PLC-EF31N/NL

SXGA Digital Multimedia Projector



INCREDIBLY BRIGHT 5800 ANSI LUMENS

A pair of high-output 200-watt UHP lamps delivers an incredible 5800 ANSI lumens of brightness.

OUTSTANDING CONTRAST RATIO — 900:1

Through its new high-contrast optical system, utilizing micro lens technology, the PLC-EF31N/NL is able to achieve an outstanding contrast ratio of 900:1. A micro lens is integrated into each individual pixel on the three LCD panels increasing light efficiency, resulting in significantly brighter images.

INTELLIGENT DIGITAL SHARPNESS CONTROL

This high-performance image processing technology analyzes the incoming signal and controls the sharpness of picture data only, while text and other elements that are already sharp are left unprocessed.

NETWORK CONTROL/ADMINISTRATION

An optional network board allows for simple control and management of the projector via a CAT5 network connection. The network board, which can memorize and store up to 55 PC modes, can also be used in parallel with RS-232 controllers.

REAL COLOR MANAGER

The Real Color Manager System provides white balance adjustment and gamma correction from a PC using the included image adjustment software by simply comparing the on-screen image to a printed color chart.

NEW ONE-TOUCH LENS REPLACEMENT

Attaching the included One-Touch lens mount adapters to your projector and lenses makes installation and removal of our optional lenses quick and easy.



21605 Plummer Street Chatsworth, CA 91311 Ph: 818.998.7322 ext. 288 Fax 818.717.2719 www.sanyolcd.com

PLC-EF31 Multi-Versatile Interface

(POA-MD11DVI) (POA-MD12VD1) (POA-MD03VD2)



