

NEC NEXT GENERATION SERIES 2

DIGITAL CINEMA PROJECTORS

3D DIGITAL CINEMA SERIES 2 PROJECTORS



DIGITAL
PICTURE BY
DLP
CINEMA
TEXAS INSTRUMENTS

3D
CINEMA

NC1200C, NC2000C, NC3200S DC Projectors | MM3000 Multimedia Switcher

NEC Digital Cinema Solutions for 2010

Improve Your Establishment Experience, Cost of Ownership and Increase Site Revenue

Bring your establishment into the future with a 'Next Generation' NEC Digital Cinema Projector.

Delivering the most exceptional image quality, brightness, resolution, contrast and colour together with a wealth of new revenue generation opportunities and backed by the trusted performance of one of the biggest names in Digital Cinema Technology. An ideal solution for theatres and cinema events.

Delivering Genuine Benefits

Generate Greater Per Seat Revenue

Achieve additional income from showing higher quality more entertaining media and arranging alternative sports, broadcast and education media during off peak operational times.

Play Captivating 3D Content

Take your establishment into the next generation and stay ahead of your competition with the latest Digital Content, which is becoming more and more an essential element of the latest movies and media.

Enjoy Lower TCO

With easy servicing, more durable components and advanced servicing options you can enjoy better quality imaging whilst experiencing an overall lower cost of ownership.

Versatile Media Management

Easy scheduling, distribution of movies and additional Media with copyright and licensing management together with simple and advanced control via a network.





NEC SERIES 2
NEXT GENERATION DIGITAL CINEMA

3D

C I N E M A

INCREASED REVENUE

Worldwide box office takings reached an all-time high in 2009 of \$29.9 billion, driven by Digital and 3D Screens that are bringing in record repeat business and driving up ticket prices

Source USA Today March 2010 - Motion Picture Association of America



NEC SERIES 2

Why Digital

Stunning 2K today and ready for tomorrow's 4K

With the highest brightness and highest contrast and consistent screen colours on all screens, every time. NEC Projectors are 4K ready with optional upgrade* and further products which will take advantage of the upcoming 4K chip are in development.

Undiluted quality

With digital reproduction there are none of the deterioration issues that can arise from reproducing film. This means your viewers see it straight from the source, just as the producers intended it to be seen.

Complete flexibility

Another advantage of digital projection is its flexibility and ease of use. Managing playlists, uploading film and performing playbacks has never been easier - and they can all be controlled from anywhere in the multiplex.

Play Virtually Any Media

*The technology for 0.98" 4k is not yet available. Should TI launch this technology in the immediate future NEC will develop a suitable product

NEC Series 2 Digital Cinema Projectors

Get Ready for the Next Generation of Media with the Next Generation in Projection.

NC1200C	9000 Lumen	up to 14M
NC2000C	17000 Lumen	up to 20M
NC3200S	31000 Lumen	up to 32M



Simple, Cost Saving Maintenance

A Modular assembly makes for quick and easy parts replacement. Access to all important electronic boards is easy and possible from one side, with just a single side panel to remove. A 2-Slot System allows for the standard Signal Input Board (SIB) and one of two optional boards. Connectivity is

simple too with four single or two dual HDS/SDI interfaces (New: 3GBIT/sec) and 2 DVI (HDCP) interfaces an integrated Media Block (option) and an MM3000 Scaler/ Switcher (option).

In addition, the electronic layout is easily accessible with clear wiring. Prism replacement is also simple with just one connector for all internal signals. Premium service support is available through Europe (16 hours/ 7 days a week*) and all key parts are available locally from NEC Service Partners.

Operationally servicing is simple too with the NEC Digital Cinema Control Software, which includes an Information Viewer, a View/Sort/Filter for easy to read/analyze log files, easy trouble shooting and quick and easy failure diagnosis via BIST (Built-in System Test) and analyzing error logs. Firmware updates can be managed and even a complete projector software update is possible remotely.

Highest Reliability

A new totally unique separated airflow design helps secure our best ever reliability with one airflow for electronics/optics and one airflow just for lamp cooling. Any lamp explosion has no influence on electronics/optics. Advanced dust/oil prevention is achieved by higher inside air pressure and special filters that can be exchanged from outside without any tool.

Improved Operation

A new all metal cabinet delivers confidence in stability and resistance to external impact. In addition the one-piece side panels make access simple and Series 2 Models include a new Status Indicator together with a new user-friendly keypad layout and a more user-friendly operation software. Three separate colour buttons on the side of the projector indicated the current status of the projector, in use; available or locked



The new User Control Panel provides not only simple access to enhanced functionality, but also houses a series of future proof new connections.

