PH Series

PH1000U digital projector

Powerful installation projector that delivers quality, larger-than-life images under virtually any operating condition. Capable of taking on even the most demanding integration projects, it is ideal for large venues or high ambient lighting conditions.

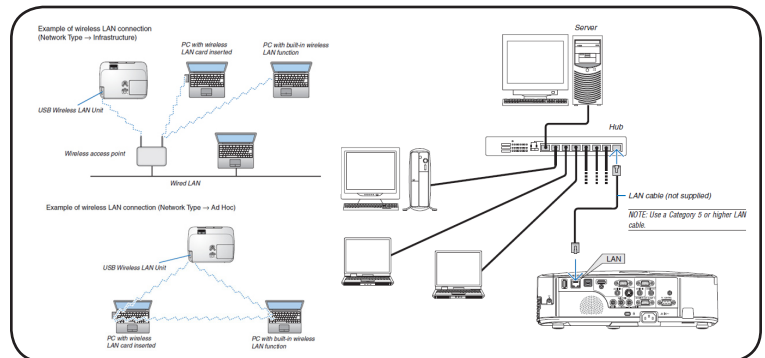### FLEXIBILITY ENABLES PERFORMANCE

° Integrated Device Technology HQV™ is a high-performance video processing/ scaling system designed for computer signals as well as standard or high-definition video. The technology produces superior video processing using pixel-based, motion-adaptive de-interlacing to remove undesirable motion artifacts typical of interlaced signals. This processing creates life-like images in applications such as video conferencing.

° Powered by a unique 3-chip 0.96" DLP system, this 11,000-lumen projector features a sleek, compact design with WUXGA resolution and dual UHP lamps

° Geometric correction tool allows you to project on spheres, cylinders and more

° VIDI technology, a Phillips innovation designed to work in conjunction with the color wheel, uses a brilliant pulse to increase the brightness of the image and a dark pulse to increase the contrast ratio

INTEGRATED NETWORKING AND ASSET MANAGEMENT

° Integrated RJ45 connection for quick connection to the LAN (10/100 base-T capability)

° Optional high-speed wireless LAN IEEE 802.11b/g/n

° Desktop control allows you to securely transmit information wirelessly to the projector from a docking station or PC in another room

° Image Express Utility (IEU 2.0; compatible with Windows or Mac operating systems) dedicated projector software provides wired and wireless data transmission via peer-to-peer or over the network

  • Broadcast mode allows you to send information from one computer to several projectors

° Windows Network Projector function within Windows Vista connects directly to networked projectors without the need for additional proprietary software

° Windows Remote Desktop function allows you to control a networked computer by connecting a USB mouse and keyboard directly to the projector's USB input

° Windows Network Drive Function displays multimedia files (.jpeg, .bmp, .png, .mpeg2 or .wmv9) in the Windows shared folder on a local network using the Viewer function—all without bringing your PC into the conference room

° Windows Media Connection Function displays multimedia files (.mpeg2, .jpeg or .wmv9) stored on the Windows Media Connect server or a local network using the Viewer function—all without bringing your PC into the conference room
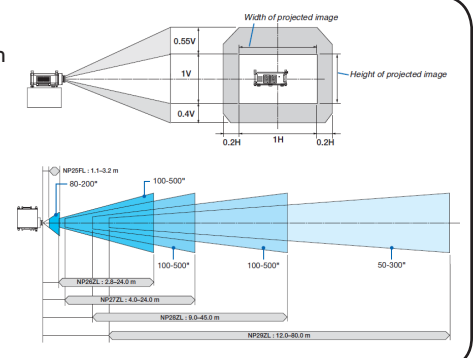
° Crestron Roomview Connected™

SECURITY FEATURES PROVIDE PEACE OF MIND

° Cabinet control lock setting enables user to deactivate buttons on cabinet to prevent unwanted changes to projector settings

° Logo lock restricts changes to logo saved in projector memory

° Password protection restricts unauthorized use of projector

° Email notification informs the system administrator when the lamp approaches the end of its useful life

Example of wireless LAN connection (Network Type → Infrastructure)

USB Wireless LAN Unit

PC with wireless LAN card inserted

PC with built-in wireless LAN function

Wireless access point

Wired LAN

Example of wireless LAN connection (Network Type → Ad Hoc)

USB Wireless LAN Unit

PC with wireless LAN card inserted

PC with built-in wireless LAN function

Server

Hub

LAN cable (not supplied)

NOTE: Use a Category 5 or higher LAN cable.

