

Empowered by Innovation

NEC

NEC DISPLAY SOLUTIONS

HIGH END INSTALLATION PROJECTORS



PH SERIES | PX SERIES | PA SERIES



A Tradition of Performance

NEC HLO INSTALLATION PROJECTORS



Built on a Tradition of Performance

PERFECT INNOVATIONS FOR THE TOUGHEST INSTALLATIONS

3 NEW RANGES, FROM THE LEADING NAME IN DIGITAL CINEMA

Three new projection series by NEC provide comprehensive solutions for all applications in the High Light Output Sector combining the knowledge that has helped make NEC the leading name in Digital Cinema Projection and the peace of mind that you can expect the highest levels of performance and quality that you can expect from NEC Reference products.

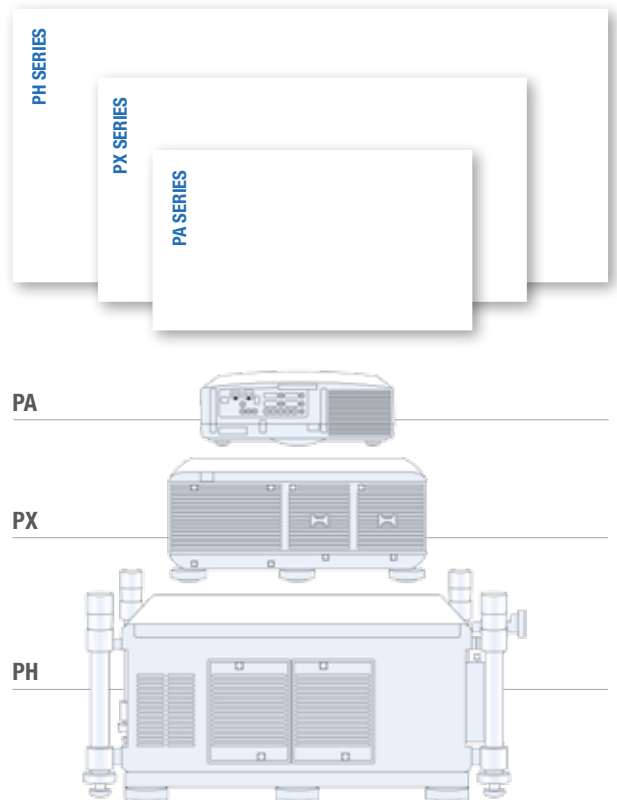
Whether its affordable and flexible HLO projection to dedicated 'virtual cinema' quality 3 Chip DLP projection, there is a projector in the NEC portfolio that will meet every challenge and since the projectors are all based on an advanced design concept mirrored from recent advances in our NC Digital Cinema ranges expect a unique level of functionality, connectivity and quality.

3 LCD, DLP OR 3 CHIP DLP

The projector is equipped with a lens shift that allows you to adjust the projected image horizontally or vertically in best optical quality. You can easily adjust the position of the projection just by turning the lens shift dials, without having to move the projector unit itself. Furthermore, it is also equipped with a centre lens design for easy alignment.

CONTENTS	DESCRIPTION	PAGE
INTRODUCTION	NEC HLO Projectors Positioning	2
IN-DEPTH ANALYSIS	Connectivity	4
	Network Control	5
	Image Enhancement	5
	Edge-Blending and Stacking	5
	Flexibility Options	5
	Total Cost of Ownership Reductions	5
	PA SERIES	PA Series User Benefits
PX SERIES	PX Series User Benefits	8
PH SERIES	PH Series User Benefits	10
NEC OFFICES		12

MODELS FOR ALL SCREEN SIZES






NEC REFERENCE PRODUCTS

The NEC REFERENCE designation is awarded to our products and solutions which through their performance and benefits we consider to be the market benchmark for our customers. The logo is a tangible reminder of our high quality, performance-driven Japanese heritage, our focus on award-winning design flair and our passion for state of the art leadership in innovation and meeting the demands of our customers in the most challenging applications.

Our Reference Displays and Projectors are trusted across the world in Airports, Hospitals, Arenas and Cinemas, Corporates and Institutions, where performance is critical.



