

M283X, M323X, M363X, M403X, M323W, M363W and M403H digital projectors

## **NEC M Series**

Easy to use and at the right price, M Series projectors provide all the essential features that you need for brilliant display in classrooms and meeting rooms while providing low cost of ownership with minimal maintenance.



#### **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 20-watt speaker provides volume needed for large rooms
- High contrast images (10,000:1) from the latest Texas Instruments
   DLP engine featuring BrilliantColor<sup>™</sup> technology with improved color accuracy
- With XGA, WXGA and 1080p native resolutions, high brightness up to 4000 lumens and patented NEC technologies, M Series projectors display impressive image quality

#### Designed with the Environment in Mind

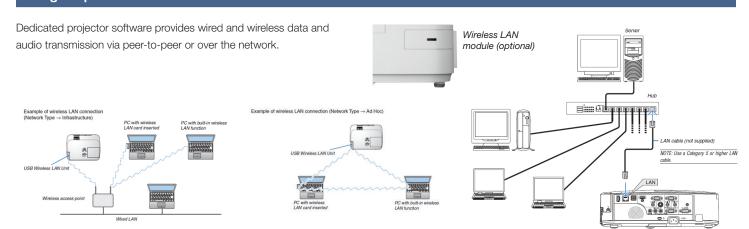
- Extended lamp life with ECO Mode<sup>™</sup> technology increases lamp life up to 10,000 hours,
  - while lowering power consumption
- Power management enables projector to automatically turn off when an incoming signal is not detected from any of the inputs
- Auto Power On via the RGB (15-pin) input 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
- 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

# High Performance Portable Projectors

## **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™
- Wireless Image Utility (WIU) sends images directly from an iPad to the projector (requires wireless LAN module NP02LM1)
- Simple Access Point Sending photos and documents have never been easier from a computer or iPad.
- MultiPresenter enables up to 16 wireless devices to be connected to the projector simultaneously with access controlled by the moderator.

#### **Image Express Lite**



#### **Advanced ECO Mode**

#### ECO Mode

Lamp control selections with the ability to change power dependent on the ambient lighting conditions. With a built-in ambient light sensor, automatic adjustment of the projectors lamp provides unprecedented brightness control resulting in bright images for most environments.

Automatically dim the image with the new Auto-dim feature to control the brightness of static images and extend lamp life.

Constant brightness control prevents the usual drop in brightness over time while maximizing lamp life.

## **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

### **M Series Features**

#### 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.



## Get Connected with a Wide Selection of Inputs

- Dual HDMI inputs (one MHL compatible) ensure quick switching between presentations
- Four audio inputs (mini-stereo, R/L RCA and 2 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**

Among the M Series' wide selection of inputs are 2 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 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.





#### Full HD 3D video (144Hz)

HDMI 3D can be viewed with 3rd party DLP-Link glasses or RF glasses paired with an RF emitter from Xpand or Volfoni. 3D computer images can be viewed using NEC active shutter glasses (NP02GL), 3D Ready M-Series Projectors use DLP Link<sup>TM</sup> technology, developed by Texas Instruments. M-Series projectors are certified as a display device for NVIDIA® 3D Vision<sup>TM</sup>, which allows you to view 3D images using supported graphics boards or