LAN

Lens Shift

Enjoy greater installation flexibility with +55%/-40% vertical lens shift and +/- 20% horizontal lens shift. Ships lensless with a complete line of optional bayonet style lenses (6) for quick and easy exchange. Lens throw distances range from 2.6 to 179.8 feet.

Width of projected image

Height of projected image

0.55V
1V
0.4V
0.2H 1H 0.2H

NP25FL : 1.1–3.2 m
80–200"
100–500"
NP26ZL : 2.8–24.0 m
100–500" 100–500" 50–300"
NP27ZL : 4.0–24.0 m
NP28ZL : 9.0–45.0 m
NP29ZL : 12.0–80.0 m

NEC

DESIGNED WITH THE ENVIRONMENT IN MIND

○ **Extended lamp life with ECO Mode™ technology** increases lamp life up to 2500 hours, while lowering power consumption
○ **Power management** enables projector to automatically turn off when an incoming signal is not detected from any of the inputs
○ **Auto Power On** via the RGB (15-pin) input connector when a signal is detected from a computer
○ **Carbon savings meter** calculates the positive effects of operating the projector in ECO Mode, which is encouraged by an optional message at startup. A green ECO Mode button on the remote control makes the switch easy.
○ **Quick start (3 to 4 seconds)** lets you begin presenting in seconds while quick shutdown (immediate power off with no cooling required after shutdown) ensures efficient energy usage
○ **Sleep timer** can be set to automatically turn off the projector at set countdown times
○ **Low power consumption** (0.2W in stand-by mode) minimizes energy costs
○ **Direct power off** provides instantaneous shutdown of the projector

ECO MODE

2500-hour filter life

NEC is committed to designing its products to provide long lifecycles. This commitment even extends to components within its products, including the improved filter. This virtually maintenance-free filter reduces the frequency at which cleaning is required, thereby decreasing your total cost of ownership. Filter replacement is only required at the time the lamp is replaced.
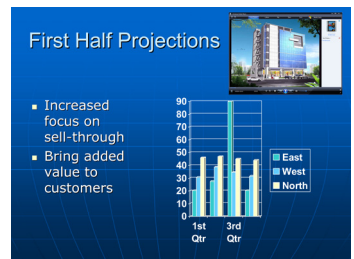
BUILT-IN SOFTWARE

Edge blending

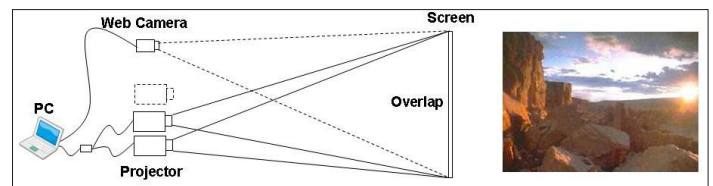This function seamlessly blends multiple projected images to display a single high-resolution image.

PIP/Side-by-Side

This function allows two sources to be displayed on the screen at one time in either a picture-in-picture or side-by-side configuration.

DICOM SIM

DICOM Simulation enables users in medical environments to display accurate diagnostic images.

Built-in stacking correction

The industry's first built-in stacking correction capabilities (up to four projectors) allows the projectors to boost an image's brightness up to 44,000 lumens, which is ideal for larger-sized screens and environments with heavy ambient light. This feature also prevents the complete loss of an image, which can happen when using only one projector.
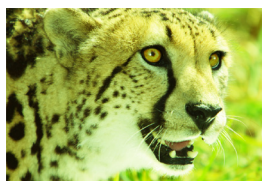
Built-in wall color correction presets

These provide for adaptive color tone correction to display properly on non-white surfaces.
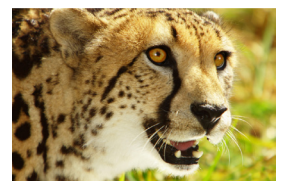
On a green wall...

BEFORE
auto wall correction

AFTER
auto wall correction

GET CONNECTED WITH A WIDE SELECTION OF INPUTS

○ **Dual computer inputs** ensure quick switching between presentations

○ **Four audio inputs (two mini stereo [Comp1 & Comp2], R/L [RCA - shared by video sources] and HDMI®)** make it easy to add sound to enhance your presentations

Remote control

Easy control from remote allows you to adjust lamp mode, aspect ratio, volume and image all with the touch of a button.