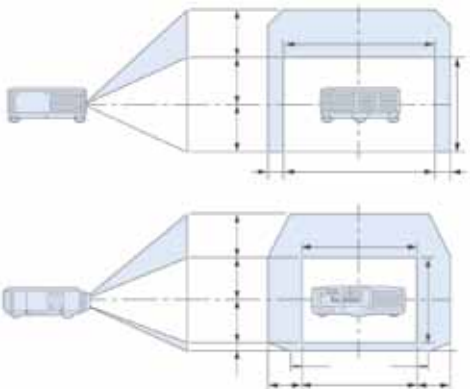
<h2>PA SERIES</h2>  <p>Ideal for Corporates and Higher Education Applications</p> <p>PA500X PA550W PA600X PA500U</p>	<h2>PX SERIES</h2>  <p>Ideal for Signage, Museums, Corporates, Control Rooms, Blue Light, Simulation and Rental</p> <p>PX700W PX750U PX800X</p>	<h2>PH SERIES</h2>  <p>Ideal for Rental and Staging, University, CAD Design and Simulation</p> <p>PH1000U</p>
<p>FEATURING</p> <ul style="list-style-type: none"> 3 x LCD HIGH COLOUR QUALITY XGA, WXGA OR WUXGA 5000 TO 6000 ANSI LUMEN BRIGHT FLEXIBLE INSTALLATION WIDE SHIFT AND ZOOM RANGE PROFESSIONAL NETWORK FEATURES 	<p>FEATURING</p> <ul style="list-style-type: none"> 1 x DLP PROFESSIONAL AV QUALITY 10 BIT HQV PICTURE PROCESSING MOTORISED LENS ADDITIONAL 6 SEGMENT COLOUR WHEEL OPS EXPANSION LENS MEMORY PROFESSIONAL NETWORK FEATURES XGA, WXGA OR WUXGA 7000 TO 8000 ANSI LUMEN HIGH BRIGHT 	<p>FEATURING</p> <ul style="list-style-type: none"> OUTSTANDING 3 CHIP DLP QUALITY 10 BIT COLOUR PROCESSING HOLLYWOOD QUALITY INTEGRATED RIGGING AND STACKING FRAME OPS EXPANSION LENS MEMORY WUXGA HIGH RESOLUTION 11000 ANSI LUMEN SUPER HIGH BRIGHT
<p align="center">ADVANCED CONNECTIVITY FOR ALL HLO MODELS</p> <p align="center">DISPLAYPORT, HDMI, S-VIDEO, PC CONTROL, RCA IN, 2 X USB A, USB B, LAN, 3 X RGB IN, 1 X RGB OUT, REMOTE IN, OPTIONAL W-LAN</p> <p align="center">PX MODELS INCLUDE AN EXPANSION SLOT PH MODEL INCLUDES AN EXPANSION SLOT</p>		
<p align="center">IMAGE FEATURES AND FLEXIBLE INSTALLATION FOR ALL HLO MODELS</p> <p align="center">DIGITAL 3D REFORM™, 3D STACKING, AMX BEACON, CRESTRON ROOMVIEW, DICOM SIMULATION, DIRECT POWER-OFF FUNCTION, EDGE BLENDING FUNCTION (03.2012), FREE TILT, GEOMETRIC CORRECTION, HELP FUNCTION, HOLLYWOOD QUALITY VIDEO PROCESSING FOR BEST IMAGE QUALITY</p> <p align="center">KEYSTONE CORRECTION, LENS SHIFT, MULTI-SCREEN COMPENSATION MODE, OSD WITH 27 LANGUAGES, OPTIONAL USER LOGO, PJ LINK</p> <p align="center">PASSWORD SECURITY SYSTEM, STACKING FUNCTION, TIMER-FUNCTION, USB VIEWER, VIRTUAL REMOTE FOR DIRECT PC CONTROL, MANUAL WALL COLOUR CORRECTION, STACKING, OPTIONAL LENSES, LONGER LAMP LIFE</p>		
<p align="center">COMPREHENSIVE NETWORK CONTROL FOR ALL HLO MODELS</p> <p align="center">WINDOWS MEDIA CONNECT, MEDIA DRIVE FUNCTION, REMOTE DESKTOP, NETWORK PROJECTOR VIA WINDOWS 7 VERY FLEXIBLE CONTROL</p> <p align="center">VIA FREE OF CHARGE NEC PC CONTROL SOFTWARE, IOS APPLICATIONS</p>		

NEC HLO PROFESSIONAL FEATURES

Flexible Installation

LENS SHIFT

PA and PX Series Projectors feature centre optic design for easy installation with wide horizontal and vertical lens shift for greater installation flexibility. The PX and PH models also include motorised lens shift.



PX SERIES
20% HORIZONTAL
50% VERTICAL

PA SERIES
60% HORIZONTAL
60% VERTICAL

LENS MEMORY

The lens memory function on the PX and PH Models adjusts the lens position automatically and individually for focus, position and zoom, according to the input signal and previous settings.

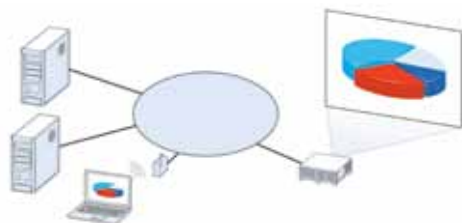
Network Management Features

EASY NETWORK CONNECTION

Aside from conventional LAN connection, the WLAN Access Point Function of NEC HLO Projectors and WPS (Wi-Fi Protected Setup) function delivers easy versatile WLAN Connection.

POWERFUL NETWORK CONTROL

NEC HLO Projectors include some powerful complimentary software utilities. PC Control Utility allows the monitoring and control of all projectors in a network, http browser control means that you can control a single projector from a web browser and the NEC Virtual Remote Utility enables the user to fully control the projector from their computer with a fully functional on-screen remote control.



WINDOWS NETWORK DRIVE

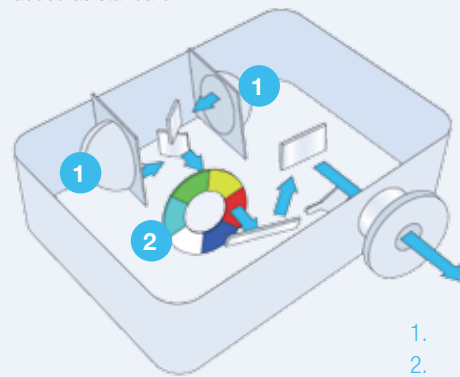
The Projector presents supported files via the network from a shared windows network folder without a PC connection.

Longer Operation, Lower Service

HEAVY DUTY READY

All NEC HLO Projectors are tested to perform well in even the most challenging environments and include innovations to make servicing easier and less frequent.

The PX and PH Models include a 'Dual Lamp' design so if your lamp should come to the end of its life the projector can still operate while you order a replacement. The 6 segment colour wheel is also conveniently placed for easy exchange. A second high colour wheel is added as standard



1. DUAL LAMPS
2. COLOUR WHEEL

NETWORK IMAGE TRANSFER

The Network Projector Function includes support for direct image transfer from Windows 7 or Windows Vista. The Image Express Utility has a Net meeting function, image transfer, file download in the background, pointer function and picture transfer to projectors and participant PCs, for group viewing applications.

