

**Specifications**

		NP610	NP510	NP410	NP405	NP310	NP305	NP510W	NP410W	NP610S	NP510WS				
LCD Panel		3LCD, 3-chip optical engine / Dichroic mirror separation-prism convergence system													
Resolution*1		0.63 inch LCD with Micro Lens Array (Aspect Ratio 4:3)			0.63 inch LCD (Aspect Ratio 4:3)			0.59 inch LCD with Micro Lens Array (Aspect Ratio 16:10)		0.63 inch LCD with Micro Lens Array (Aspect Ratio 4:3)		0.59 inch LCD with Micro Lens Array (Aspect Ratio 16:10)			
Lens		Manual Zoom / Focus, Zoom ratio 1-1.2, Throw ratio 1.5-1.8:1, F1.7-2.0, f=19.8-23.7mm													
Lamp (Eco Mode / Normal Mode)		170W / 230W AC		145W / 180W AC					170W / 230W AC						
Lamp Life*2 (Eco Mode / Normal Mode)		5000H / 4000H													
Image Size (Projection Distance)		21 to 300 inches (0.7m to 11.3m)						21 to 300 inches (0.8m to 11.9m)		60 to 110 inches (0.9m to 1.7m)		57 to 104 inches (0.9m to 1.7m)			
Colour Reproduction		16.7 million colours simultaneously, Full colour													
Light Output*3*4		Normal Mode		3500 ANSI lumens			3000 ANSI lumens		2600 ANSI lumens		2200 ANSI lumens		3000 ANSI lumens	2600 ANSI lumens	2100 ANSI lumens
		Eco Mode		Approx.70% of Normal Mode			Approx.80% of Normal Mode		Approx.70% of Normal Mode		Approx.70% of Normal Mode		Approx.70% of Normal Mode		Approx.70% of Normal Mode
Contrast Ratio (White / Black)*4		500:1		2000:1			500:1		2000:1		500:1		450:1		600:1
Maximum Resolution		UXGA (1600 x 1200) with Advanced AccuBlend													
Scan Rate		SXGA+(1400 x 1050) with Advanced AccuBlend (NP405/NP305 are not available)													
Keystone Correction		Vertical													
Input Terminals		2 Computer Input 1 D-Sub Mini 15pin (Computer 1 IN), 2 D-Sub Mini 15pin : NP405/NP305 (Computer 1&2 IN) 1 DVI-I (Computer 2 IN (Except for NP405/NP305)) 2 Stereo Mini Jack 1 Component Input (2 Component Input : NP405/NP305) S-Video Input Video Input 1 RCA pin x 2 1 RCA pin													
Output Terminals		1 D-Sub Mini 15pin (Sharing with Computer 1 IN), 2 D-Sub Mini 15pin : NP405/NP305 (Sharing with Computer 1&2 IN) Audio Input is Sharing with Computer 1 IN 1 Mini DIN-4pin 1 RCA pin x 2 1 RCA pin													
LAN Port		RJ-45													
Control Terminals		PC Control 1 D-sub 9pin													
Built-in Speaker		7W Monaural													
Quietness (Eco Mode / Normal Mode)		29dB / 35dB													
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 (G version : 200 to 240V AC, 50Hz/60Hz)													
Input Current		100 - 130V 3.8 / 1.5A		200 - 240V 1.8A			3.2 / 1.4A		1.5A		3.8 / 1.5A		1.8A		
Power Consumption		Normal Mode 100 - 130V 312W		200 - 240V 294W			251W		239W		312W		294W		
		Eco Mode 100 - 130V 237W		200 - 240V 228W			203W		195W		237W		228W		
		Standby Mode 100 - 130V 10W		200 - 240V 10W			8W		10W		8W		10W		
		Power-saving Mode 100 - 130V 0.6W		200 - 240V 0.7W			0.6W		0.7W		0.6W		0.7W		
Heat Dissipation		100 - 130V 1065BTU (Max)		200 - 240V 1003BTU (Max)			857BTU (Max)		816BTU (Max)		1065BTU (Max)		1003BTU (Max)		
Dimensions (WxHxD) (Not Including Protrusions)		308mm x 93.5mm x 262mm													
Weight		2.99kg		3.0kg			2.97kg		2.97kg		2.99kg		3.3kg		
Accessories		Lens cap, Remote control, Batteries(AAA x 2), VGA signal cable(1.8m), Power cable, Soft Case(Except for NP405/NP305/NP610S/NP510WS), DVI to VGA adapter(Except for NP405/NP305), User's manual(CD-ROM), Quick setup guide													
Regulations		UL/C-UL Approved (UL 60950-1, CSA 60950-1) Meets FCC Class B requirements Meets AS/NZS CISPR 22 Class B Meets EMC Directive (EN55022, EN55024, EN61000-3-2, EN61000-3-3) Meets Low Voltage Directive (EN60950-1, TÜV GS Approved)													

\*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 does 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 : What is HDCP/HDCP technology?