Specifications

Resolution	SXGA (1280 x 1024)					
Brightness	5800 ANSI Lumens (2-lamp mode)					
8 · · · · · · · · · · · · · · · · · · ·	2900 ANSI Lumens (1-lamp mode)					
Uniformity	90% (corner to corner)					
LCD Panel System	1.8" TFT polysilicon type w/micro lens x 3					
Number of Pixels	3,932,160 (1,310,720 x 3)					
Contrast Ratio	900:1 (full on/off)					
Projection Lens	Standard Zoom 2 - F2.0-2.3 (PLC-EF31N only)					
	(Model PLC-EF31NL shipped without lens)					
Image Size (diagonal)	40"-600"					
Aspect Ratio	5:4					
Throw Distance	4.9' – 107.2'					
Zoom/Focus						
	Powered					
Throw Ratio	2.0 – 2.6:1					
Zoom Ratio	1:1.3					
Power Lens Shift	Up/Down Ratio 10:0 – 0:10 or 8:1 – 1:8					
Digital Keystone	+ 40 / - 20°					
Correction						
Projection Lamp	200W UHP x 2					
Scanning Frequency	H Sync: 15-120kHz V Sync: 50-120Hz					
Dot Clock						
	230MHz					
Color System	PAL/PAL-M/PAL-N/SECAM/NTSC/NTSC4.43					
Computer Compatibility	UXGA, SXGA , XGA, SVGA, VGA, MAC					
Voltage	100-240V AC					
BTU Rating	1877					
dB Rating	45.0					
Power Consumption	550W					
Dimensions (WxHxD)	17.3"x9.1"x23.9" (PLC-EF31N) / 23.8" (PLC-EF31NL)					
Net Weight	PLC-EF31N – 50.5 lbs.; PLC-EF31NL – 46.3 lbs. (w/o					
Net weight						
	lens)					
User Maintenance	Clean air filters, replace lamp assembly					
Detachable Input Panels						
POĀ-	Digital Visual Interface (DVI) • Left & Right Audio					
MD11DVI	(RCA x 2)					
	• Control (Min DIN 8-pin)					
POA-	RGB & Component (BNC x 5) • Left & Right Audio					
MD12VD1	(RCA x 2) • Control (Min DIN 8-pin)					
POA-	Composite & Y/C (BNC x 2) • S-Video					
MD03VD2	• Left & Right Audio (RCA x 2)					
Fixed Input/Output	Serial in & Serial out (D-Sub 9 x 2) • Audio out					
Panel	Serial III & Serial out (D-Sub 9 x 2) · Audio out					
	(RCA x 2) • USB • Wired RC jack (Stereo mini)					
Included Accessories	Wired/Wireless I/R Remote Control w/Mouse Pad and					
	Laser Pointer • AC power cord • VGA and DVI Cable •					
	Laser Pointer • AC power cord • VGA and DVI Cable •					
	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control					
	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens					
	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-					
	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's					
	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD08HD - HD-SDI Input Panel					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD08HD - HD-SDI Input Panel POA-MD09VD3 – Faroudja TM Input Panel					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD08HD - HD-SDI Input Panel POA-MD09VD3 – Faroudja TM Input Panel POA-MD11DVI – DVI Board					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD09VD3 – Faroudja TM Input Panel POA-MD09VD3 – Faroudja TM Input Panel POA-MD11DVI – DVI Board POA-MD12VD1 – 5-BNC RGBHV Board					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD09VD3 – Faroudja TM Input Panel POA-MD09VD3 – Faroudja TM Input Panel POA-MD11DVI – DVI Board POA-MD12VD1 – 5-BNC RGBHV Board POA-MD13NET – Network Board					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 - Y/C & S-Video Board POA-MD04VGA - D-Sub15 VGA Board POA-MD09VD3 - Faroudja TM Input Panel POA-MD09VD3 - Faroudja TM Input Panel POA-MD11DVI - DVI Board POA-MD12VD1 - 5-BNC RGBHV Board POA-MD13NET - Network Board POA-LNA02 - Lens Mount Adapter					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 - Y/C & S-Video Board POA-MD04VGA - D-Sub15 VGA Board POA-MD09VD3 - Faroudja TM Input Panel POA-MD11DVI - DVI Board POA-MD11DVI - DVI Board POA-MD13NET - Network Board POA-LNA02 - Lens Mount Adapter (for LNS-W02, W02KS, M01, S01 lenses)					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA- LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 — Y/C & S-Video Board POA-MD04VGA — D-Sub15 VGA Board POA-MD08HD - HD-SDI Input Panel POA-MD09VD3 — Faroudja TM Input Panel POA-MD11DVI — DVI Board POA-MD11DVI — DVI Board POA-MD13NET — Network Board POA-LNA02 - Lens Mount Adapter (for LNS-W02, W02KS, M01, S01 lenses) POA-LNA01 - Lens Mount Adapter (for all other lenses)					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD09VD3 – Faroudja TM Input Panel POA-MD09VD3 – Faroudja TM Input Panel POA-MD11DVI – DVI Board POA-MD11DVI – DVI Board POA-MD13NET – Network Board POA-MD13NET – Network Board POA-LNA02 • Lens Mount Adapter (for LNS-W02, W02KS, M01, S01 lenses) POA-LNA01 • Lens Mount Adapter (for all other lenses) PLC-CSE16 • ATA Hard Shipping Case					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 – Y/C & S-Video Board POA-MD04VGA – D-Sub15 VGA Board POA-MD08HD - HD-SDI Input Panel POA-MD09VD3 – Faroudja TM Input Panel POA-MD11DVI – DVI Board POA-MD11DVI – DVI Board POA-MD13NET – Network Board POA-MD13NET – Network Board POA-LNA02 - Lens Mount Adapter (for LNS-W02, W02KS, M01, S01 lenses) POA-LNA01 - Lens Mount Adapter (for all other lenses) PLC-CSE16 - ATA Hard Shipping Case					
Optional Accessories	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 - Y/C & S-Video Board POA-MD04VGA - D-Sub15 VGA Board POA-MD09VD3 - Faroudja TM Input Panel POA-MD09VD3 - Faroudja TM Input Panel POA-MD11DVI - DVI Board POA-MD11DVI - DVI Board POA-MD13NET - Network Board POA-MD13NET - Network Board POA-LNA02 - Lens Mount Adapter (for LNS-WO2, W02KS, M01, S01 lenses) POA-LNA01 - Lens Mount Adapter (for all other lenses) PLC-CSE16 - ATA Hard Shipping Case POA-LLB02 - Lamp and Ballast Kit for 100W UHP					
Optional Accessories Warranty	Laser Pointer • AC power cord • VGA and DVI Cable • Wired remote cable • PS/2, Serial, MAC Mouse Control Cables • MAC/VGA and DVI/VGA Adapter • Lens cover • Lens Mount Adapters (POA-LNA01 & POA-LNA02) • Dust cover • Light Block Sheets • Owner's manual • Real Color Manager CD-ROM POA-MD03VD2 - Y/C & S-Video Board POA-MD04VGA - D-Sub15 VGA Board POA-MD08HD • HD-SDI Input Panel POA-MD09VD3 - Faroudja TM Input Panel POA-MD11DVI - DVI Board POA-MD11DVI - DVI Board POA-MD13NET - Network Board POA-MD13NET - Network Board POA-LNA02 • Lens Mount Adapter (for LNS-W02, W02KS, M01, S01 lenses) POA-LNA01 • Lens Mount Adapter (for all other lenses) PLC-CSE16 • ATA Hard Shipping Case					

Because its products are subject to continuous improvement, SANYO reserves the right to modify product design and specifications without notice and without incurring any obligations.

Lens Specifications									
Type	Short Fixed	Short Zoom	On-Axis	Standard	Standard	Standard	Semi-Long	Long Fixed	Long Zoom
			Short Fixed	Zoom 1	Zoom 2	Zoom 3	Zoom		
Part No.	LNS-W01	LNS-W02	LNS-W03	LNS-S01	LNS-S02	LNS-S03	LNS-M01	LNS-T01	LNS-T02
Zoom	No	Yes (power)	No	Yes (power)	Yes (power)	Yes (power)	Yes (power)	NO	Yes (power)
Throw Ratio	1.2:1	1.35 — 1.8:1	0.8:1	1.8 — 2.9:1	2.0 — 2.6:1	2.6 - 3.5:1	3.5 — 4.6:1	7.0:1	4.6 — 6.0:1
F Stop	2.5	2.5 - 2.9	2.6	2.6 — 3.5	2.0 - 2.3	1.7 — 2.6	2.0 — 2.6	2.0	2.0 - 2.9
Lens Shift	8:1 — 1:8	8:1- 1:8	1:1	10:0 — 0:10	10:0 — 0:10	8:1- 1:8	8:1- 1:8	8:1- 1:8	8:1- 1:8
Walak	10 0 lba	E E Iba	C C Ibo	27160	4 O Iba	و ما الم	4 O Iba	0.4160	C O Iba

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