In addition the projectors support a remote Desktop function, Network Drives and Media Connect so the projector can substitute as a display device for Multimedia files stored on a media server.



IMAGE EXPRESS UTILITY

1 Presenter (A) can share his content with up to 25 attendants (B). Attendants see and save content on their screens.

REMOTE DESKTOP

Easy operation of any PC in the same network (B) from the projector (A) via the projector's remote desktop function.

Image Enhancement Features

GEOMETRIC CORRECTION

AUTOMATIC ADVANCED IMAGE CORRECTION

Advanced and finely tuned 'Geometric Control' functions allow flexible and easy installation even the most irregular screen situations and applications.

While 3D Reform corrects horizontal and vertical keystone distortion NEC HLO projectors can make many more complicated adjustments that compensate for the angular, three dimensional or irregularity of the projected surface, e.g. for simulation. Consistent projected images are achieved, even in extremely irregular screen situations.



SPHERICAL SURFACE



CORNER SHAPES



HORIZONTAL ROUND SHAPES



VERTICAL ROUND SHAPES

Professional Installation Features

OPS EXPANSION SLOT

PX and PH Series are the Worldwide first projectors supporting OPS standard modules that allow added connectivity and upgradability now and in the future.

A specialised Slot-In PC can make your projector its own digital signage content player or and OPS board with HD-SDI connectivity is the ideal option for broadcasting applications.



NEW OPS MODULES

Allow instant upgradability and can be exchanged between Projectors and NEC's latest Large Format Displays.

EDGE BLENDING

This utility provides an easy way to create larger pictures, specifically useful in larger auditorium applications with the PA, PX or PH Series. Any content for design applications or combining several pictures to one picture of outstanding quality.

PROJECTOR STACKING

NEC's complimentary stacking utility means that up to 4 HLO projectors can be combined to create an outstanding output brightness as high as 44,000 ANSI lumen. The stacking tool is easy to setup with automated features that automatically align the individual projector images to create a perfect overlay.



STACKING



EDGE BLENDING



PA FLEXIBILITY AND PERFORMANCE

5 Optional Lenses, Wide Lens Shift, Easy Adjustment

FLEXIBLE LENS SELECTION

The projector supports five types of optional lenses which are adapted to a variety of installation locations and projection methods, including conference rooms, auditoriums, and exhibition halls. The NP13ZL is compatible with 2x zoom, which allows it to handle an even broader range of projection distances. The lenses can be easily changed by using the lens release button.

EASY POSITIONING LENS SHIFT FUNCTION

The projector is equipped with a lens shift that allows you to adjust the projected image horizontally or vertically. You can easily adjust the position of the projection just by turning the lens shift dials, without having to move the projector unit itself. Furthermore, it is also equipped with a centre lens design for easy alignment.



Choose from Diverse Image Sources

FLEXIBLE CONTENT WITH UNCOMPROMISING QUALITY STANDARDS

With their advanced connectivity and High Resolution HQV processing, PA Series projectors can deliver high quality images, suitable for a wide range of content and driven by a comprehensive range of sources.

DICOM SIMULATION MODE

The projector can display medical images for non diagnostic purposes saved in the DICOM format and can handle presentations such as academic conferences.

WIRED AND OPTIONAL WIRELESS LAN WITH NETWORK CONTROL

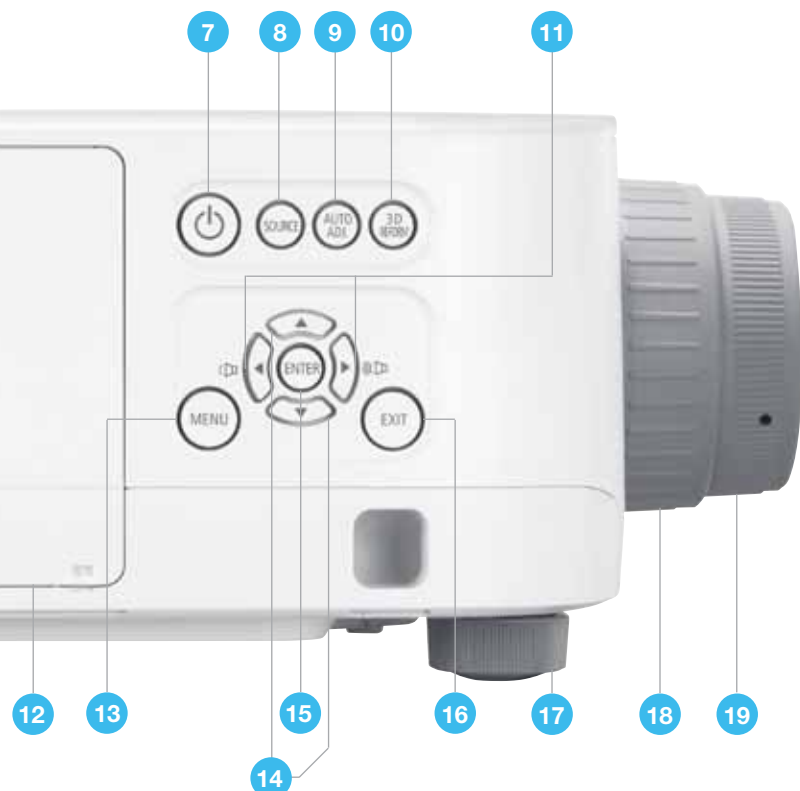
The projector supports Microsoft Windows Media Connect, which transmits still and moving images (streaming) to projectors connected to the network (does not support segment overrun). It also allows you to display certain files that are in the shared folder of computers connected to the network.