* provided the projector warranty is still valid

NEC SERIES 2

NEXT GENERATION DIGITAL CINEMA

The Future of Cinema Viewing

- Industry's first separated airflow system
- Industry's first lamp memory
- Motorized Zoom/Focus/Shift
- Lamp replacement from the back
- Easiest lamp adjustment
- Dust/Oil resistance
- Easy maintenance
- Covering all screen sizes from 4m to 32m
- Working with all 3D systems in market
- Dolby 3D assembly already prepared
- Triple flash 3D in full 2K resolution standard
- Standard cinema lamps usable
- Fully DCI compliant



3D
CINEMA

NC1200C

Suitable for small screens and post production

DLP Cinema Chip: 0.98" DLP
Resolution: 2048 x 1080

Brightness: 9000 Lumen

Screen Width:*

At screen gain of 1.3/14-ft-L 12M
At screen gain of 1.8/14-ft-L 14M

Power Consumption:

Projector head: 500W
Integrated lamp power supply: 2600W
Total: 3100W

HIGH RESOLUTION AND CONTENT Utilising DLP Cinema Technology from Texas Instruments. Exceptional image and colour quality with contrast ratios of 2200:1 or higher by using DMD chips that support a resolution of 2048 x 1080. This projector faithfully reproduces digital cinema and high-definition input sources requiring superior colour reproduction and wide gradation.

HIGH RELIABILITY Newly designed separate cooling system creates positive air pressure internally to prevent contaminations from entering the optical and electrical system. Lamp cooling air flow is separate from the main optics and electronics.

AUTOLAMP BRIGHTNESS AND CONTROL Minimise fluctuations that occur during the lamp's life. The brightness level will not decrease as

NC2000C

Suitable for the majority of Cinemas

DLP Cinema Chip: 0.98" DLP
Resolution: 2048 x 1080

Brightness: 17000 Lumen

Screen Width:*

At screen gain of 1.3/14-ft-L 17M
At screen gain of 1.8/14-ft-L 20M

Power Consumption:

Projector head: 500W
Integrated lamp power supply: 5000W
Total: 5500W

the lamp is consumed. These projectors optimise lamp performance and ensure the brightest and most uniform image possible for the life of the lamp.

MINIMAL MAINTENANCE Trouble-Free lamp replacement. Technicians can replace lamps simply from the back of the projector even in cramped space.

SIMPLE OPERATION One touch operation, ergonomic keyboard layout and memory functions. Optional scaler/switcher for alternative content processing.

BUILT IN WEBSERVER Access and control projectors from any authorised web browser (Available during 2010)

NC3200S

Suitable for large and outdoor Cinemas

DLP Cinema Chip: 1.25" DLP
Resolution: 2048 x 1080

Brightness: 31000 Lumen

Screen Width:*

At screen gain of 1.3/14-ft-L 25M
At screen gain of 1.8/14-ft-L 32M

Power Consumption:

Projector head: 700W
Lamp power supply unit: 9700W
Total: 10400W



The NC3200S has an optional movable Stand for improved installation and accessibility.

*subject to installation conditions

THE NEC ADVANTAGE

MM3000 MultiMedia Switcher

Multiple Source Content Management



"HQV(R) powered by Teranex(R)" is used by Geo Semiconductor under license from Integrated Device Technology Inc. and Teranex Systems Inc. "HQV" is short for Hollywood Quality Video and is a registered trademark of Integrated Device Technology Inc. "Teranex" is a registered trademark of Teranex Systems Inc. Realta is a registered trademark of Geo Semiconductor, Inc. in the United States.

The NEC Multimedia Switcher converts inputs from various external sources - DVD players, PCs, satellite receivers, BlueRay, little cameras etc. - to allow DLP Cinema® projectors to screen anything from live concerts and sporting events to computer presentations and DVD content.

