M Short Throw Series

M332XS and M352WS digital projectors

Easy to use and at the right price, M Short Throw Series projectors using the latest DLP® technology from Texas Instruments provide all the essential features that you need to connect with your audience.

M Short Throw Series projectors vs. standard projectors

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™ 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™ technology with improved color accuracy
- With XGA and WXGA native resolutions, high brightness up to 3500 lumens and patented NEC technologies, M Short Throw Series projectors display impressive image quality
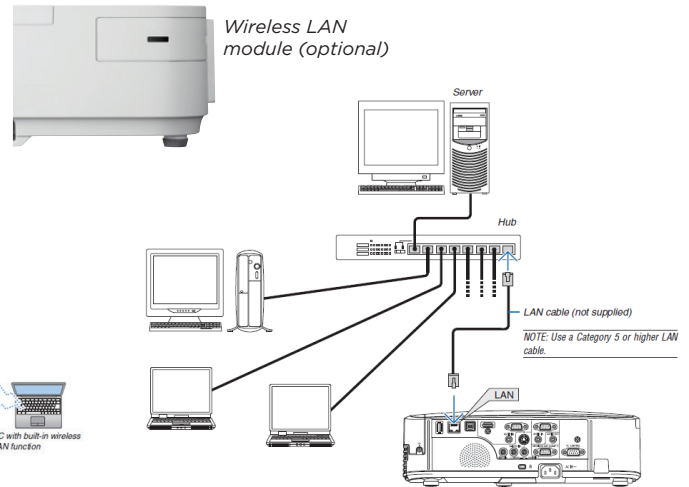
Designed with the Environment in Mind

- Extended lamp life with ECO Mode™ technology increases lamp life up to 8000 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

necdisplay.com **NEC**
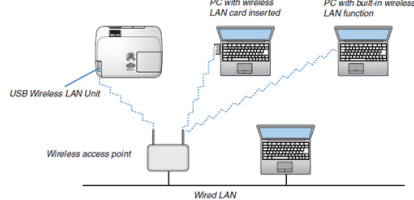
Advanced Networking Capabilities

- 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.
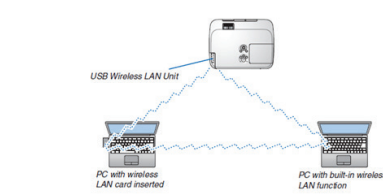
Image Express Lite

Dedicated projector software provides wired and wireless data and audio transmission via peer-to-peer or over the network.

Wireless LAN module (optional)

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.

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

When combined with active shutter glasses (NP02GL), 3D Ready M Series Projectors use DLP Link™ technology, developed by Texas Instruments, to create 3D images from a computer. The M332XS and M352WS are certified as a display device for NVIDIA® 3D Vision™, which allows you to view 3D images using supported graphics boards or software. HDMI 3D images can be viewed using a 3rd party 3D glass from XPAND or Volfoni.

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

Get Connected with a Wide Selection of Inputs

- Dual HDMI 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
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 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, 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

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 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, lens cap, user's manual on CD-ROM, quick start guide, product registration card and DisplayNote Presenter License

ORDERING MODEL NUMBERS

NP-M332XS
NP-M352WS

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

Specifications for M332XS and M352WS

OPTICAL

Display Technology	M332XS: 0.55" DLP by Texas Instruments w/ BrilliantColor M352WS: 0.65" DLP by Texas Instruments w/ BrilliantColor
Light Output (lumens)	M332XS: 3300 M352WS: 3500
Resolution	
Native	M332XS: XGA 1024 x 768 M352WS: WXGA 1280 x 800
Maximum	WUXGA 1920 x 1200
Contrast Ratio (up to)	Up to 10,000:1
Lamp Type	270W AC
Lamp Life (up to)	3500 hours / 8000 hours eco
Screen Size (diagonal)	60 - 150 in., 1.5 - 3.1m
Throw Ratio	M332XS: 0.56:1 M352WS: 0.45:1
Projection Distance	M332XS: 2.21 - 5.76 ft. / 0.675 - 1.757m M352WS: 1.85 - 4.86 ft. / 0.565 - 1.482m
Projection Angle	M332XS: 40.7° - 40.8° M352WS: 40.7° - 40.9°
Lens*	
Zoom	1.2
Focus	Manual
F-#, f-#	F=2.4, f=6.5mm
Keystone Correction	Vertical (Automatic/Manual) adjustment

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)
PC Signal Compatibility	VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA
Macintosh Compatibility	Yes
Input/Output Terminals	
RGB1 (analog)	VGA 15-pin D-sub
RGB2 (digital)	HDMI w/ HDCP
RGB3 (digital)	HDMI w/ HDCP
RGB4 (digital)	USB A Type
Video	RCA
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	20W speaker
External Control	RS-232, IR, LAN, DDC/CI, USB, Wireless LAN (optional)
Sync Compatibility	Separate Sync / Composite Sync / Sync on G

ELECTRICAL

Power Requirements	100 – 240V AC, 50/60Hz
Input Current	3.9A / 1.6A
Power Consumption (ECO Off/ECO Mode/Standby/Standby-Power Saving)	335W / 246W / 2.5W / 0.2W

MECHANICAL

Installation Orientation	Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear
Dimensions (WxDxH)	14.5 x 11.5 x 5.3 in. / 368 x 286 x 134mm
Net Weight	8.2lbs. / 3.7kg
Fan Noise	39 dB / 33 dB eco
Regulations	UL60950-1, CSA60950-1, FCC Part 15 Class B, ICES-03 Class B

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
SPKR30	Amplified 30-watt speaker
ADP-CV1E	Component video to VGA adapter
MP300CM	Ceiling mount
NP05WK1	Wall Mount
NP01UCM	Universal ceiling mount for projectors weighing less than 40 pounds
NP02GL	Active shutter 3D glasses (PC only)
AEC006009	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
NP30LP	Replacement lamp
RMT-PJ36	Replacement remote control
NECEW1-MP	Extends term of parts and labor warranty to 3 years
NECEW2-MP	Extends term of parts and labor warranty to 4 years
ADVEXON1-MP	Extends term of InstaCare service program to 2 years
ADVEXON2-MP	Extends term of InstaCare service program to 3 years
NECECO	Projector recycling program, disposal certificate
PWRCRD-PJPX	Power cable
RGBCBL-PJPX	RGB cable

NEC Display Solutions
500 Park Boulevard, Suite 1100
Itasca, IL 60143
866-NEC-MORE

necdisplay.com

NEC