PA Series projectors support WPS and can be synchronized with the access point and can be connected automatically via the WLAN infrastructure. An access point connection also improves the security of wireless LAN connections. PA Series are compatible with the Windows Network Projector standard.

CRESTRON ROOMVIEW COMPATIBLE

The projector supports Crestron RoomView®, allowing multiple devices connected to the network to be managed and controlled from Crestron as well as AMX Beacan and PJ Link control.

INTUITIVE CONTROLS



The intuitively placed user controls ensure that all the important functions of your projector is instantly adjustable at the touch of a finger.

BUTTON DESIGNATIONS

1. 10W SPEAKER
2. VERTICAL LENS SHIFT
3. EASY LENS RELEASE
4. CENTRALLY MOUNTED LENS
5. HORIZONTAL LENS SHIFT
6. INFRARED RECEIVER
7. POWER ON / OFF
8. SOURCE SELECT
9. AUTOMATIC ADJUSTMENT
10. 3D REFORM
11. SPEAKER VOLUME ADJUST
12. LAMP ACCESS
13. MENU SELECT
14. SELECT UP / DOWN BUTTONS
15. SELECT BUTTON
16. EXIT BUTTON
17. ADJUSTABLE HEIGHT FEET
18. MANUAL ZOOM
19. MANUAL FOCUS

ADVANCED CONNECTIVITY

KEY CONNECTOR DESIGNATIONS

20. LAN CONNECTOR

An RJ45 port allows connection to a local area network or control of the projector via ethernet cable. In addition pictures can be transmitted via LAN.

21. HDMI

HDMI is the high definition connection of the future, it supports, on a single cable, any un-compressed TV or PC video format, including standard, enhanced, and high-definition video; up to 8 channels of compressed or un-compressed digital.

22. DISPLAYPORT

DisplayPort is ideal for High Definition signals and lets you connect the projector up to 20 metres away.

23. USB VIEWER / WIFI SOCKET

Add the optional NEC USB WiFi Connector that supports IEEE.802.11n high speed WLAN.



24. COMPONENT INPUTS



NEAR SILENT OPERATION

An operating noise level of only 31 dB is ideal for class and meeting rooms

PA SERIES OPTIONS AND ACCESSORIES

NP21LP	Replacement Lamp	All Models
NP11FL	Short Throw Lens	0.8 : 1, 40 - 150" Screens
NP12ZL	Zoom Lens	1.19 - 1.56 : 1, 30 - 500" Screens
NP13ZL	Zoom Lens	1.50 - 3.02 : 1, 40 - 500" Screens
NP14ZL	Zoom Lens	2.97 - 4.79 : 1, 60 - 500" Screens
NP15ZL	Zoom Lens	4.70 - 7.20 : 1, 60 - 500" Screens
NP01LM2 NP02LM3	USB Wireless LAN Unit	EMEA (Except Russia) Russia
NP05UCM	Ceiling Mount Kit	All Models
NP02CV	Cable Cover	All Models

MODEL VARIATIONS

	PA500U	PA550W	PA600X	PA500X
Display	3 x 1.93cm (0.76") LCD Panel - MLA	3 x 1.9cm (0.75") LCD Panel - MLA	3 x 2cm (0.79") LCD Panel - MLA	3 x 2cm (0.79") LCD Panel - MLA
Native Resolution	1920 x 1200 (WUXGA)	1280 x 800 (WXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)
Brightness	5000 ANSI Lumen	5500 ANSI Lumen	6000 ANSI Lumen	5000 ANSI Lumen
Contrast Ratio	2000:1			
Lamp	330W UHP AC, 264W Eco Mode			
Lamp Life [hrs]	3000 (4000 Eco Mode)			
Lens	5 Optional Bayonet Lenses			
Projection Factor	Determined by the Lens Selection, Standard Option NP13ZL at 1.5-3.02:1			
Projection Distance [m]	0.70 (NP11FL) - 7.2 (NP15ZL)	0.50 (NP11FL) - 7.2 (NP15ZL)	0.50 (NP11FL) - 7.2 (NP15ZL)	0.50 (NP11FL) - 7.2 (NP15ZL)
Screens Size (diagonal) [cm]	Minimum: 76 / 30"; Maximum 1270 / 500"			
Zoom	Manual (x2 with Optional Lens NP13ZL)			
Focus Adjustment	Manual			
Supported Resolutions	480p/60; 576p/50; 720p/60; 720p/50; 1080p/60; 1080p/50; 480i/50; 576i/50; 1080i/60; 1080i/50; 1920x1200 (WUXGA) - 640x480 (VGA)			
Frequency	Horizontal: 15 - 108 kHz (RGB: 24 kHz - 108 kHz); V: 48 - 120 Hz			
Video Signal	PAL; PAL60; NTSC; SECAM; NTSC 4.43; PAL-N; PAL-M			
Power Supply	100-240V AC; 50-60Hz			
Power Consumption [W]	455; 6 Network Standby; 0.2 Standby	443; 6 Network Standby; 0.2 Standby	443; 6 Network Standby; 0.2 Standby	443; 6 Network Standby; 0.2 Standby
Dimensions (W x H x D) [mm]	499 x 144 x 359 (Without Lens and Feet)			
Weight [kg]	7.8	7.7	7.7	7.7
Fan Noise [db (A)]	32 / 38 (Eco / Normal)	31 / 38 (Eco / Normal)	31 / 38 (Eco / Normal)	31 / 38 (Eco / Normal)
Safety and Ergonomics	CE; TÜV GS; ErP; RoHS			
Speakers	1 x 10 (Mono)			
Projector Warranty	3 Years Pan-European			
Lamp Warranty	6 months, maximum 1000 hours			
Shipping Content	Projector; Remote Control; Mini D-SUB Signal Cable; Power Cord; Users Manual on CD-ROM; Quick Setup Guide; Network Setup Guide			