#### **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.



			NP-M403H	NP-M323W / M363W	NP-M283X / M323X / M363X / M403X
Projection System		Single DLP® (0.65")	Single DLP® (0.65")	Single DLP® (0.55")	
Resolution	tion		1920 x 1080 (1080p Full HD)	1280 x 800 (WXGA)	1024 x 768 (XGA)
Lens		Manual zoom (x1.7) / manual focus, F=2.4 - 3.1, f=17.09 - 29.05mm, throw ratio 1.5 - 2.55	Manual zoom (x1.7) / manual focus, F=2.4 - 3.1, f=17.09 - 29.05mm, throw ratio 1.2 - 2.04	Manual zoom (x1.7) / manual focus, F=2.4 - 3.2, f=18.0 - 30.6mm, throw ratio 1.2 - 2.04	
Light source (lamp)	ECO mode		162W	135W / 150W	120W / 135W / 150W / 162W
	ECO mode off		270W	225W / 250W	200W / 225W / 250W / 270W
Lamp life	ECO mode		8,000 H	8,000 H	10,000 / 8,000 / 8,000 / 8,000 H
	ECO mode off		3,500 H	3,500 H	4,500 / 3,500 / 3,500 / 3,500 H
Image size		30 to 300 inches	30 to 300 inches	30 to 300 inches	
	Normal		4,000 ANSI lumens	3,200 / 3,600 ANSI lumens	2,800 / 3,200 / 3,600 / 4,000 ANSI lumens
Light output	ECO mode		Approximately 80% of normal		
Contrast ratio (white/black)			10,000:1		
Maximum resolution			Up to WUXGA (1920 x 1200)		
	Horizontal		15kHz to 100kHz (RGB: 24 kHz or over)		
Sychronization range	Vertical		50Hz to 120Hz (HDMI: 50 - 85Hz)		
	Horizontal		Manual: (+/- 25 decrees		
Keystone correction	Vertical		Auto / manual: +/- 30 degrees		
	Computer		Mini D-sub 15 pin x 1		
	Compator	Audio	Stereo mini jack x 1		
Input terminals	Video	7 100.0	RCA x 1		
		Audio	(L/R) RCA x 1		
	HDMI		HDMI x 2 (HDMI 1 supports MHL function)		
	Microphone		Stereo mini jack, dynamic mic, condenser mic		
	3D Sync		Mini 3-pin		
	USB Port	Type A	USB 2.0 (USB viewer) powered		
		Type B	USB display / mouse control		
Output terminals		Mini D-sub 15 pin x 1			
Audio			Stereo mini jack x 1 (VAO)		
Wired LAN port			BJ45 (10 BASE-T / 100 FASE-TX) x 1		
Control terminals			D-Sub 9-pin x 1		
Built-in speaker			20W monaural		
Usage environment	Operational temper	erature	41 to 104 degrees Fahrenheit, 20 to 80% humidity (no condensation)		
Coago Grivilorimoni	Storage temperature		14 to 122 degrees Fahrenheith, 20 to 80% humidity (no condensation)		
Power requirements	0 .		100-240 VAC 50/60Hz		
Input current			3.9 A to 1.9 A	3.6 A to 1.4 A	3.9 A to 1.5 A
Power consumption	ECO mode off		338W	283W / 316W	255W / 283W / 316W / 338W
	ECO mode		221W	186W/205W	170W/186W/205W/221W
	Standby (network)			0.5W or less	11044/10044/20044/22144
	Standby (normal)		0.5W or less		
Net dimenstions (W x H x D)			368 x 108 x 292mm (14.5" x 4.3" x 11.5")		
Weight			3.5kg / 7.7lbs		
Gross dimensions (W x D x H)			459 x 225 x 381mm (18.1" x 8.9" x 15.2")		
Gross weight			459 X 225 X 35111111 (18.1 X 8.9 X 15.2 ) 5.2kg / 11.5lbs		
GIOSS WEIGHT			5.2ng / 11.5lbS		

#### **UNIQUE FEATURES**

**BrilliantColor** advanced video processing from Texas Instruments delivers more vibrant and realistic colors and blacks rich in detail.

**DICOM Simulation** enables users in medical training environments to display accurate diagnostic images

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

**Filter Free** with shielded engine eliminates the hassle and time spent monitoring and /or changing filters.

**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

#### WARRANTY

Registered owners receive a 2-year parts and labor warranty including 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**

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

#### ORDERING MODEL NUMBERS

NP-M283X NP-M323X NP-M363X NP-M403X NP-M323W NP-M363W NP-M403H

#### Accessories

NP01MR	IR receiver enables PJ remote to control PC and MAC functions		
NP02LM1	802.11b/g/n wireless LAN adapter		
SPKR30	Amplified 30-watt speaker		
MP300CM	Ceiling mount		
NP01UCM	Universal ceiling mount for projector weighing less than 40 pounds		
NP02GL	Active shutter 3D glasses (PC only)		
SCP200	Adjustable suspended ceiling plate for use with ceiling mount		
NP27LP	Replaceable lamp for M283X		
NP28LP	Replacement lamp for M323X and M323W		
NP29LP	Replacement lamp for M363X and M363W		
NP30LP	Replacement lamp for M403X		
RMT-PJ36	Replacement remote control		
PWRCRD-PJPX	Power cable		

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









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