High Video Quality

- Integrated Realta® video processor with HQV® Powered by Teranex® technology
 - 3D Motion Adaptive Deinterlacing with Multi-Directional Diagonal Filter for SD and HD
 - Multi-Cadence detection including automatic detection of 2:3 /2:2 pull-down signals and many other film formats
 - Per-pixel Motion Adaptive Noise Reduction for SD
 - Per-pixel Detail Enhancement to bring out more visible details
- Images with high-bit depth with full 10 bit image processing for SD, HD and video sources
- High contrast images with the Contrast Enhancement function for SD-NEC unique technology

Easy to Operate

- One touch selection of input signals from NEC Cinema Projectors
- Quick and flexible connection of input signals from up to 2 input modules





GREEN > VISION



CREATING A SUSTAINABLE SOCIETY

Displaying the most outstanding and versatile content can have a demonstrable effect on helping to save our planet's resources and eliminate waste. NEC's unique lower cost of ownership proposition means a longer life cycle and less cost and less waste. More importantly digital means eliminating 35mm media with its harmful production and disposal implications.

Ecological Innovation:

Using the latest IT Communications and Security Features media can be safely transferred without involving couriers or physical production of any media.

Ecological Materials:

Minimal Use of Harmful Materials.
Digital Media means virtual production with massive savings on resources from a movie's initial concept to its premiere and distribution.



Reduced Consumption:

Less power usage, eliminate waste and landfill implications associated with 35mm Media.



Digital Signage

Outstanding Venue Information Display Solutions

As the market leader in digital signage, NEC offers a large selection of powerful digital signage solutions that can provide reliable outstanding images over long periods of use.

Digital Signage can serve several purposes such as informing, entertaining or providing a purchasing incentive. For instance, a public display with tantalising content placed above a concession stand can boost sales of popcorn, cola and other items. Public Displays in waiting areas playing trailers of other current movies can draw people into other shows and generate future ticket sales while shortening the perceived waiting time.

Way finding or simply displaying the movie poster at the door of the respective movie theatre are other great examples of using public displays in a cinema environment. Digital Signage solutions let you change content in a split second and allows for great flexibility if movies are cancelled or additional movies are added to your schedule. Digital Signage with it's moving images and flexible content creates fascination and captivates audiences in a manner not possible with printed medium.

NEC Display Solutions offers LCD public displays from 32" up to 82" as well as videowall solutions which can be as large as 60m². Whatever you want to communicate digitally at your venue, NEC Display solutions can provide the ideal digital signage solution.