PX EXTREME HIGH BRIGHTNESS HIGH QUALITY

AV DLP Chip Quality, 6 Segment Colour Wheel, Dual Lamp Technology

GREAT INSTALLATION PERFORMANCE

The PX Series feature high brightness projectors with resolution up to WUXGA. Vertical and horizontal motorised lens shift, edge blending and stacking, together with Lens Memory and Lens shutter make these projectors some of the most richly featured models on the market.

TRUSTED OPERATION WITH DUAL LAMP TECHNOLOGY

Manufactured to the highest quality standards associated with our Digital Cinema ranges, the PX Series are ready for the toughest installation challenges and the dual lamp system means that you remain up and running even when a lamp fails. Filter life is also 10,000 Hours, and a second easily exchangeable colour wheel is included for high colour applications.



Centrally Mounted Lens

Performance Without Compromise

POWERFUL BUT FLEXIBLE FEATURES FOR OPTIMUM USABILITY

PX projectors operate at 7000, 7500 and 8000 ANSI lumen and are loaded with features that make for an outstanding installation whilst it's rugged construction means it is ideally suited to signage, museum, higher education, conference hall, rental and other heavy duty applications.

Choose from 6 new or use lenses from our NP4100 series of projectors and enjoy maximum flexibility to make the most appropriate use of the installation venue.

RICH IN INSTALLATION BENEFITS

PX benefits include, lens memory function, a lens centred design, up to 2100:1 contrast ratio, 10 bit signal processing for optimum colour performance and multi-screen colour correction. A wide range of network multimedia functions, geometric correction options and stacking and edge-blending solutions, with picture-in-picture and side by side picture function also make the PX range convenient to operate, control and re-install throughout your establishment.

STV2 OPTION SLOT UPGRADABILITY

Building on the success of the NEC 'Option Slot' technology, the PX range have an integrated option slot that can be used to instantly upgrade the power of your projector by adding a specialised HD-SDI or Slot-in PC OPS Option board.

OPS products can also be exchanged with other NEC products that have an option slot including PH Series projectors and many of our new large format displays.

INTUITIVE CONTROLS



The intuitively placed user controls ensure that all the important functions of your projector is instantly adjustable at the touch of a finger.

BUTTON DESIGNATIONS

1. INFRA-RED RECEIVER
2. EASY LENS RELEASE
3. CENTRAL BAYONET LENS MOUNT
4. POWER ON / OFF
5. SOURCE SELECT
6. AUTOMATIC ADJUSTMENT
7. 3D REFORM
8. ORIENTATION
9. SHUTTER/ HOME POSITION
10. FOCUS ADJUST
11. LENS SHIFT ADJUST
12. ZOOM ADJUST
13. KENSINGTON LOCK
14. MENU BUTTON
15. MENU NAVIGATION BUTTONS
16. EXIT MENU BUTTON

ADVANCED CONNECTIVITY

KEY CONNECTOR DESIGNATIONS

17. LAN CONNECTOR

An RJ45 port allows connection to a local area network or control of the projector via ethernet cable. In addition pictures can be transmitted via LAN.

18. HDMI

HDMI is the high definition connection of the future, it supports, on a single cable, any un-compressed TV or PC video format, including standard, enhanced, and high-definition video; up to 8 channels of compressed or un-compressed digital.

19. DISPLAYPORT

DisplayPort is ideal for High Definition signals and lets you connect the projector up to 20 metres away.

20. USB VIEWER / WIFI SOCKET

Add the optional NEC USB WiFi Connector that supports IEEE.802.11n high speed WLAN.

21. OPS EXPANSION BOARD SLOT

Integrated slot for OPS Stv2 Expansion Board



22. COMPONENT INPUTS



Full Connectivity including an Expansion Slot

PX SERIES LENS OPTIONS

NP22LP	Replacement Lamp	All Models
NP16FL	0.74 Throw Ratio	All Models
NP17ZL	1.4 Zoom Ratio, 1.25 - 1.79 Throw ratio, Lens Memory	All Models
NP18ZL	1.3 Zoom Ratio, 1.73 - 2.27 Throw ratio, Lens Memory	All Models
NP19ZL	1.7 Zoom Ratio, 2.22 - 3.67 Throw ratio, Lens Memory	All Models
NP20ZL	1.5 Zoom Ratio, 3.6 - 5.4 Throw ratio, Lens Memory	All Models
NP21ZL	1.6 Zoom Ratio, 5.3 - 8.3 Throw ratio, Lens Memory	All Models
NP06FL	Existing NEC Lens, 0.77 Throw Ratio	PX800X, PX700W Only
NP07ZL - NP10ZL	Existing NEC Lens, Various	PX800X, PX700W Only
NP01LM2 NP02LM3	USB Wireless LAN Unit	EMEA (Except Russia) Russia
OPS Celeron 1.86	Slot-in PC STv2	All Models
OPS i5 2.4	Slot-in PC STv2	All Models
OPS Atom 1.6	Slot-in PC STv2	All Models
OPS HD-SDI	HD-SDI STv2/ 1.5G	All Models