HDCP is an acronym for High-bandwidth Digital Content Protection. High bandwidth Digital Content Protection (HDCP) is a system for preventing illegal copying of video data sent over a Digital Visual Interface (DVI). If you are unable to view material via the DVI input, this does not necessarily mean the projector is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).

All specifications are subject to change without notice.

**Remote Control**

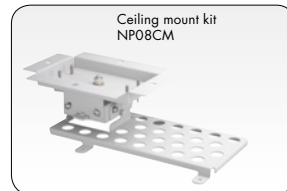
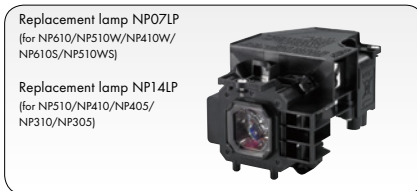


**Soft Case**

(basic accessory)  
(except for NP405/NP305/NP610S/NP510WS)



**Options**



**Portable Projector**

**NP610/NP510/NP410/NP405/  
 NP310/NP305/NP510W/NP410W  
 NP610S/NP510WS**

*Projector series considering ecology, with user-friendly operability employing full functionality  
 Appropriate for business and educational occasions. Product lineups are available with wide  
 aspect and ultra short focus projection models. Select the optimum model for your purpose of use.*



NP610/NP510/NP410/NP405/NP310/NP305/NP510W/NP410W



NP610S/NP510WS

**From Digital Cinema to Mobile Convenience - NEC Projector is the Best Solution**

## Ecology and Operability—leading features of the projector



NP610/NP510/NP410/NP405/NP310/NP305/NP510W/NP410W

NP610S/NP510WS

<b>NP610</b> XGA 3500 ANSI lumens 500:1 2.99 Kg	<b>NP510</b> XGA 3000 ANSI lumens 500:1 2.99 Kg	<b>NP410</b> XGA 2600 ANSI lumens 2000:1 3.0 Kg	<b>NP405</b> XGA 2600 ANSI lumens 500:1 2.97 Kg	<b>NP610S</b> XGA 2600 ANSI lumens 600:1 3.3 Kg
<b>NP310</b> XGA 2200 ANSI lumens 2000:1 3.0 Kg	<b>NP305</b> XGA 2200 ANSI lumens 500:1 2.97 Kg	<b>NP510W</b> WXGA 3000 ANSI lumens 500:1 2.99 Kg	<b>NP410W</b> WXGA 2600 ANSI lumens 450:1 2.99 Kg	<b>NP510WS</b> WXGA 2100 ANSI lumens 600:1 3.3 Kg

## User-friendly operability and superior flexibility in installation and projection

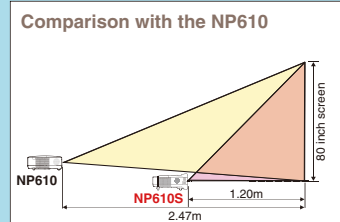
### Quick start & Quick power off

Your projector is setup and ready to display your presentation about 3 seconds after powering on, with the NEC 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. 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.

\*NP510/NP410/NP405/NP305. The other models are about 4 seconds.

### Ultra short focus projection (NP610S/NP510WS)

The fixed short-focus lens enables ultra short distance projection. For an 80-inch screen, it is possible to project from a distance of 1.20 m for the NP610S and 1.28 m for the NP510WS respectively, so that the projector can be set on a desk in the classroom or used in a meeting corner.



\*Throwing distance of NP510WS for an 80-inch screen is 1.28m, compared with 2.62m of NP510W.

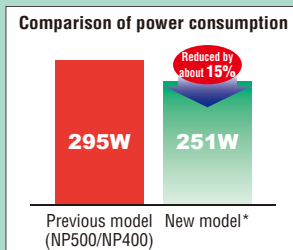


## The ECO function saves power and reduces CO2 emissions

### 15% energy saving and extends lamp life\*

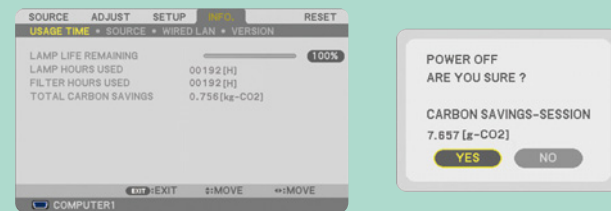
Lamp life in Eco Mode has been extended from 4000 hours to 5000 hours (Normal mode: 4000 hours). Furthermore, power consumption has been reduced by about 15%. Power consumption in standby mode is 0.6 W (100-130V AC)/0.7 W (200-240V AC). These enhancements help to dramatically reduce the TCO (total cost of ownership).

