

All Laser Technology is Not Created Equal

Ensure your choice of laser projectors include
the most advanced technology features:

NEC laser phosphor projector features include:

- 20,000-plus hours of virtually maintenance-free operation
- HDBaseT for easy connection and cost saving installation
- Tilt-free and Portrait mode features improving installation flexibility
- Adjustable light source for control in any ambient lighting condition
- Constant Brightness Mode sustains light output over a long period of time



Explore NEC's Laser Phosphor Projector Lineup



- Imaging Device Lifetime – Equal to or greater than light source
- White/Color uniformity – Uniform from corner to corner
- Virtually maintenance free – Filter free
- 24/7 operation - suited for Network Operation Centers and Digital Signage applications*

*DLP models only (PX and PH Series)

		P525WL	P525UL	PA653UL	PA803UL
Display Technology		0.64" LCD w MLA		0.76" LCD w MLA	
Light Output (lumens)		5,200 normal / Eco = variable		6,500 normal / Eco = variable	
Resolution	Native	WXGA 1280 x 800		WUXGA 1920 x 1200	
	Maximum	4K@30Hz 3840 x 2160		4K 4096 x 2160	
Contrast Ratio (up to)		500,000:1 with dynamic contrast		2,500,000:1 with auto iris	
Lamp Life (up to)		20,000 hours			
Screen Size (diagonal)		25 to 300 in. / 0.67 to 7.6m		50 to 500 in. / 1.27 to 12.7m	
Throw Ratio		1.23 - 2.0:1		NP44ML-01LK: 0.32:1	
				NP40ZL: 0.79 - 1.11	
				NP41ZL: 1.30 - 3.02	
				NP43ZL: 2.88 - 5.93	
Projection Distance		2.6 - 44.3 ft. / 0.8 - 13.5m		2.5 to 68.5 ft. / 0.74 to 20.9m	
Projection Angle		0 to 10.8° tele / 0 to 17.0° wide		10.3 to 10.8° tele / 13.7 to 14.5° wide	
Lens	Zoom	Manual		Motorized	
	Zoom Ratio	1.6:1		Variable	
	Focus	Manual		Motorized	
	F-number, f-number	F= 1.5~2.1, f= 17.2 to 27.6mm		NP44ML-01LK: F=2.0, f= 6.27mm	
				NP40ZL: F=2.0 to 2.5, f= 13.3 to 18.6mm	
		NP41ZL: F=1.7 to 2.0, f= 21.8 to 49.8mm			
Shift	Manual (H = +/- 29% / V = 0%~+60%)		Motorized +0.5/0.1 vertical, +/-30 horizontal		
Keystone Correction		+/- 25° horizontal, +/- 30° vertical		+/- 40° horizontal, +/- 40° vertical	
Synchronization Range	Horizontal	15 to 100KHz (RGB: 24kHz or over)		Analog: 15-100KHz, Digital: 15-153KHz	
	Vertical	50 to 120Hz		Analog: 48-120Hz, Digital: 24-120Hz	
Supported Video Standards		NTSC3.58, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM	
