# Installation Projector

# NP3200/NP2200/NP1200

## Eco-friendly projector capable for flexible installation and versatile uses with five optional lenses, lens shift and many other features.

### Low power consumption in power-saving mode

Power consumption in power-saving mode is 0.4W (100-120V AC) / 0.5W (200-240V AC). These enhancements help to dramatically reduce the TCO (total cost of ownership).

### Carbon meter for visualizing ecology

The projector employs the Carbon Meter indicating the reduced amount of $CO_2$ emissions in Eco Mode. Visually confirm the numerical value indicating the reduction in $CO_2$ emissions in comparison with Eco Mode Off operation.

### Quick start & Quick power off

Your projector is setup and ready to display your presentation about 5 seconds after powering on, with the Quick Start function. The Quick Power Off function stops the cooling fan immediately after turning off the power to the projector, which makes it possible to remove the projector quickly.

### Direct power off

For a rapid shut down, the projector can be turned off without powering off the projector using the Direct Power Off function and a power strip equipped with a switch and breaker.

● High Brightness up to 5000 ANSI Lumens (NP3200)

● Vertical Keystone Correction +/-30 degrees

● Wall Colour Correction for vivid images even without a screen

### Virtual Remote Function is easy and convenient to set up on the projector

The included Virtual Remote Tool utility software allows to manipulate the projector from your PC connected with VGA signal cable. In addition, the Easy Setup function gives simple instructions for setting up the projector.

For the operating screen, you can select either the toolbar or the remote controller type.

Power — Source Select — Freeze — Help
AV-MUTE — Option
(Indication of the toolbar/ Adjustment of the button sizes)

### Five types of optional lenses available for Flexible installation

Five optional lenses are selectable for various installation conditions depending on the screen size, room space, throwing distance, etc. Lenses can be easily replaced by hand without using tools.

### Manual lens shift for simple adjustment of projected images on screen

With the manual lens shift mechanism, the position of projected images on screen can be adjusted in both the vertical and horizontal directions without moving the main unit.

*The Lens Shift function is not available for the NP01FL.

● Wired LAN Connectivity

● Auto Power On starts projection immediately by inserting the power cord into an outlet

● High altitude mode (5500ft / 1600m)