\*NP510/NP410/NP405/NP310/NP305



### Carbon meter for visualizing ecology

The projector employs the Carbon Meter indicating the reduced amount of CO2 emissions in Eco Mode. Visually confirm the numerical value indicating the reduction in CO2 emissions in comparison with Normal Mode operation.



## Major specifications

	Standard Model					Wide Panel Model		Short-Throw Model	Wide Panel & Short-Throw Model	
	NP610	NP510	NP410	NP405	NP310	NP305	NP510W	NP410W	NP610S	NP510WS
Resolution (Native Aspect Ratio)	XGA (4:3)					WXGA (16:10)		XGA (4:3)	WXGA (16:10)	
Brightness (ANSI lm)	3500	3000	2600		2200		3000	2600		2100
Zoom	Manual Zoom							Digital Zoom		
Screen Size (Throwing Distance)	21"-300" (0.7-11.3m)					21"-300" (0.8-11.9m)		60"-110" (0.9-1.7m)	57"-104" (0.9-1.7m)	
Contrast Ratio	500:1	2000:1	500:1	2000:1	500:1		450:1	600:1		
Computer Input	Analog with DVI-I		Analog	Analog with DVI-I	Analog	Analog with DVI-I				
Wired LAN	RJ-45		-	RJ-45	-	RJ-45				

## Terminals

NP610/NP510/NP410/NP310/NP510W/NP410W/NP610S/NP510WS

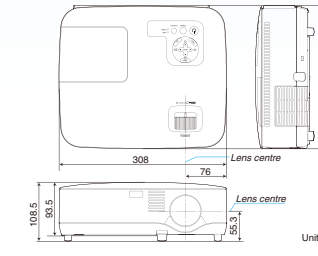


NP405/NP305

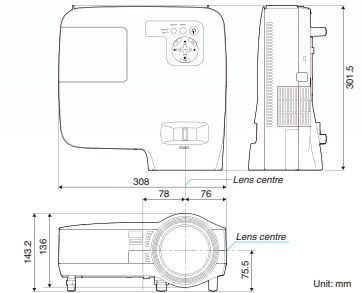


## Dimensions

NP610/NP510/NP410/NP405/NP310/NP305/NP510W/NP410W



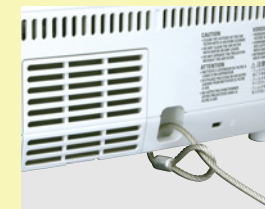
NP610S/NP510WS



## Variety of functions for user-friendly operation on different occasions

### Security function

By using passwords, the projector cannot be used by unauthorized persons. It is impossible to project an image unless the proper password is entered. Since the main unit has a security chain opening, unauthorized removal of the projector is prevented by inserting the security cable or wire commercially available into the opening.



### Built-in 7W speaker for integrated audio solutions

### Multiple input/output terminals

### Auto Vertical Keystone Correction

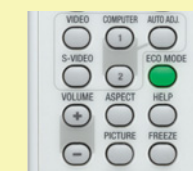
### Wall Colour Correction for vivid images even without a screen

### Wired LAN Connectivity (NP610/NP510/NP410/NP310/NP510W/NP410W/NP610S/NP510WS)

### WXGA panel for wide-format images (NP510W/NP410W/NP510WS)

### High Contrast Ratio 2000:1 (NP410/NP310)

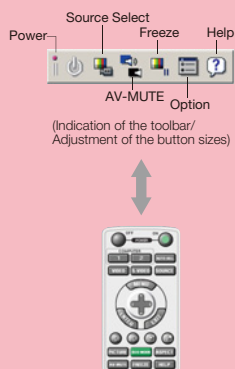
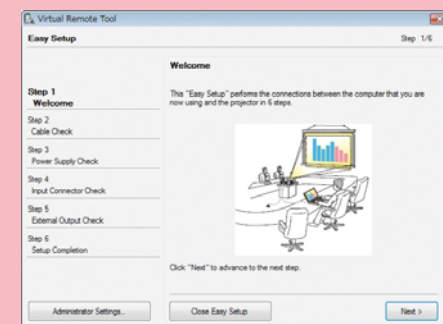
### One-touch operation switches the remote controller into Eco mode



