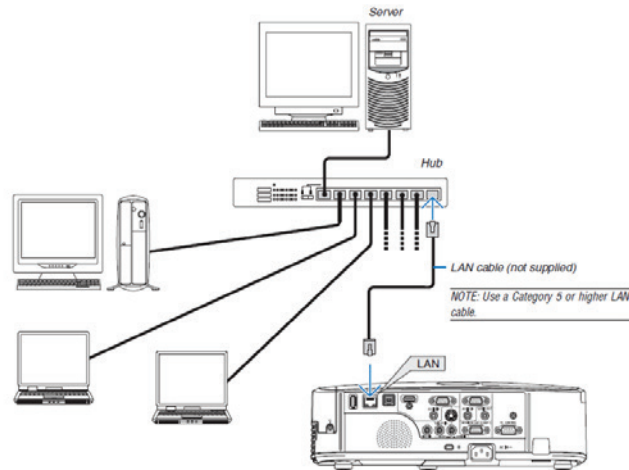
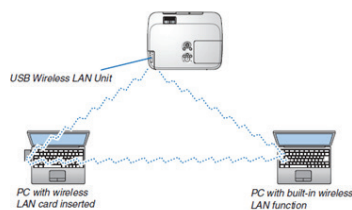
# Advanced Networking Capabilities

- Integrated RJ45 connection for quick connection to the LAN (10/100 base-T capability)
- Integrated high-speed wireless LAN IEEE 802.11b/g/n
- 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)



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



## 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

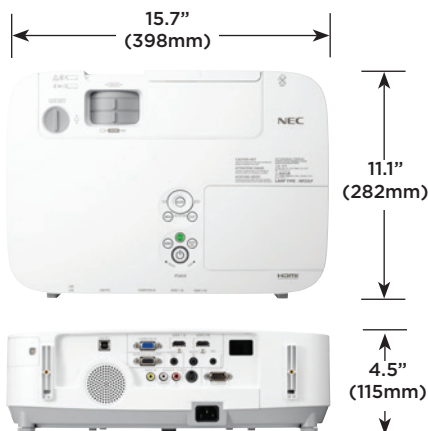
Your connection options go even further with the P Series. Connect your laptop or PC directly to the projector using the USB port and a standard USB cable.



## Input panel cover

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





## 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



## Specifications for P401W/P451X/P451W/P501X

### OPTICAL

Display Technology

Light Output (lumens)

Resolution  
Native

Maximum  
Contrast Ratio (up to)  
Lamp Type

Lamp Life (up to)

Screen Size (diagonal)  
Throw Ratio  
Projection Distance

Projection Angle  
Lens\*

Zoom

Focus

F-#, f-#

Shift (vertical)

Keystone Correction

P451X/P501X: 0.63" LCD with MLA  
P401W/P451W: 0.59" LCD with MLA  
P401W: 4000  
P451X/P451W: 4500  
P501X: 5000

P451X/P501X: XGA 1024 x 768  
P401W/P451W: WXGA 1280 x 800  
UXGA 1600 x 1200  
4000:1  
P401W/P451X: 240W AC  
P451W/P501X: 270W  
P401W/P451X: 4000 hours normal / 6000 hours eco  
P451W/P501X: 3500 hours normal / 6000 hours eco  
25 - 300 in., 0.64 - 7.6m

1.3 - 2.2  
P451X/P501X: 1.9 - 45.3 ft. / 0.6 - 13.8m  
P401W/P451W: 2.3 - 47.8 ft. / 0.69 - 14.6m  
0 - 9.8° tele / 0 - 16.5° wide

1.7  
Manual  
F=1.7 - 2, f=17.4 - 29mm  
P451X/P501X: 0 - 0.5V  
P401W/P451W: 0 - 0.6V  
Manual +/- 30°

### SIGNAL COMPATIBILITY/CONNECTIVITY

Scan Rate

Horizontal

Vertical

Supported Video Standards

SD/HD Video Signal Compatibility

HDMI Signal Compatibility

PC Signal Compatibility

Macintosh Compatibility

Input/Output Terminals

RGB1 (analog)

RGB2 (digital)

RGB3 (digital)

RGB4 (digital)

Video 1

Video 2

Audio 1

Audio 2

Audio 3

Audio Out

Monitor Out

Audio

External Control

Sync Compatibility

Microphone

Wireless LAN

15 - 100 kHz  
50 - 120 Hz  
NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM  
1080i, 1080p, 720p, 576p, 576i, 480p, 480i, Y/Cb/Cr component  
(with optional adapter - ADP-CV1E)  
VGA, SVGA, XGA, WXGA, SXGA, 480p, 576p, 720p, 1080i, 1080p  
VGA, SVGA, XGA, SXGA, SXGA+, UXGA  
Yes

15 pin  
HDMI w/HDCP  
HDMI w/HDCP  
USB A Type  
RCA  
S-Video  
L/R RCA (shared by video sources)  
1/8 in. stereo  
1/8 in. stereo  
mini stereo (Variable audio out)  
Yes  
16W speaker  
RS-232, IR, LAN, DDC/CI, USB, Wireless LAN  
Separate Sync / Composite Sync / Sync on G  
1/8 in. stereo  
Optional

### ELECTRICAL

Power Requirements

Input Current

Power Consumption (ECO Mode off/  
ECO Mode/Standby/Standby-Power Saving)

100 - 240V AC, 50/60Hz  
P401W/P451X: 3.9 - 1.7A  
P451W/P501X: 4.2 - 1.7A  
P401W/P451X: 325W / 231W / 10W / 0.2W  
P451W/P501X: 357W / 231W / 10W / 0.2W

### MECHANICAL

Installation Orientation

Dimensions (WxDxH)

Net Weight

Fan Noise

Regulations

Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear  
15.7 x 11.1 x 4.5 in. / 398 x 282 x 127mm  
9 lbs. / 4.1 kg  
P401W/P451X: 36 dB normal / 30 dB eco  
P451W/P501X: 37 dB normal / 30 dB eco  
UL60950-1, CSA60950-1, FCC Part 15 Class B, ICES-03 Class B, NOM-001-SCFI-1993

### ENVIRONMENTAL

Operating Temperature

Humidity

Storage

41° - 104°F / 5° - 40°C  
20-80% non-condensing  
14° - 122°F / -10° - 50°C

### ACCESSORIES

NP01MR

NP02LM1

NP03CV

SPKR30

ADP-CV1E

MP300CM

NP01UCM

AEC00609

AEC012018

AEC0203

AEC0305

SCP200

NP23LP

RMT-PJ31

NECEW2-I

ADVEXON2-I

IR receiver enables PJ remote to control PC and MAC functions  
802.11b/g/n wireless LAN adapter  
Input panel cover  
Amplified 30 watt speaker  
Component video to VGA adapter  
Ceiling mount  
Universal ceiling mount for projectors weighing less than 40 pounds  
6 to 9 inch adjustable extension column for use with projector mount  
12 to 18 inch adjustable extension column for use with projector mount  
2 to 3 foot adjustable extension column for use with projector mount  
3 to 5 foot adjustable extension column for use with projector mount  
Adjustable suspended ceiling plate for use with ceiling mount  
Replacement lamp  
Replacement remote control  
Extends term of parts and labor warranty to 4 years  
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](http://www.necdisplay.com) for details.

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