## Specifications

| | | | NP3200 | NP2200 | NP1200 |
|---|---|---|---|---|---|
| LCD Panel | | | | 0.8 inch LCD with Micro Lens Array (Aspect Ratio 4:3) Dichroic mirror separation-prism convergence system | |
| Resolution*[1] | | | | 1024 x 768 pixels | |
| Lens | | | | Manual Zoom/ Focus, Zoom Ratio 1 to 1.33, Range = 1 : 1.5 to 2.0, f = 24.4mm to 32.5mm, F = 1.7 to 2.2 | |
| Lens Shift | | | | Horizontal : Max±0.1H / Vertical : Max+0.5V | |
| Lamp (Eco Mode On / Eco Mode Off) | | | 264W / 330W AC | 264W / 300W AC | |
| Lamp Life*[2] (Eco Mode On / Eco Mode Off) | | | | 3000H / 2000H | |
| Image Size (Projection Distance) | | | | 30 to 500inch (0.89m to 20.83m) (Standard Lens) | |
| Colour Reproduction | | | | 16.7 million colours simultaneously, Full colours | |
| Light Output*[3]*[4] | | Eco Mode Off | 5000 ANSI lumens | 4200 ANSI lumens | 3700 ANSI lumens |
| | | Eco Mode On | Approx.80% of ECO Mode Off | Approx.88% of ECO Mode Off | Approx.88% of ECO Mode Off |
| Contrast Ratio (White / Black) *[4] | | | | 600:1 | |
| Maximum Resolution | | Analog | | UXGA (1600 x 1200) @ 60Hz with Advanced AccuBlend | |
| | | Digital | | SXGA+ (1400 x 1050) @ 60Hz with Advanced AccuBlend | |
| Scan Rate | | Horizontal | | 15kHz to 100kHz (RGB : 24kHz or over) | |
| | | Vertical | | 50Hz to 120Hz | |
| Keystone Correction | | Vertical | | Manual Approx.±Max 30 degrees *[5] | |
| Input Terminals | 2 Computer Input (Analog) | 1 D-Sub Mini 15pin (Computer 1 IN) 1 BNC x 5 (Computer 2 IN) | | VGA, SVGA, XGA, WXGA, SXGA, SXGA+, UXGA /480i, 480p, 576i, 576p, 720p, 1080i RGB : 0.7Vp-p/75Ω H/V Sync : 4.0Vp-p/TTL Level Composite Sync : 4.0Vp-p/TTL Level Sync on G : 1.0Vp-p/75Ω(with Sync) Negative Polarity | |
| | | 2 Stereo Mini Jack | | Stereo L/R 0.5Vrms/22kΩ or over | |
| | 1 Computer Input (Digital) | 1 DVI-D (Computer 3 IN) | | T.M.D.S. Specification, with H.D.C.P. , Max Resolution : SXGA+/60Hz RB | |
| | | 1 Stereo Mini Jack | | Stereo L/R : 0.5Vrms/22kΩ or over | |
| | 2 Component Input | 1 D-Sub Mini 15pin (Sharing with Computer 1 IN) 1 BNC x 5 (Sharing with Computer 2 IN) | | Y : 1.0Vp-p/75Ω(with Sync) Cb, Cr (Pb, Pr) : 0.7Vp-p/75Ω Compatible signals : 480i, 480p, 720p, 1080i/60Hz, 576i, 576p, 1080i/50Hz DVD Progressive (50/60Hz) | |
| | | Audio Input is Sharing with Computer1&2 | | Specification is same as Computer 1&2 IN | |
| | 1 S-Video Input | 1 Mini DIN-4pin | | Y : 1.0Vp-p/75Ω C : 0.286Vp-p/75Ω (Burst Level of NTSC) | |
| | | 1 RCA pin x 2 | | Stereo L (MONO)/R : 0.5Vrms/22kΩ or over | |
| | 2 Video Input | 1 RCA pin 1 BNC x 1 (Sharing with Computer 2 IN) | | NTSC/NTSC4.43/PAL/PAL-N/PAL-M/PAL-60/SECAM 1.0Vp-p/75Ω | |
| | | Audio Input is Sharing with S-Video | | Specification is same as S-Video | |
| Output Terminals | 1 RGB Output | 1 D-Sub Mini 15pin | | Selected Computer1 or Computer2 Signal Input | |
| | 1 Audio Output | 1 Stereo Mini Jack | | Stereo L/R : Selected Audio Signal input from Computer1, Computer2, Computer3 (DVI-D), Video or S-Video | |
| LAN Port | RJ-45 | | | 100BASE-TX/10BASE-T | |
| Control Terminals | PC Control | 1 D-sub 9pin | | RS-232C | |
| Built-In Speaker | | | | 10W (5W+5W Stereo) | |
| Quietness (Eco Mode On / Eco Mode Off) | | | 31dB / 38dB | 30dB / 34dB | 30dB / 33dB |
| Environment | | Operational Temperatures | | 5˚C to 40˚C(Eco Mode selected automatically at 35˚C to 40˚C), 20% to 80% Humidity (Non-Condensing) | |
| | | Storage Temperatures | | -10˚C to 50˚C, 20% to 80% Humidity (Non-Condensing) | |
| Power Requirement | | | | 100 to 240V AC, 50Hz/60Hz | |
| Input Current | | 100 - 240V | 4.7 - 2.0A | 4.3 - 1.9A | |
| | | 200 - 240V | 2.3A | 2.2A | |
| Power Consumption | Eco Mode Off | 100 - 120V AC | 428W | 396W | |
| | | 200 - 240V AC | 412W | 381W | |
| | Eco Mode On | 100 - 120V AC | | 345W | |
| | | 200 - 240V AC | | 334W | |
| | Standby Mode | 100 - 120V AC | | 12W | |
| | | 200 - 240V AC | | 13W | |
| | Power- saving Mode | 100 - 120V AC | | 0.4W | |
| | | 200 - 240V AC | | 0.5W | |
| Dimensions (WxHxD) | | | | 399mm x 150.5mm x 358mm (Not Including Protrusions) | |
| Weight | | | | 7.4kg | |
| Regulations | For United States | | | UL Approved (UL 60950 - 1), Meets FCC Class B Requirements | |
| | For Canada | | | C - UL Approved (CSA 60950 - 1), Meets DOC Canada Class B Requirements | |
| | For Asia / Oceania | | | IEC60950 - 1, Meets AS/NZS CISPR.22 Class B | |
| | For Europe | | | Meets EMC Directive (EN55022 Class B, EN55024, EN61000 - 3 - 2, EN61000 - 3 - 3), Meets Low Voltage Directive (EN60950 - 1, TÜV GS Approved) | |
| | For Korea | | | KC (safety : K60950 - 1, EMC : K00022, K00024, K61000 - 3 - 2) | |
| | For China | | | GB4943, GB9254, GB17625.1 | |
| | For Russia | | | Gost R 60950 - 1, 51318.22, 51317.3.2./3.3. | |