HDMI input

Among the PH Series' wide selection of inputs is an HDMI w/HDCP for connecting to high-definition sources such as Blu-ray players, cable boxes, satellite receivers and personal computers.
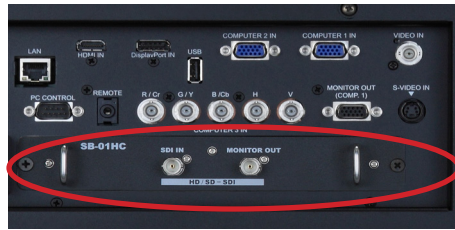
DisplayPort

This input provides PH Series models with expanded connectivity with advanced technology.

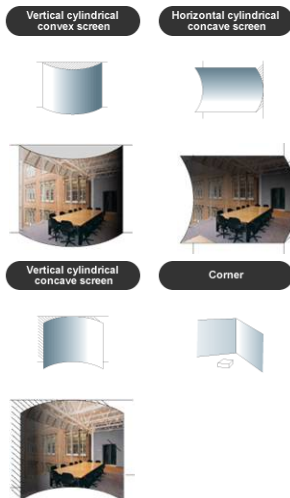### Open Pluggable Specification (OPS)

The first industry-wide standardization in option slots simplifies installation, use and maintenance, while offering superior input flexibility.

ADVANCED SOFTWARE FEATURES

Geometric Correction

Projecting an image isn't confined to a standard flat screen or wall with the NEC PH Series. Geometric correction allows these models to project an image on spheres, cylinders, corner angles and many more non-standard surfaces.

Vertical cylindrical convex screen

Horizontal cylindrical concave screen

Vertical cylindrical concave screen
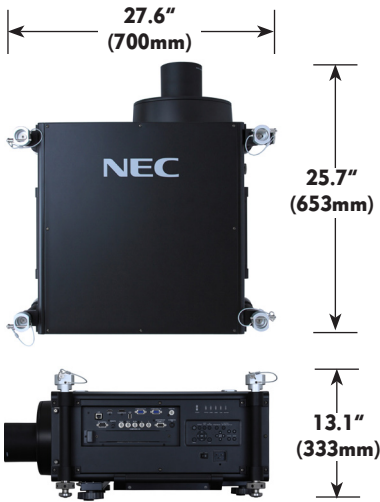
Corner

Virtual Remote™ (DDC/CI)

Used over the VGA cable, you can control the projector directly from a computer without the need for additional control cables.

Cornerstone

Enhanced keystone correction allows for horizontal, vertical and diagonal image correction for aligned images even when the projector is set up at an angle to the screen.

27.6"
(700mm)

25.7"
(653mm)

13.1"
(333mm)

UNIQUE FEATURES

3D Reform™ allows you to square the image by adjusting horizontally, vertically or diagonally when the projector cannot be placed parallel or perpendicular to the screen

Advanced AccuBlend™ ensures detailed images when non-native resolution sources are connected to the projector

AutoSense™ automatically syncs with any computer signal and features one-touch image optimization

64-step image magnification with location control

Discreet source keys for source selection

Remote diagnostics enable the user to monitor and make adjustments to the projector remotely

Built-in HTTP page for control and monitoring over a LAN network. Email notification of error messages or lamp end-of-life can be sent to remote locations.

WARRANTY

Registered owners receive a 3-year parts and labor warranty including the first year of InstaCare. The lamp is covered for one year or 500 hours, whichever comes first. InstaCare provides the original owner one year of either limited 3 business day repair/return or next business day exchange.

IN THE BOX

Remote control, remote control cable, batteries, power cord, RGB signal cable, lens cap, user's manual on CD-ROM, quick start guide, product registration card, wired and wireless network setup guide, lens anti-theft screw

Ordering Model Numbers
NP-PH1000U

Specifications for PH1000U

OPTICAL		
Display Technology		0.96 x (3) DMD
Resolution		
	Native	WUXGA 1920 x 1200
	Maximum	WUXGA 1920 x 1200
Light Output (lumens)		11,000 normal / Eco = approx. 85% of normal mode
Contrast Ratio (up to)		2000:1
Lamp Type		(2) 400W AC
Lamp Life (up to)		2000 hours normal / 2500 hours eco
Screen Size (diagonal)		80 to 500 in. / 2032 to 12,700mm
Throw Ratio		
	NP25FL	0.67:1
	NP26ZL	1.39 - 1.87:1
	NP27ZL	1.87 - 2.56:1
	NP28ZL	2.56 - 4.16:1
	NP29ZL	4.16 - 6.96:1
Lens*		
	Zoom	Power
	Focus	Power
	F-number	
	NP25FL	F = 1.85, f = 11.2mm
	NP26ZL	F = 1.85 to 2.5, f = 18.7 to 26.5mm
	NP27ZL	F = 1.64 to 1.86, f = 25.7 to 33.7mm
	NP28ZL	F = 1.86 to 2.48, f = 32.9 to 54.2mm
	NP29ZL	F = 1.85 to 2.41, f = 52.8 to 79.1mm
	Shift	Motorized +55%/-40% Vertical and +/-20% Horizontal
	Shutter	Yes (motorized)
Keystone Correction		V +/-35º H +/- 30º