MODEL VARIATIONS

	PX800X	PX700W	PX750U
Display	1.78 cm (0.7") DMD Chip - DLP™	1.65 cm (0.65") DMD Chip - DLP™	1.7 cm (0.67") DMD Chip - DLP™
Native Resolution	1024 x 768 (XGA)	1280 x 800 (WXGA)	1920 x 1200 (WUXGA)
Brightness	8000 ANSI Lumen	7000 ANSI Lumen	7500 ANSI Lumen
Contrast Ratio	Up to 2100:1 with DynamicBlack™		
Lamp	2-Lamp System (2 x 400 W AC), 2 x 320 Eco Mode		
Lamp Life [hrs]	2000 (2500 Eco Mode)		
Lens	6 Optional Bayonet Lenses		
Projection Factor	Determined by the Lens Selection (0.74:1 and 1.25-8.3:1)		
Projection Distance [m]	0.8 (NP16FL) - 54 (NP21ZL)		
Screens Size (diagonal) [cm]	Minimum: 127 / 50" ; Maximum: 762 / 300" ; (best performance range)		
Lens Adjustment	Motorised		
Supported Resolutions	1920x1200 (WUXGA) - 640x480 (VGA); 1080i/60; 1080p/60; 1080i/50; 1080p/50; 720p/60; 720p/50; 576i/50; 576p/50; 480p/60; 480i/50		
Frequency	Horizontal: 15 - 108 kHz (RGB: 24 kHz - 108 kHz); V: 48 - 120 Hz		
Power Supply	100-240V AC; 50-60Hz		
Power Consumption [W]	927, 18 Standby, 0.4 Power Saving	931, 18 Standby , 0.4 Power Saving	958, 23 Standby, 0.4 Power Saving
Dimensions (W x H x D) [mm]	504 x 192 x 516		
Weight [kg]	19.7		
Fan Noise [db (A)]	32 / 38 (Eco / Normal)	31 / 38 (Eco / Normal)	31 / 38 (Eco / Normal)
Safety and Ergonomics	CE; TÜV GS; ErP; RoHS		
Projector Warranty	3 Years Pan-European		
Lamp Warranty	6 months, maximum 1000 hours		



PH HOLLYWOOD QUALITY HLO PROJECTION

3 Chip DLP Cinema Quality, Super High Brightness for Larger Venues

The PH1000U, is a high end 3-Chip installation projector is ideal for installations that demand the highest levels of heavy duty usage and unique picture quality in highest resolution. Five optional bayonet lenses and an integrated stacking/rigging frame make it ideal for Rental/Staging, Large Corporate, High Education, Conference Room, Museum and Signage.

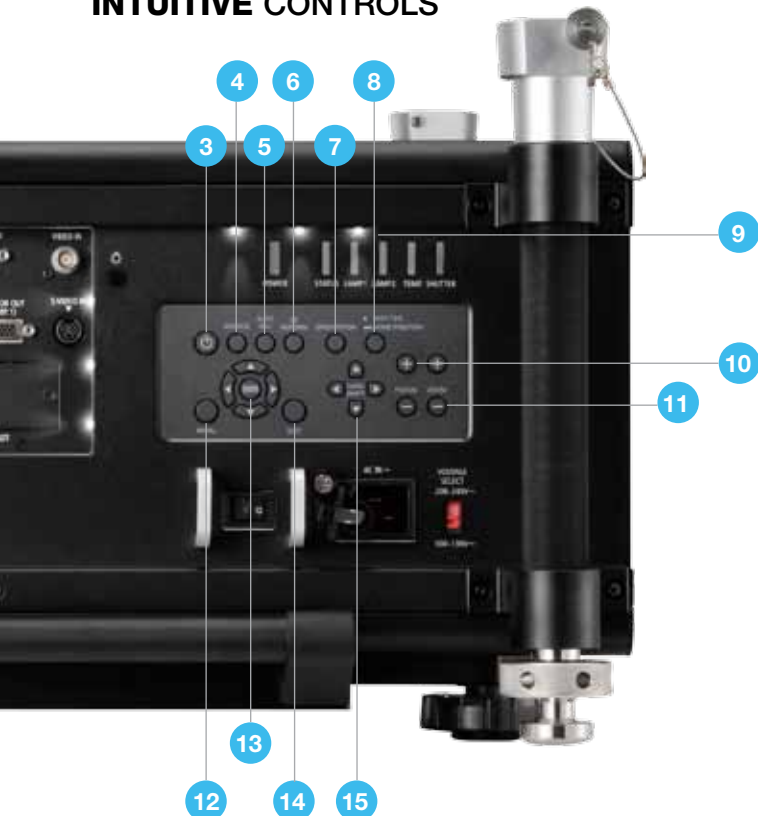
DISPLAY CONTENT THAT DEMANDS ATTENTION

WUXGA resolution and superb brightness levels and colour ranges, ensure your viewers will enjoy an outstanding visual experience. Even in high ambient light conditions the combination of ultra high brightness and 10-bit Hollywood Quality Video signal processing creates an excellent image in terms of brightness, colours and detail.



Easy Install Rigging Points

INTUITIVE CONTROLS



Premium Installation Features

RICH IN UNCOMPROMISING QUALITY STANDARDS

INSTALLATION IS EASY

The PH Series incorporate a riggable design that can easily be installed into a racking setup with minor adjustment conveniently possible via adjustable lockable thumb-screws.

Even in challenging venues - motorized Lens Shift with vertical and horizontal adjustment and Lens Memory makes setting up the perfect installation image easy, delivering content is also easy due to the vast number of connectors featured with this projector, including an innovative DisplayPort terminal and a host of networking, analog and digital connection terminals.