DIGITAL CINEMA SPECIFICATIONS

	NC1200C ORDER CODE: 60002948	NC2000C ORDER CODE: 60002815	NC3200S ORDER CODES: PJ HEAD 60002816 POWER SUPPLY 60002996
PROJECTION METHOD	3-chip DMD reflection method	3-chip DMD reflection method	3-chip DMD reflection method
Brightness	9,000 lumens when using 2.0KW high-efficiency Xenon lamp bulb	17,000 lumens when using 4.0KW high-efficiency Xenon lamp bulb	31,000 lumens when using 7.0KW high-efficiency Xenon lamp bulb
Supported Screen Sizes	14m /46ft*	20m / 65ft*	32m / 105ft*
Contrast	2200:1 (full on/off)	2200:1 (full on/off)	2200:1 (full on/off)
Lamp	High-efficiency Xenon (2.0KW lamp bulb)	High-efficiency Xenon (4.0KW lamp bulb)	High-efficiency Xenon (4.5KW, 6KW, 7KW)
Primary Lenses	(for 0.98" DLP Chip) 1.2-1.8:1 zoom 1.3 to 1.75:1 zoom 1.9 to 3.25:1 zoom 1.4 to 2.05:1 zoom 2.4 to 3.9:1 zoom 1.59 to 2.53:1 zoom 3.9 to 6.52:1 zoom	(for 0.98" DLP Chip) 1.2-1.8:1 zoom 1.3 to 1.75:1 zoom 1.9 to 3.25:1 zoom 1.4 to 2.05:1 zoom 2.4 to 3.9:1 zoom 1.59 to 2.53:1 zoom 3.9 to 6.52:1 zoom	(for 1.25" DLP Chip) 1.25 to 1.45:1 zoom 1.6 to 2.4:1 zoom 3.0 to 4.3:1 zoom 1.44 to 2.05:1 zoom 1.8 to 3.0:1 zoom 2.15 to 3.6:1 zoom
Focus	Motorized	Motorized	Motorized
Zoom	Motorized	Motorized	Motorized
Shift	Horizontal/Vertical Motorized	Horizontal/Vertical Motorized	Horizontal/Vertical Motorized
Other	Dowser (light shutter), Lens memory stores lens setting (shift/zoom/focus) Range of shift is dependent on lens	Dowser (light shutter), Lens memory stores lens setting (shift/zoom/focus) Range of shift is dependent on lens	Dowser (light shutter), Lens memory stores lens setting (shift/zoom/focus) Range of shift is dependent on lens
Chip	0.98" DLP	0.98" DLP	1.25" DLP
Tilt Angle	12°	12°	12°
Pixels	2048 x 1080	2048 x 1080	2048 x 1080
Cooling method	Liquid cooling inside, air cooling with dust-preventing electrostatic filter	Liquid cooling inside, air cooling with dust-preventing electrostatic filter	Liquid cooling inside, air cooling with dust-preventing electrostatic filter
Total thermal dissipation	10600BTU	18800 BTU	35500BTU
Projector exhaust	10 m³/min	13 m³/min	16 m³/min
Demand of exhaust duct	Yes	Yes	Yes
External Controls	1 x LAN port [RJ-45], 1 x USB port [Type A], 1 x Serial port (RS-232C) [D-sub(9-pin)], 1 x General Purpose I/O [D-sub (37-pin)] General purpose I/O for 3D (1 x D-sub [15-pin]), 1 x Remote control connector	1 x LAN port [RJ-45], 1 x USB port [Type A], 1 x Serial port (RS-232C) [D-sub(9-pin)], 1 x General Purpose I/O [D-sub (37-pin)] General purpose I/O for 3D (1 x D-sub [15-pin]), 1 x Remote control connector	1 x LAN port [RJ-45], 1 x USB port [Type A], 1 x Serial port (RS-232C) [D-sub(9-pin)], 1 x General Purpose I/O [D-sub (37-pin)] General purpose I/O for 3D (1 x D-sub [15-pin]), 1 x Remote control connector
Input Terminals	4 x HD-SDI port [BNC] 2 x DVI port [DVI-digital]	4 x HD-SDI port [BNC] 2 x DVI port [DVI-digital]	4 x HD-SDI port [BNC] 2 x DVI port [DVI-digital]
Projector Power Supply (C2)	Projector: 100 to 240V AC, 50/60Hz, single phase	Projector: 100 to 240V AC, 50/60Hz, single phase	Projector: 100 to 240V AC, 50/60Hz, single phase
Lamp Power Supply	Lamp: 200 to 240V, 50/60Hz single phase	Lamp: 200 to 240V AC, 50/60Hz, single phase	Lamp: 200 to 230V AC, 380 to 415AC, 50/60Hz three phase
Lamp Power Consumption	Head 500W; Lamp Power Supply 2600W, Total 3100W	Head 500W; Lamp Power Supply 5000W; Total 5500W	Head 700W; Lamp Power Supply 9700W, Total 10400W
Operational Temp	5° to 35° C	5° to 35° C	5° to 35° C
Humidity	10% to 85% (non-condensing)	10% to 85% (non-condensing)	10% to 85% (non-condensing)
Storage	-10° to 50° C	-10° to 50° C	-10° to 50° C
External Dimensions (W x D x H)	700 x 990 x 503 mm Excluding lens, lens hood and exhaust stack	700 x 990 x 503 mm Excluding lens, lens hood and exhaust stack	700 x 1124 x 503 mm Excluding lens, lens hood and exhaust stack
Net Weight: Projector head	92 kg (excluding lens)	99 kg (excluding lens)	99 kg (excluding lens)
Fan Noise	Less than 62 dB	Less than 62 dB	Less than 66 dB
European Regulations	EN55022 1998, Class A EN61000-3-11 EN55024-1998 EN61000-3-12	EN55022 1998, Class A EN61000-3-11 EN55024-1998 EN61000-3-12	EN55022 1998, Class A EN61000-3-11 EN55024-1998 EN61000-3-12
ACCESSORIES (option)	Wide converter lens and motorized turret, built-in alternative content processor, optional input boards for alternative content processor, air filter,	Wide converter lens and motorized turret, built-in alternative content processor, optional input boards for alternative content processor, air filter,	Wide converter lens and motorized turret, built-in alternative content processor, optional input boards for alternative content processor, air filter,
WARRANTY	1 year, parts warranty	1 year, parts warranty	1 year, parts warranty
Additional accessories	Additional accessories are available. Visit www.nec-display-solutions.com for details.	Additional accessories are available. Visit www.nec-display-solutions.com for details.	Additional accessories are available. Visit www.nec-display-solutions.com for details.

*. Subject to installation conditions. Maximum Screen Size is under the conditions of 14-ft- @ screen gain 1.8

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