SIGNAL COMPATIBILITY/CONNECTIVITY		
Scan Rate		Horizontal 15 – 108 kHz / Vertical 48 – 120 Hz
Supported Video Standards		NTSC, NTSC4.43, PAL, PAL-60, PAL-M, PAL-N, SECAM
SD/HD Video Signal Compatibility		1080p, 1080i, 720p, 575p, 575i, 480p, 480i
PC Signal Compatibility		VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WXGA
Macintosh Compatibility		Yes
Input/Output Terminals		
	RGB1 (analog)	15 pin
	RGB2 (analog)	15 pin
	RGB3 (analog)	5-BNC
	RGB4 (digital)	HDMI w/HDCP
	RGB5 (digital)	DisplayPort
	Video 1	RCA
	Video 2	S-Video
	Video 3	Component
	Option Slot	HD/SD-SDI
	Monitor Out	1-15 pin
External Control		9-pin D-sub, RS-232, IR
Sync Compatibility		Separate Sync / Composite Sync / Sync on G
Networking		RJ-45 and Wireless LAN (optional)

ELECTRICAL		
Power Requirements		100 – 240V AC, 50/60Hz
Input Current		
	Normal Mode	10.8A dual lamp / 3.8A single lamp
	ECO Mode	5.8A dual lamp / 3.1A single lamp
Power Consumption		
	Normal Mode	1006W dual lamp / 530W single lamp
	ECO Mode	810W dual lamp / 439W single lamp
Standy Power / Power Saving		33W / 23W / 0.2W

MECHANICAL		
Installation Orientation		Floor/Front, Floor/Rear, Ceiling/Front, Ceiling/Rear
Dimensions (WxDxH)		22.8 x 22 x 9.3 in. / 578 x 558 x 235mm (without stacking columns) 25.7 x 27.6 x 13.1 in. / 653 x 700 x 333mm
Net Weight		87.1 lbs. / 39.5 kg
Fan Noise		45 dB normal / 39 dB eco @ 1m

ENVIRONMENTAL		
Operational Temp		41° – 104°F / 5° – 40°C Sea level / 41° – 73°F / 5° – 23°C @10,000 ft.
Regulations		USA UL 60950-1, FCC A, Canada C-UL 60950-1
Humidity		20-80% non-condensing
Storage		14° – 122°F / -10° – 50°C

ACCESSORIES		
	NP25FL	0.67:1 fixed short throw lens
	NP26ZL	1.39 - 1.87:1 zoom lens
	NP27ZL	1.87 - 2.56:1 zoom lens
	NP28ZL	2.56 - 4.16:1 zoom lens
	NP29ZL	4.16 - 6.96:1 zoom lens
	SB-01HC	HD/SD-SDI input card
	PHCase-01	ATA-certified case for shipping and secure storage
	RMT-PJ33	Replacement remote control
	PWRCRD-PJPX	Replacement power cable
	RGBCBL-PJPX	Replacement RGB signal cable
	NP03FT	Replacement filter
	NP22LP	Replacement lamp
	NECEW2-I	Extends term of parts and labor warranty to 5 years
	NECEW1-I	Extends term of parts and labor warranty to 4 years
	ADVEXON1-I	Extends term of InstaCare service program to 2 years
	ADVEXON2-I	Extends term of InstaCare service program to 3 years

* Lens does not ship with the projector.
Additional accessories are available, including screens, carts, mount accessories and replacement cables. Visit www.necdisplay.com for details.

CERTIFIED FOR Windows Vista®

HQV

CERTIFIED Integrated Partner

AMX DEVICE DISCOVERY

EcoCare™

InstaCare

NEC Display Solutions
500 Park Boulevard, Suite 1100
Itasca, IL 60143
866-NEC-MORE

NEC