EASY POSITIONING LENS SHIFT FUNCTION

The projector is equipped with a lens shift that allows you to adjust the projected image horizontally or vertically. You can easily adjust the position of the projection just by turning the lens shift dials, without having to move the projector unit itself.

STv2 OPTION SLOT UPGRADABILITY

Building on the success of the NEC 'Option Slot' technology, the PX range have an integrated option slot that can be used to instantly upgrade the power of your projector by adding a specialised HD-SDI or Slot-in PC OPS Option board.

OPS products can also be exchanged with other NEC products that have an option slot including PH Series projectors and many of our new large format displays.

TIME SAVING NETWORK CONTROL

For convenient image source management and cost saving convenient maintenance and management of content and scheduling.

The intuitively placed user controls ensure that all the important functions of your projector is instantly adjustable at the touch of a finger.

BUTTON DESIGNATIONS

1. EASY MOUNTING ADJUSTMENT
2. INFRARED RECEIVER
3. POWER ON / OFF
4. SOURCE SELECT
5. AUTOMATIC ADJUSTMENT
6. 3D REFORM
7. ORIENTATION
8. SHUTTER/ HOME POSITION
9. LOW LIGHT ILLUMINATION
10. FOCUS ADJUST
11. ZOOM ADJUST
12. MENU BUTTON
13. MENU NAVIGATION BUTTONS
14. EXIT MENU BUTTON
15. LENS SHIFT ADJUST

ADVANCED CONNECTIVITY

KEY CONNECTOR DESIGNATIONS TBC

17. LAN CONNECTOR

An RJ45 port allows connection to a local area network or control of the projector via ethernet cable. In addition pictures can be transmitted via LAN.

18. HDMI

HDMI is the high definition connection of the future, it supports, on a single cable, any un-compressed TV or PC video format, including standard, enhanced, and high-definition video; up to 8 channels of compressed or un-compressed digital.

19. DISPLAYPORT

DisplayPort is ideal for High Definition signals and lets you connect the projector up to 20 metres away.

20. USB VIEWER / WIFI SOCKET

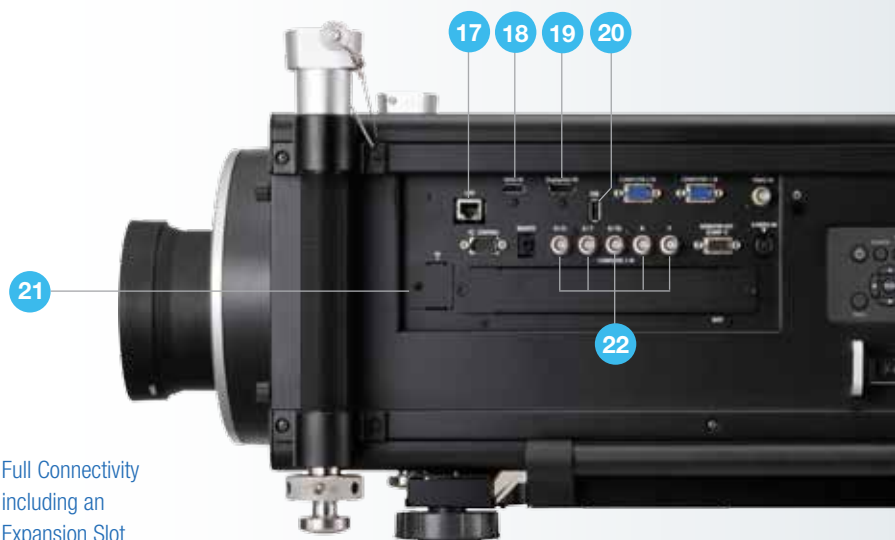
Add the optional NEC USB WiFi Connector that supports IEEE.802.11n high speed WLAN.

21. OPS EXPANSION BOARD SLOT

Integrated slot for OPS Stv2 Expansion Board

22. COMPONENT INPUTS

23. ADJUSTABLE RIGGING AND STACKING THUMBSCREWS



Full Connectivity including an Expansion Slot

PH SERIES OPTIONS AND ACCESSORIES

NP22LP	Replacement Lamp	EMEA
NP25FL	Short Throw Lens	0.8 : 1, 40 - 150" Screens
NP26ZL	Zoom Lens	1.19 - 1.56 : 1, 30 - 500" Screens
NP27ZL	Zoom Lens	1.50 - 3.02 : 1, 40 - 500" Screens
NP28ZL	Zoom Lens	2.97 - 4.79 : 1, 60 - 500" Screens
NP29ZL	Zoom Lens	4.70 - 7.20 : 1, 60 - 500" Screens
NP01LM2 NP02LM3	USB Wireless LAN Unit	EMEA (Except Russia) Russia
NP03FT	Filter Set	EMEA
OPS Celeron 1.86	Slot-in PC STv2	EMEA
OPS i5 2.4	Slot-in PC STv2	EMEA
OPS Atom 1.6	Slot-in PC STv2	EMEA
OPS HD-SDI	HD-SDI STv2/ 1.5G	EMEA

