

## NC2002ML Laser Projector

### Datasheet



#### Modular Cinema Projection - a new standard in adaptable screening

The world's first cinema projector series offering a modular laser light system with projector head, all in one box. The modular concept allows you to plug-in the appropriate light modules based on the brightness you need. Protect your investment when migrating from 2D to 3D projection, or adapting your set-up to a wider screen.

The NC2002ML utilises RB laser technology which is almost speckle-free compared to RGB technology, providing similar benefits yet at a lower cost. Don't limit your venue's potential; go beyond cinema to increase your visitor numbers and maximise revenue. The modular light concept opens opportunities to screen alternative content for corporate presentations and gaming events.

You can expect a powerful modular projector that delivers compelling advantages when it comes to operation, efficiency and image quality. Ideally operating in medium-sized venues and with premium format cinema screens of up to 20m.

### 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.

**Optimise your cost ownership** - take advantage of new financing structures; lease your light engine and only pay for the light you use.

**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.

**A host of integrated features** - including built-in 2TB screen server, 2 x 3G SDI Interfaces, HDMI interface for alternative content, advanced network and built-in GPIO functions with NAS support.

## Product Information

Product Name	NC2002ML
Product Group	Laser Projector
Components	Projector Head NP-02HD (60004880), Laser Light Source NP-20LU01 (100015208)
Order Code	40001313

## Optical

Projection Method	3-chip DLP Cinema® Technology
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 <sup>1</sup>
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	2048 x 1080 Chip: 0.98" S2K, DLP Cinema® Technology
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)
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## Electrical

Power Supply	Built-in power supply Projector Power Supply Unit: 200 to 240V AC, 50/60Hz, single phase
Rated Input Current	Projector power: 18.1A @ 200V-240V
Power Consumption [W]	2977 max.
Heat Dissipation (BTU)	10158

## 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

## Regulations

Europe	CE; DCI 1.2; EN55024; EN55032 Class A (Marking TUV,CE); EN60950-1; 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; IEC60950-1

## Mechanical

External Dimensions (W x H x D) [mm]	697 x 509.5 x 1,337
Weight [kg]	150 (without lens)
Fan Noise [dB (A)]	< 50

## Additional Features

Special Characteristics	Built-in IMS (NP-90MS02-4K or IMS3000, optional); Compact model; Dust sealed optical engine; Laser Light System; Latest digital technology; Low TCO; Metal filter; RB laser light source; Reduced costs
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### **Interfaces: Dolby IMS3000 (optional)**

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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

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### **Warranty**

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

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### **Green Features**

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Ecological Materials	Laser technology reduces power usage and reduces replacement materials required
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<sup>1</sup> 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.

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