SD/HD Video Signal Compatibility		4K, 1080p, 1080i, 720p, 576p, 576i, 480p, 480i		4K, 1080p, 1080i, 720p, 576p, 576i, 480p, 480i	
PC Signal Compatibility		VGA, SVGA, XGA, WXGA, Quad-VGA, SXGA, SXGA+, WXGA+, WUXGA+, WSXGA+, WUXGA		VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA, 4K	
Macintosh Compatibility		Yes			
Input/Output Terminals	RGB1 (analog) VGA 15 pin D-sub, Component video using ADP-CV1E adapter				
	RGB2 (analog)				
	RGB1 (Digital)				
	RGB2 (digital)		HDMI (w/HDCPv1.4)		HDMI (V2.0) w/HDCP (V1.4/2.2)
	RGB3 (digital)		HDMI (w/HDCPv1.4)		HDMI (V2.0) w/HDCP (V1.4/2.2)
	RGB4 (digital)		HDBaseT		DisplayPort w/HDCP (V1.4)
	RGB5 (digital)				HDBaseT w/HDCP (V1.4/2.2)
	RGB6 (digital)				
	Option Slot				
	Video		RCA		
	Audio 1		Stereo Mini Jack		
	Audio 2				
	Audio Out		Stereo Mini Jack		
	Monitor Out				HDBaseT
	USB Type A		Memory, (2A)		
USB Type A (behind cover)		Wireless LAN (optional)			
USB Type B (behind cover)		USB Service			
Wired LAN port		RJ45 (100Base-TX/10Base-T)			
3D Sync Line				3Pin D	
Audio		20W mono			
External Control		RS-232 (D-Sub 9pin), IR, RJ-45		RS-232, IR, HDBaseT, Stereo Mini, RJ-45	
Sync Compatibility		Separate Sync / Composite Sync / Sync on G		Separate Sync / Composite Sync / Sync on G	
Power Requirements		100 - 240V AC, 50/60Hz		100 - 240V AC, 50/60Hz	
Input Current		5.0 - 2.1A	5.1 - 2.1A	10.2A - 4.5A	
Power Consumption		320W / 332W / 1.4W / 0.13W	330W / 340W / 1.4W / 0.13W	672W / 437W / 0.64W / 0.11	
Installation Orientation		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear	
Dimensions (WxDxH)		18.9 x 16.0 x 5.6 in. / 480 x 407 x 142.5mm		22.8 x 19.4 x 8.2 in. / 580 x 494 x 208mm	
Net Weight		21.3 lbs. / 9.7 kg		40.1lbs. / 18.2 kg	
Fan Noise		27 dB normal / 22 dB eco		39 dB normal / 33 dB eco	
Regulations		"USA: UL60950-1:2nd edition,2014, UL62368-1:2nd Edition, FDA, FCC Part15 Subpart B(ANSI C63.4:2014), Proposition65,TPCH Canada: CAN/CSA C22.2 No.60950-1-07,2nd Edition,2014, ICES-003 Issue6(ANSI C63.4:2014)"		USA: FCC Part15 Subpart B(ANSI C63.4:2014), UL62368-1:2nd Edition Canada: CSA C22.2 No.60950-1-07,2nd Edition,2014, NOM	
Operating Temperature		41° - 104°F / 5° - 40°C			
Humidity		20-80% non-condensing		20-80% non-condensing	
Storage		-14° - 122°F / -10° - 50°C		-14° - 122°F / -10° - 50°C	