MODEL VARIATIONS

PH1000U

Display	3-Chip - (0.96") DLP™ Technology
Native Resolution	1920 x 1200 (WUXGA)
Brightness	11000 ANSI Lumen
Contrast Ratio	2000:1
Lamp	2-Lamp System (2 x 400 W AC)
Lamp Life [hrs]	2000
Lens	5 Optional Bayonet Lenses with Lens Memory
Projection Distance [m]	1.1 (NP25FL) - 74 (NP29ZL)
Screens Size (diagonal) [cm/inches]	Minimum: 203 / 80 ; Maximum: 1,270 / 500
Zoom	Motorised
Focus Adjustment	Motorised
Supported Resolutions	1920 x 1200; 1920 x 1080 (HDTV 1,080i/60, HDTV 1,080i/50); 1600 x 1200 (UXGA); 1400 x 1050 (SXGA); 1280 x 1024 (SXGA); 1280 x 720 (HDTV 720p); 1152 x 870 (Mac 21"); 1024 x 768 (XGA) compressed; further lower resolutions also supported
Frequency	Horizontal: 15 - 108 kHz (RGB: 24 kHz - 108 kHz); V: 48 - 120 Hz
Video Signal	PAL; PAL60; NTSC; SECAM; NTSC 4.43; PAL-N; PAL-M
Power Supply	100-240V AC; 50-60Hz
Dimensions (W x H x D) [mm]	458 x 235 x 578 (Without Lens and Feet)
Weight [kg]	40
Fan Noise [db (A)]	45
Safety and Ergonomics	CE; TÜV GS; ErP; RoHS
Projector Warranty	3 Years Pan-European
Lamp Warranty	6 months, maximum 1000 hours



The PH Series is uniquely equipped with a rigging frame that makes installation into rigs easy and further finely adjustable vertical and horizontal screws make single or stacking alignment easy.





NEC DISPLAY SOLUTIONS

HIGH END INSTALLATION PROJECTORS

PA SERIES | PX SERIES | PH SERIES



This document is © Copyright 2012 NEC Display Solutions Europe GmbH. All rights are reserved in favour of their respective owners. The document, or parts thereof, should not be copied, adapted, redistributed, or otherwise used without the prior written permission of NEC Display Solutions Europe GmbH. This document is provided "as is" without warranty of any kind whatsoever, either express or implied. Errors and omissions are excepted.

NEC Display Solutions Europe GmbH may make changes, revisions or improvements in, or discontinue the supply of any product described or referenced in this document at any time without notice.

NEC Display Solutions Europe GmbH – HQ
Landshuter Allee 12-14
D-80637 München
Phone: +49 (0) 89 99 699-0
Fax: +49 (0) 89 99 699-500
info@mail@nec-displays.com
www.nec-display-solutions.com

**NEC Display Solutions Europe GmbH
Representative Office Austria**
Mooslackengasse 17, 1190 Wien, Österreich
Phone: +43(1)23060 3685
Fax: +43(1)23060 3686
info@mail@nec-displays.com
www.nec-display-solutions.at

**NEC Scandinavia AB Display Solutions Division
Finland**
Ahventie 4, FIN-02170
ESPOO
Finland
Phone: +358 9 348 70204
www.nec-display-solutions.fi

NEC France S.A.S – Display Solutions Division
29 rue des Hautes Pâtures
F-92737 Nanterre Cedex, France
Phone: +33 (0) 1 46 49 46 49
Fax: +33 (0) 1 47 69 92 86
necdisplay@emea.nec.com
www.nec-display-solutions.fr

NEC Italia S.p.A. – Display Solutions Division
Viale Enrico Forlanini 23
I-20134 – Milano, Italy
Phone: +39.02.48415.1
Fax: +39.02.48414.409
info.necdisplay-it@emea.nec.com
www.nec-display-solutions.it

**NEC Display Solutions Europe GmbH
Representative Office Middle East & Africa**
Office 0205, 2nd Floor, JafzaView 18, Jebel Ali
Dubai, U.A.E. PO Box 262314
Phone: +971 4 88 49 452
Fax: +971 4 88 49 453
info@nec-displays.ae, www.nec-display-solutions.com

**NEC Scandinavia AB Display Solutions Division
Norway**
Olaf Helsetsvæi 6, NO-0621 Oslo
Norway
Phone: +47 (0) 22 62 89 95
Fax: +47 (0) 22 62 89 96
www.nec-display-solutions.no

**NEC Display Solutions Europe GmbH
Representative Office Poland**
ul. Bociana 22A
PL-31-231 Kraków, Poland
Phone: +48 (0) 12 614 53-53
Fax: +48 (0) 12 614 53-54
www.nec-display-solutions.pl

**NEC Display Solutions Europe GmbH
Representative Office Russia**
Smolenskaya square 3, Office 760
121099 Moscow, Russia
Phone: +7 495 937 84 10
Fax: +7 495 937 82 90
www.nec-display-solutions.ru

**NEC Display Solutions Europe GmbH
South Africa Contact**
P. O. Box 7243, Westwood, 1477
Johannesburg, South Africa
Phone: +27 (0) 11 918 6449
Fax: +27 (0) 11 894 2973
www.nec-display-solutions.co.za

NEC Iberica – Display Solutions Division
C/ Anabel Segura, 7 – Planta 2a
E- 28108 Alcobendas (Madrid)
Spain
Phone: +34 (0) 91 203 29 00
Fax: +34 (0) 91 650 11 00
www.nec-display-solutions.es

**NEC Scandinavia AB – Display Solutions Division
Sweden**
Kronborgsgränd 11, S-16487 Kista
Sweden
Phone: +46 (0) 8 635 92 00
Fax: +46 (0) 8 635 93 50
www.nec-display-solutions.se

NEC (UK) Ltd. – Display Solutions Division
NEC House
1 Victoria Road, London W3 6BL
United Kingdom
Phone: +44 (0) 870 120 1160
Fax: +44 (0) 208 752 3670
www.nec-display-solutions.co.uk



Document Name: High End Installation Projectors Guide
Document Revision: Version 1
Document Date: 01/12

Empowered by Innovation

NEC