*1 : Effective pixels are more than 99.99%.
*2 : Lamp life is defined as the average time span for the brightness of the lamp to be reduced by half, it dose not refer to the warranty period for the lamp.
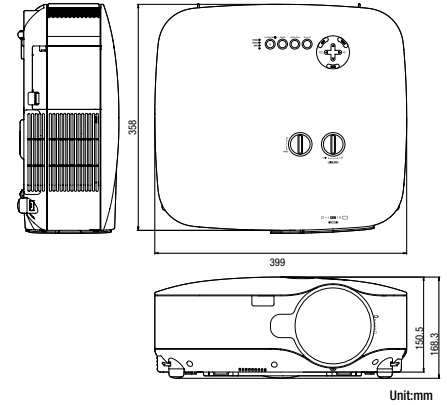*3 : This is the light output value (ANSI lumens) when the [PRESET] mode is set to [HIGH-BRIGHT]. If any other mode is selected as the [PRESET] mode, the light output value may drop slightly.
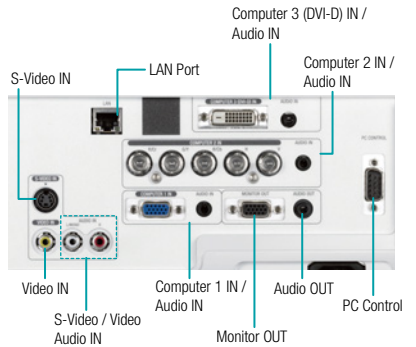*4 : Compliance with ISO21118-2005
*5 : When the lens shift is set to the center. When the lens shift is used and yet the image is not displayed in the center of the screen, the adjustable range will be increased or decreased. Image is projected in Wide (Zoom lever).

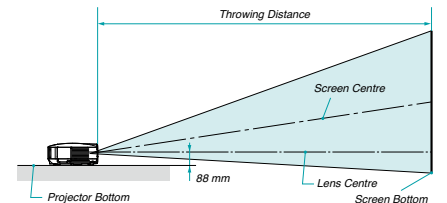All specifications are subject to change without notice.

## Dimensions



Unit:mm

## Terminals



- Computer 3 (DVI-D) IN / Audio IN
- Computer 2 IN / Audio IN
- S-Video IN
- LAN Port
- Video IN
- S-Video / Video Audio IN
- Computer 1 IN / Audio IN
- Monitor OUT
- Audio OUT
- PC Control