		PX803UL	PX1004UL	PX1005QL	
Display Technology		0.67" DMD		0.66" TRP DMD	
Light Output (lumens)		8,000 normal / Eco = variable	10,000 normal / Eco = variable	10,000 normal / Eco = variable	
Resolution	Native	WUXGA 1920 x 1200		WQXGA 2716 x 1528	
	Maximum	4K 4096 x 2160		4K UHD 3840 x 2160 Viewable	
Contrast Ratio (up to)		15,000:1 with dynamic contrast		10,000:1 with dynamic contrast	
Lamp Life (up to)		20,000 hours			
Screen Size (diagonal)		30 to 300 in. / 0.76 to 7.62m		40 to 500 in. / 1.57 to 19.7m	
Throw Ratio		NP39ML: 0.38:1		NP39ML-4K: 0.38:1	
		NP31ZL: 0.75 - 0.93:1		NP31ZL-4K: 0.75 - 0.93:1	
		NP16FL: 0.76:1		NP16FL-4K: 0.76:1	
		NP17ZL: 1.25 - 1.79:1		NP17ZL-4K: 1.25 - 1.79:1	
		NP18ZL: 1.73 - 2.27:1		NP18ZL-4K: 1.73 - 2.27:1	
		NP19ZL: 2.22 - 3.67:1		NP19ZL-4K: 2.22 - 3.67:1	
		NP20ZL: 3.58 - 5.38:1		NP20ZL-4K: 3.58 - 5.38:1	
		NP21ZL: 5.31 - 8.26:1		NP21ZL-4K: 5.31 - 8.26:1	
Projection Distance		2.1 to 179.8 ft. / 0.64 to 54.8m		1.6 to 182.9 ft. / 0.6 to 55.8m	
Projection Angle		2.1 to 19.1° tele / 3.3 to 24.0° wide		1.2 to 17.6° tele / 1.8 to 22.0° wide	
Lens	Zoom	Motorized		Motorized	
	Zoom Ratio	Variable		Variable	
	Focus	Motorized		Motorized	
	F-number, f-number	NP39ML: F=2.0, f=5.64mm		NP39ML-4K: F=2.0, f=5.64mm	
		NP31ZL: F=1.96 to 2.3, f=11.3 to 14.1mm		NP31ZL-4K: F=1.96 to 2.3, f=11.3 to 14.1mm	
		NP-16FL: F=1.85, f=11.6mm		NP16FL-4K: F=1.85, f=11.6mm	
		NP17ZL: F=1.85 to 2.5, f=18.7 to 26.5mm		NP17ZL-4K: F=1.85 to 2.5, f=18.7 to 26.5mm	
		NP18ZL: F=1.64 to 1.86, f=25.7 to 33.7mm		NP18ZL-4K: F=1.64 to 1.86, f=25.7 to 33.7mm	
NP19ZL: F=1.86 to 2.48, f=32.9 to 54.2mm			NP19ZL-4K: F=1.86 to 2.48, f=32.9 to 54.2mm		
NP20ZL: F=1.85 to 2.4, f=52.8 to 79.1mm			NP20ZL-4K: F=1.85 to 2.4, f=52.8 to 79.1mm		
NP21ZL: F=1.85 to 2.48, f=78.5 to 121.9mm		NP21ZL-4K: F=1.85 to 2.48, f=78.5 to 121.9mm			
Shift	Motorized +0.59 vertical, +/-28 horizontal				
Keystone Correction		+/- 40° horizontal, +/- 40° vertical			
Synchronization Range		Horizontal	Analog: 15-100kHz, Digital: 15-153kHz		
		Vertical	Analog: 48-120Hz, Digital: 24-120Hz		
Supported Video Standards		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM			
SD/HD Video Signal Compatibility		4K, 1080p, 1080i, 720p, 576p, 576i, 480p, 480i			
PC Signal Compatibility		VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA, 4K			
Macintosh Compatibility		Yes			
Input/Output Terminals		RGB1 (analog)	VGA 15 pin D-sub, Component video using ADP-CV1E adapter		
		RGB2 (analog)	5-BNC		
		RGB1 (Digital)		HDMI (V2.0) w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 12 bit 4:4:4	
		RGB2 (digital)	HDMI (V1.4) w/HDCP	HDMI (V2.0) w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 12 bit 4:4:4	
		RGB3 (digital)	DisplayPort w/HDCP	DisplayPort w/HDCP (V1.4) - 4096 x 2160 @ 60p, 12 bit 4:4:4	
		RGB4 (digital)	HDBaseT	DisplayPort w/HDCP (V1.4) - 4096 x 2160 @ 60p, 12 bit 4:4:4	
		RGB5 (digital)		HDBaseT w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 8 bit 4:2:0	
		RGB6 (digital)		Quad 3G-SDI	
		Option Slot	OPS		
		Video			
		Audio 1			
		Audio 2			
		Audio Out			
		Monitor Out	HDMI (V1.4) w/HDCP		
		USB Type A			
USB Type A (behind cover)					
USB Type B (behind cover)					
Wired LAN port					
3D Sync Line		3Pin D			
Audio					
External Control		RS-232, IR, HDBaseT, Stereo Mini, RJ-45		RS-232, IR, HDBaseT, Stereo Mini	
Sync Compatibility		Separate Sync / Composite Sync / Sync on G			
Power Requirements		100 - 240V AC, 50/60Hz			
Input Current		9.4A - 3.8A	11.8A - 5.2A	12.5A - 5.5A	
Power Consumption		874W/456W/4.3W/0.18W	1220W/625W/4.3W/0.2W	1181W/658W/0.88W/0.5W	
Installation Orientation		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear			
Dimensions (WxDxH)		19.7 x 22.8 x 8.5 in. / 500 x 583 x 216mm			
Net Weight		61.7 lbs. / 28.0 kg	63.9 lbs. / 29.0 kg	68.8 lbs. / 31.2 kg	
Fan Noise		40 dB normal / 35 dB eco	42 dB normal / 37 dB eco	42 dB normal / 39 dB eco	
Regulations		USA: UL/UL60950-1, Laser + Lamp (IEC60825-1 + IEC62471), FCC Part15 Class A Canada: CUL/UL60950-1, Laser + Lamp (IEC60825-1 + IEC62471), ICES-003 Class A			
Operating Temperature		41-104°F / 5° - 40°C			
Humidity		20-80% non-condensing			
Storage		-14° - 122°F / -10° - 50°C			