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

### Virtual Remote Function

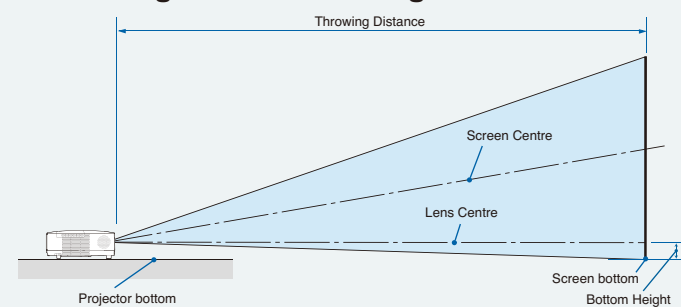
The included Virtual Remote Tool utility software allows to operate the power on/off or switch inputs on the projector from your PC by using the supplied VGA signal cable. The Easy Setup function is employed in addition to the ordinary Virtual Remote Tool. With this function, projector can be set up simply by following the instructions shown on the screen for easy setup.



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



## Throwing Distance and Image Size



NP610/NP510/NP410/NP405/NP310/NP305 (Aspect Ratio 4:3)

Screen Size (inch)	Throwing distance(m)	Bottom Height(cm)
21 (0.43x0.32)	-	5.0
25 (0.51x0.38)	0.75	6.0
30 (0.61x0.46)	0.90	7.1
40 (0.81x0.61)	1.22	9.5
60 (1.22x0.91)	1.84	14.3
80 (1.63x1.22)	2.47	19.1
100 (2.03x1.52)	3.10	23.8
120 (2.44x1.83)	3.73	28.6
150 (3.05x2.29)	4.67	35.7
180 (3.66x2.74)	5.61	42.9
200 (4.06x3.05)	6.24	47.6
240 (4.88x3.66)	7.50	57.2
300 (6.10x4.57)	9.38	71.4

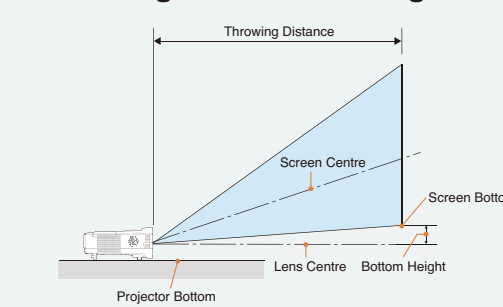
The values in the tables are design values and may vary.

NP510W/NP410W (Aspect Ratio 16:10)

Screen Size (inch)	Throwing distance(m)	Bottom Height(cm)
21 (0.45x0.28)	-	2.5
25 (0.54x0.34)	0.79	2.9
30 (0.65x0.40)	0.96	3.5
40 (0.86x0.54)	1.29	4.7
60 (1.29x0.81)	1.96	7.1
80 (1.72x1.08)	2.62	9.4
100 (2.15x1.35)	3.29	11.8
120 (2.59x1.62)	3.95	14.1
150 (3.23x2.02)	4.95	17.7
180 (3.88x2.42)	6.00	21.2
200 (4.31x2.69)	6.62	23.6
240 (5.17x3.23)	7.95	28.3
300 (6.46x4.04)	9.94	35.3

The values in the tables are design values and may vary.

## Throwing Distance and Image Size



NP610S (Aspect Ratio 4:3)

Screen Size (inch)	Throwing distance(m)	Bottom Height(cm)
60 (1.22x0.91m)	0.90	4.8
64 (1.30x0.97m)	0.96	5.1
70 (1.42x1.06m)	1.05	5.6
77 (1.57x1.17m)	1.16	6.1
80 (1.63x1.22m)	1.20	6.4
90 (1.83x1.37m)	1.36	7.1
100 (2.03x1.52m)	1.51	7.9
110 (2.23x1.67m)	1.67	8.7

The values in the tables are design values and may vary.

NP510WS (Aspect Ratio 16:10)

Screen Size (inch)	Throwing distance(m)	Bottom Height(cm)
57 (1.23x0.76m)	0.90	12.5
60 (1.29x0.81m)	0.95	13.1
70 (1.51x0.94m)	1.11	15.3
80 (1.72x1.08m)	1.28	17.5
87 (1.87x1.17m)	1.39	19.0
90 (1.94x1.21m)	1.44	19.7
100 (2.15x1.35m)	1.60	21.9
104 (2.24x1.40m)	1.67	22.8

The values in the tables are design values and may vary.