# **M** Series

# M271X, M311X and M311W digital projectors

Easy to use and at the right price, M Series projectors provide all the essential features that you need to connect with your audience.

# ESSENTIAL FEATURES FOR EDUCATIONAL FACILITIES

- Plug and Play intuitive setup and operation
- Bright images easily viewed in any application
- Versatile, color-coded connections to computer, video sources and external monitor
- Automatic keystone correction technology instantly projects a square image even when the projector is set up at a steep offset angle to the screen
- AutoSense<sup>™</sup> intuitively syncs the projector with most computer signals and features one-touch image optimization
- One-touch source changes and complete menu control using the intuitive projector keypad
- Powerful 10-watt speaker provides volume needed for large rooms
- Remarkable contrast ratio (3000:1) enhances your image
- With XGA and WXGA native resolutions, high brightness up to 3100 lumens and patented NEC technologies, M Series projectors display impressive image quality

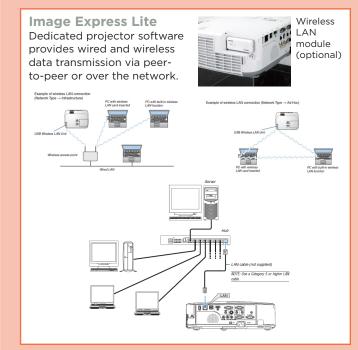
#### ADVANCED NETWORKING CAPABILITIES

- Integrated RJ45 connection for quick connection to the LAN (10/100 base-T capability)
- 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.
- PC CTL 5.0 for MAC users
- Control and receive important broadcast messages via Crestron Roomview  $\ensuremath{^{\text{TM}}}$
- Wireless Image Utility (WIU) sends images directly from an iPad to the projector (requires wireless LAN module NPO2LM1)



Top cover lamp change provides for easy lamp changes without removal of the projector from the mount.







## **DESIGNED WITH THE ENVIRONMENT IN MIND**

- Extended lamp life with ECO Mode™ technology increases lamp life up to 10,000 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



## 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. Filter replacement is only required at the time the lamp is replaced.



#### 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.



# **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.



## **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.



## **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.



# **HDMI** input

Among the M Series' wide selection of inputs is an HDMI w/HDCP for connecting to 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 selfpowered 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**

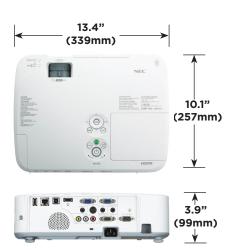
In instances when you'd prefer to leave your laptop behind for a presentation, M Series projectors can deliver a solution. Using the presentation conversion software included with your projector, simply place your file onto a USB drive and plug it into the projector's USB port. This allows you to display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



# **USB** input

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





## **UNIQUE FEATURES**

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

Built-in closed captioning enables decoding and display of text information from a video

64-step image magnification with location control

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

Direct power-off provides instantaneous shutdown of projector

#### WARRANTY

Registered owners receive a 2-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.

#### IN THE BOX

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

# **ORDERING MODEL NUMBERS**

NP-M271X NP-M311X NP-M311W

# Specifications for M271X/M311X/M311W

# **OPTICAL**

Light Output (lumens)

Maximum Contrast Ratio (up to) Lamp Type

Lamp Life (up to)

Screen Size (diagonal) Throw Ratio Projection Distance

Projection Angle

Zoom Focus F-#, f-#

M271X: 0.63" LCD M311X: 0.63" LCD with MLA M311W: 0.59" LCD with MLA M271X: 2700 normal M311X/M311W: 3100 normal

M271X/M311X: XGA 1024 x 768 M311W: WXGA 1280 x 800 UXGA 1600 x 1200 3000:1

30001 M27IX/M31IX: 180W AC / 145W eco M31IW: 230W AC / 170W eco M27IX/M31IX: 5000 hours normal / 10,000 hours eco M31IW: 4000 hours normal / 8000 hours eco M31W: 4000 hours normal / 8000 hours eco 13 - 20 in., 0.64 - 7.6m

1.3 - 2.2 M271X: 2.1 - 45.3 ft. / 0.65 - 13.8m M311X: 1.9 - 45.3 ft. / 0.6 - 13.8m M311W: 2.3 - 47.8 ft. / 0.69 - 14.6m M271X/M31X: 6.5 - 6.8° tele / 10.7 - 11.4° wide M311W: 6.5 - 6.8° tele / 10.8 - 11.4° wide

Manual F=1.7 - 2.1, f=17.5 - 29mm Automatic or manual +/- 30°

# SIGNAL COMPATIBILITY/ CONNECTIVITY

Horizontal Vertical Supported Video Standards SD/HD Video Signal Compatibility

PC Signal Compatibility PC Signal Compatibility Macintosh Compatibility Input/Output Terminals RGB1 (analog) RGB2 (analog) RGB3 (analog) RGB4 (digital) Video 1 Video 2 Audio 1

Audio 2 Audio 3 Audio Out Monitor Out

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-CVIE) VGA, SVGA, XGA, SXGA, SXGA+, UXGA

HDMI USB A Type RCA S-Video L/R RCA (shared by video sources) 1/8 in. stereo 1/8 in. stereo , \_ .... stereo mini stereo (variable audio out) Yes

10W speaker RS-232, IR, LAN, DDC/CI, USB, Wireless LAN (optional) Separate Sync / Composite Sync / Sync on G

## **ELECTRICAL**

Input Current

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

100 - 240V AC, 50/60Hz M271X/M311X: 2.8A / 1.2A M311W: 3.4A / 1.5A M271X/M31TX: 248W / 198W / 8W / 0.2W M311W: 311W / 239W / 8W / 0.2W

# **MECHANICAL**

Dimensions (WxDxH) Net Weight

Fan Noise

Regulations

Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear 13.4 x 10.1 x 3.9 in. / 339 x 257 x 99mm M271X/M311X: 6.4 lbs. / 2.9 kg

M27/LV/M311X: 0-4 1US / 2-1S ng M311W: 66 lbs. / 3 kg M271X/M311X: 33 dB normal / 26 dB eco M311W: 35 dB normal / 28 dB eco UL60950-1, CSA60950-1, FCC Part 15 Class B, ICES-03 Class B, NOM-001-5CF-1993

# **ENVIRONMENTAL**

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

# **ACCESSORIES**

NP02LM1 SPKR30 ADP-CV1E MP300CM NP01UCM AEC0609 AEC12018 AEC0203 AEC0305 SCP100 NP15LP NP16LP RMT-P 129 NPI6LP RMT-PJ29 NECEWI-MP NECEW2-MP ADVEXONI-MP ADVEXON2-MP NECECO IR receiver enables PJ remote to control PC and MAC functions 802.11b/g/n wireless LAN adapter Amplified 30-watt speaker Component video to VGA adapter

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
4 to 5 foot adjustable extension column for use with projector mount
Adjustable suspended ceiling plate for use with ceiling mount
Replacement lamp for M27IX and M31IX
Replacement lamp for M31IW
Replacement lamp for M31IW
Replacement remote control
Extends term of parts and labor warranty to 3 years
Extends term of parts and labor warranty to 4 years
Extends term of instaCare service program to 2 years
Extends term of instaCare service program to 3 years
Projector recycling program, disposal certificate Ceiling mount

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