		PH1202HL1	PH2601QL	PH3501QL	
Display Technology		0.65" DMD			
Light Output (lumens)		12,000 normal / Eco = variable	26,000 normal / Eco = variable	35,000 normal / Eco = variable	
Resolution	Native	1080p 1920 x 1080	DC4K 4096 x 2160		
	Maximum	4K 4096 x 2160	4K 4096 x 2160		
Contrast Ratio (up to)		15,000:1 with dynamic contrast	2,000:1 with dynamic contrast		
Lamp Life (up to)		20,000 hours			
Screen Size (diagonal)		100 to 500 in. / 2.54 to 12.7m	50 to 500 in. / 1.27 to 12.7m		
Throw Ratio		NP-9LZ08ZM1: 0.9 - 1.34:1	L2K-10F1: 0.93:1		
		NP-9LS12ZM1: 1.28 - 1.83:1	L4K-11ZM: 1.24 - 1.73:1		
		NP-9LS13ZM1: 1.42 - 2.24:1	L4K-15ZM: 1.52 - 2.10:1		
		NP-9LS16ZM1: 1.73 - 2.88:1	L4K-20ZM: 1.98 - 3.34:1		
			L2K-30ZM: 2.71 - 3.92:1		
			L2K-43ZM1: 3.91 - 5.52:1		
			L2K-55ZM1: 5.00 - 7.80:1		
Projection Distance		4.6 to 245.1 ft. / 1.4 to 74.7m	2.5 to 68.5 ft. / 0.74 to 20.9m		
Projection Angle		5.8 to 14.4° tele / 10.9 to 18.4° wide	10.3 to 10.8° tele / 13.7 to 14.5° wide		
Lens	Zoom	Motorized		Motorized	
	Zoom Ratio	Variable		Variable	
	Focus	Motorized		Motorized	
	F-number, f-number	NP-9LZ08ZM1: F=2.5 - 3.0, f= 13.3 - 19.9mm	L2K-10F1: F=2.5, f= 28.95mm		
		NP-9LS12ZM1: F=2.5,	L4K-11ZM: F=2.5, f= 38.5 to 53.7mm		
		NP-9LS13ZM1: F=2.5,	L4K-15ZM: F=2.5, f= 47.5 to 65.6mm		
		NP-9LS16ZM1: F=2.5,	L4K-20ZM: F=2.5, f= 61.4 to 105.2mm		
			L2K-30ZM: F=2.5, f= 85.0 to 121.6mm		
			L2K-43ZM1: F=2.5, f= 122.8 to 172.3mm		
			L2K-55ZM1: F=2.5, f= 156.5 to 243.1mm		
	Shift		L2K-10F1:	Motorized +/-0.27 Vertical, +/-0.08 Horizontal	
			L4K-11ZM:		
		L4K-15ZM:			
		L4K-20ZM:	Motorized +/-0.17 Vertical, +/-0.50 Horizontal		
		L2K-30ZM:			
		L2K-43ZM1:			
		Motorized +/-0.5 vertical, +/-11 horizontal	L2K-55ZM1: Motorized +/-0.31 Vertical, +/-0.10 Horizontal		
Keystone Correction		+/- 40° horizontal, +/- 40° vertical		+/- 40° horizontal, +/- 40° vertical	
Synchronization Range	Horizontal	Analog: 15-100kHz, Digital: 15-153kHz		Analog: 15-100kHz, Digital: 15-153kHz	
	Vertical	Analog: 48-120Hz, Digital: 24-120Hz		Analog: 48-120Hz, Digital: 24-120Hz	
Supported Video Standards		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM	
SD/HD Video Signal Compatibility		4K, 1080p, 1080i, 720p, 576p, 576i, 480p, 480i			
