

NEC NC2043ML Laser Projector

Datasheet



Greater flexibility with modular cinema projection solutions

Joining Sharp/NEC's modular cinema projection solutions, the NC2043ML provides high flexibility and future-proof adaption. The modular concept allows for simple upgrade from 2K to 4K by changing only the projector head, or an increase in brightness by choosing from three different light modules (18K, 20K, 24K Lumen). In addition to the 2K projector head, the NC2043ML employs a 4K head and a 20K Lm laser module.

The NC2043ML is based on RB laser technology, generating exceptional image quality with very natural looking colours yet at a low operational cost. RB laser technology is almost entirely speckle-free allowing high gain screens to be used achieving higher brightness levels especially for 3D.

The Sharp/NEC modular solution is opening opportunities for leasing structures which greatly appeal to theatre operators to better manage their budgets. The innovative NC2043ML brings compelling benefits in lowering operating costs and increasing efficiencies whilst delivering exceptional viewing experiences in medium-sized venues.

Benefits

Modular Light Source - achieve the light output which is perfectly adjusted to your requirements with exchangeable light modules 24,500lm, 20,000lm and 18,000lm for different brightness demands.

Protect your investment - save on new lenses by reutilising the NEC NC2000 series lens family.

Virtually zero maintenance - no lamp and no filter replacement costs, no maintenance personnel costs and no lamp stock due to the innovative Laser Light engine.

Enjoy a Lower TCO - highest reliability, maintenance-free operation, low power consumption and up to 50000 hours life; the Laser light source results in a significantly lower total cost of ownership.

Sealed optical engine - minimising dust ingress, consistent performance is assured and no special maintenance is required.

Product Information

Product Name	NEC NC2043ML
Product Group	Laser Projector
Components	Projector Head NP-42HD (60005139), Laser Light Source NP-20LU03 (100015659)
Order Code	40001393

Optical

Projection Method	3-chip 0.98" DC4K DMD
Screen Size [m]	up to 20 in DCI colour (1.8 Gain screen)
Brightness	Up to 20000 Lumen
Contrast Ratio	2000:1
Light Source	Laser Light Source, expected life: up to 50000 h ¹
Lens	Zoom / Focus / Shift: Motorized Other: Range of shift is dependent on lens Primary Lenses: NC-60LS12Z:1.2-1.81:1; NC-60LS14Z:1.4-2.05:1; NC-60LS16Z:1.59-2.53:1; NC-60LS19Z:1.9-3.25:1; NC-60LS24Z:2.4-3.9:1; NC-60LS39Z:3.9-6.52:1
DMD Specifications	4096 x 2160
Cooling Method	Circulating air cooling system Liquid: Cooling inside, no chiller required

Connectivity Projector

External Controls	1 x D-Sub 9 pin (RS-232); 1 x GPIO (3D) (D-sub 15 pin female); 1 x GPIO (D-sub 37 pin female); 1 x RJ45 100Base-T; 1 x USB port (TypeA)
-------------------	---

Environmental Conditions

Operating Temperature [°C]	10 to 35
Operating Humidity [%]	10 to 85 - non-condensing
Storage Temperature [°C]	-10 to 50
Storage Humidity [%]	10 to 85 - non-condensing

Electrical

Power Supply	Built-in power supply Projector Power Supply Unit: 200 to 240V AC, 50/60Hz, single phase
Rated Input Current	Projector power: (TBD)A @ (TBD)V-(TBD)V
Power Consumption [W]	2947 max.
Heat Dissipation (BTU)	10055

Mechanical

External Dimensions (W x H x D) [mm]	697 x 509.5 x 1,095
Weight [kg]	150 (without lens)
Fan Noise [dB (A)]	< 50

Additional Features

Special Characteristics	Built-in IMS (IMS3000, optional); Compact model; Dust sealed optical engine; Laser Light System; Latest digital technology; Low TCO; Metal filter; RB laser light source; Reduced costs
-------------------------	---

Green Features

Ecological Materials	Laser technology reduces power usage and reduces replacement materials required
----------------------	---

Interfaces: Dolby IMS3000 (optional)

External Controls	2 x RJ45 (4 GPI and 6 GPO); 3 x RJ45 Gigabit Ethernet
Input Terminals	1 x USB Type 2.0; 2 x 3GSDI bidirectional (input and output); 2 x USB Type 3.0; eSATA; HDMI
Output Terminals	2 x RJ45 (16-channel AES3-EBU Digital Audio)
Additional Features	HFR 3D Support (48 Hz/eye, 60 Hz/eye); Integrated SMS; Integrated Storage: 2 TB (DCP, RAID5); NAS support

Regulations

Europe	CE; DCI 1.2; EN55024; EN55032 Class A (Marking TUV,CE); EN61000-3-11; EN61000-3-12; EN61000-3-2; EN61000-3-3
Russia/Belarus/Kazakhstan	EAC; EN55024 1998; EN55032 1998, Class A; EN61000-3-2; EN61000-3-3

Warranty

Warranty	2 years, parts warranty
Light Source	2 years or 7500h (whatever comes first)

¹ 50% of initial brightness at the end of specified laser life time at 25 degree ambient temperature, under normal usage condition, not covered by standard warranty

This product has been equipped with a laser module and is classified as Class1 of IEC60825-1 Ed3 2014 and is classified as RG3 of IEC62471-5 Ed1 2015.

DO NOT LOOK DIRECTLY INTO THE BEAM.

This document is © 2022 Sharp NEC Display Solutions Europe GmbH.

All rights reserved in favour of their respective owners. All hardware and software names are brand names and/or registered trademarks of the respective manufacturers. All specifications are subject to change without notice. Errors and omissions are excepted. 19.07.2022