## Throwing Distance and Image Size



- Throwing Distance
- Screen Centre
- Projector Bottom
- 88 mm
- Lens Centre
- Screen Bottom

| Screen Size (Inch) | Throwing Distance (m) | | | | | |
|---|---|---|---|---|---|---|
| | Standard | NP01FL | NP02ZL | NP03ZL | NP04ZL | NP05ZL |
| 30"(0.61x0.46m) | 0.9-1.2 | – | 0.7-0.9 | – | – | – |
| 40"(0.81x0.61m) | 1.2-1.6 | 0.64 | 0.9-1.2 | 1.6-2.5 | – | – |
| 60"(1.22x0.91m) | 1.8-2.5 | 0.98 | 1.4-1.9 | 2.4-3.8 | 3.6-5.8 | 5.7-8.8 |
| 80"(1.63x1.22m) | 2.5-3.3 | 1.32 | 1.9-2.5 | 3.2-5.1 | 4.8-7.8 | 7.7-11.7 |
| 100"(2.03x1.52m) | 3.1-4.1 | 1.66 | 2.4-3.2 | 4.0-6.4 | 6.1-9.8 | 9.6-14.7 |
| 120"(2.44x1.83m) | 3.7-5.0 | 2.00 | 2.9-3.8 | 4.8-7.7 | 7.3-11.8 | 11.6-17.7 |
| 150"(3.05x2.29m) | 4.7-6.2 | 2.50 | 3.7-4.8 | 6.0-9.6 | 9.2-14.8 | 14.5-22.2 |
| 200"(4.06x3.05m) | 6.2-8.3 | – | 4.9-6.4 | 8.1-12.8 | 12.3-19.7 | 19.4-29.6 |
| 300"(6.10x4.57m) | 9.4-12.5 | – | 7.4-9.6 | 12.2-19.3 | 18.5-29.7 | 29.2-44.5 |
| 400"(8.13x6.10m) | 12.5-16.7 | – | 9.9-12.9 | 16.2-25.7 | 24.7-39.6 | 39.0-59.4 |
| 500"(10.16x7.62m) | 15.7-20.8 | – | 12.4-16.1 | 20.3-32.1 | 30.9-49.5 | 48.9-74.4 |

*Stated projection distances are standard values. For a stack installation, the recommended projection distances will be different.
*The values in the tables are design values and may vary.

## Remote Control



## Options



Replacement lamp NP06LP



Ceiling mount kit NP05CM

## Option Lens

| Model | Standard | NP01FL | NP02ZL | NP03ZL | NP04ZL | NP05ZL |
|---|---|---|---|---|---|---|
| Lens type | Zoom Lens | Wide Angle Fixed Lens | Zoom Lens | Zoom Lens | Zoom Lens | Zoom Lens |
| Option Lens |  |  |  |  |  |  |
| Zoom/Focus | Manual | Manual(Focus only) | Manual | Manual | Manual | Manual |
| Zoom Ratio | 1.33 | – | 1.3 | 1.58 | 1.6 | 1.52 |
| Throw Ratio | 1.5-2.0:1 | 0.8:1 | 1.2-1.5:1 | 1.9-3.1:1 | 3.0-4.8:1 | 4.7-7.2:1 |
| Screen Size | 30-500inch | 40-150inch | 30-500inch | 40-500inch | 60-500inch | 60-500inch |
| Brightness* NP3200 | 5000 ANSI lm | 3700 ANSI lm | 4000 ANSI lm | 4300 ANSI lm | 4200 ANSI lm | 4000 ANSI lm |
| Brightness* NP2200 | 4200 ANSI lm | 3200 ANSI lm | 3400 ANSI lm | 3600 ANSI lm | 3500 ANSI lm | 3400 ANSI lm |
| Brightness* NP1200 | 3700 ANSI lm | 3000 ANSI lm | 3100 ANSI lm | 3300 ANSI lm | 3200 ANSI lm | 3100 ANSI lm |
| Lens Shift Vertical | Max +0.5V | 0 | Max +0.5V | Max +0.5V | Max +0.5V | Max +0.5V |
| Lens Shift Horizontal | Max ±0.1H | 0 | Max ±0.1H | Max ±0.1H | Max ±0.1H | Max ±0.1H |
| Weight | 0.63kg | 1.1kg | 1.1kg | 1.13kg | 0.89kg | 0.92kg |

*This is the brightness value when the lamp mode is set to "Eco Mode Off" and the preset mode is "High brightness mode". If the lamp mode is switched to "Eco Mode On", the brightness will drop to about 80% in the NP3200. For the NP2200 and NP1200 to the brightness drops to about 88%. If any other mode is selected as the preset mode, brightness may drop slightly.

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