PC Signal Compatibility		VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA, 4K			
Macintosh Compatibility		Yes			
Input/Output Terminals	RGB1 (analog)	VGA 15 pin D-sub, Component video using ADP-CV1E adapter			
	RGB2 (analog)	5-BNC			
	RGB1 (Digital)	HDMI (V1.4) w/HDCP	HDMI (V2.0) w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 12 bit 4:4:4		
	RGB2 (digital)	DisplayPort w/HDCP	HDMI (V2.0) w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 12 bit 4:4:4		
	RGB3 (digital)	HDBaseT	DisplayPort w/HDCP (V1.4) - 4096 x 2160 @ 60p, 12 bit 4:4:4		
	RGB4 (digital)		DisplayPort w/HDCP (V1.4) - 4096 x 2160 @ 60p, 12 bit 4:4:4		
	RGB5 (digital)		HDBaseT w/HDCP (V1.4/2.2) - 4096 x 2160 @ 60p, 8 bit 4:2:0		
	RGB6 (digital)		Quad 3G-SDI		
	Option Slot				
	Video				
	Audio 1				
	Audio 2				
	Audio Out				
	Monitor Out	HDMI (V1.4) w/HDCP			
USB Type A					
USB Type A (behind cover)					
USB Type B (behind cover)					
Wired LAN port					
3D Sync Line		3Pin D	15 pin		
Audio					
External Control		RS-232, IR, HDBaseT, Stereo Mini, RJ-45		RS-232, IR, HDBaseT, Stereo Mini, RJ-45	
Sync Compatibility		Separate Sync / Composite Sync / Sync on G		Separate Sync / Composite Sync / Sync on G	
Power Requirements		100 - 240V AC, 50/60Hz		220 - 240V AC, 50/60Hz Single Phase	
Input Current		9.2A	30A		
Power Consumption		1392W / 1110W / 752W / 1291W / 1.83W / 5.7W	3665W / 205W		
Installation Orientation		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear	
Dimensions (WxDxH)		26.8 x 33.9 x 13.1 in. / 680 x 860 x 333mm	27.4 x 46.5 x 17.9 in. / 697 x 1180 x 455mm		
Net Weight		149.9 lbs. / 68 kg	372.6 lbs. / 169 kg		
Fan Noise		47 dB normal	55 dB normal		
Regulations		"UL60950-1 (2nd)/ FCC Part15 Class A (Marking: UL) CSA60950-1 / ICES-003 Class A (Marking: CAN ICES-38(A)/NMB-38(A)) EN60950-1/EN55022 Class A, EN55032 Class A, EN55024, EN61000-3-2/-3-3/-3-11/-3-12 (Marking CE) IEC60825-1 Edition3 2014 : Class1, IEC62471 2006 : RG3, FDA(21 CFR 1040.10 and 1040.11) IEC60825-1 Edition3 2014 : Class1, IEC62471 2006 : RG3 "			
Operating Temperature		41° - 104°F / 5° - 40°C			
Humidity		20-80% non-condensing			
Storage		-14° - 122°F / -10° - 50°C			

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