Lens Unit User's Manual

Model NP31ZL

This manual discusses specifications and focus adjustment for the NP31ZL short focus zoom lens.
For cautions on handling the lens, see the User's Manual supplied with the lens.
For instructions on mounting, removing, and cleaning the lens, see the User's Manual supplied with the projector.

NOTE: The drawings in this manual may differ slightly from the actual product.

Specifications

Throw distance (Unit: m)

Screen size (inch)	Projector model name		
	PX750U	PX700W	PX800X
40"	0.6 - 0.8	0.7 - 0.8	0.6 - 0.8
50"	0.8 - 1.0	0.8 - 1.1	0.8 - 1.0
60"	1.0 - 1.2	1.0 - 1.3	0.9 - 1.2
80"	1.3 - 1.6	1.4 - 1.7	1.3 - 1.6
100"	1.6 - 2.0	1.7 - 2.1	1.6 - 2.0
120"	2.0 - 2.5	2.1 - 2.6	1.9 - 2.4
150"	2.5 - 3.1	2.6 - 3.2	2.4 - 3.0
200"	3.3 - 4.1	3.5 - 4.3	3.2 - 4.0
240"	4.0 - 5.0	4.2 - 5.2	3.9 - 4.9
300"	5.0 - 6.2	5.2 - 6.5	4.8 - 6.1
400"	6.6 - 8.3	7.0 - 8.7	6.5 - 8.1
450"	7.5 - 9.4	7.8 - 9.8	7.3 - 9.1
500"	8.3 - 10.4	8.7 - 10.9	8.1 - 10.2

TIP:
Calculation of the throw distance from the screen size (m)
PX750U: H x 0.75 to H x 0.93 : 0.62 m (min.) to 10.41 m (max.)
PX700W: H x 0.79 to H x 0.98 : 0.65 m (min.) to 10.91 m (max.)
PX800X: H x 0.77 to H x 0.97 : 0.61 m (min.) to 10.16 m (max.)

* "H" (Horizontal) refers to the screen width.
* Figures differ by several % with the table above because the calculation is approximate.
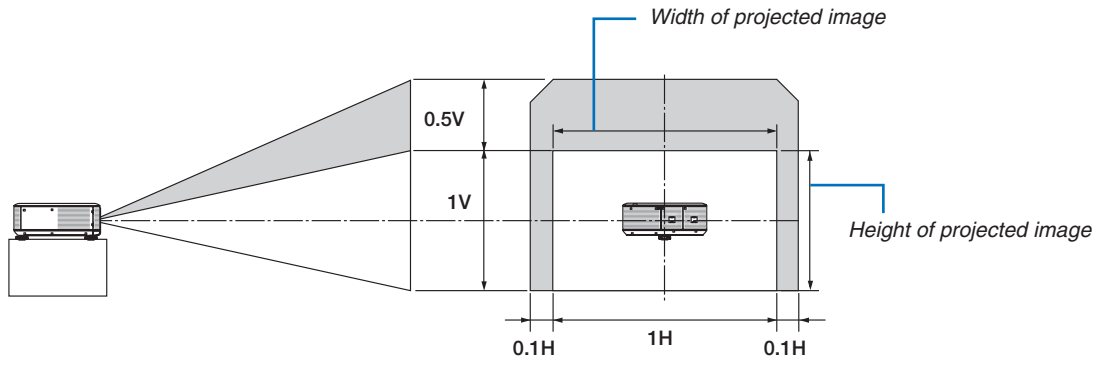
Lens shifting range

Button operations on the projector or on the remote control allow you to move the position of the projected image in the vertical and horizontal directions based on the following ranges.

Description of symbols: V indicates vertical (height of the projected image), H indicates horizontal (width of the projected image).
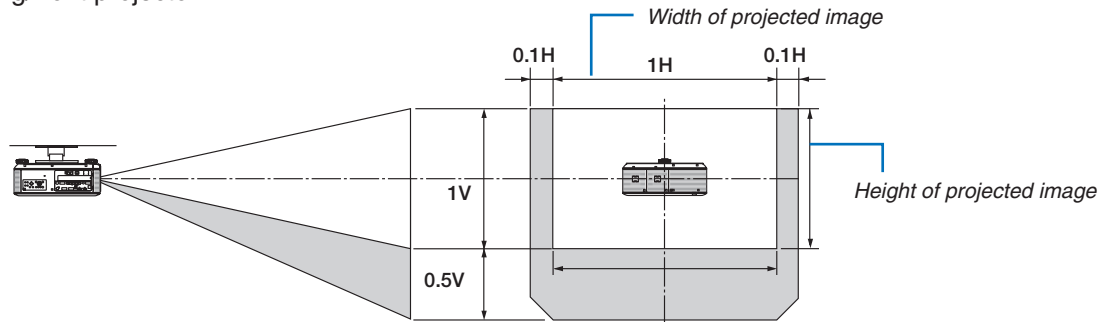For adjusting the lens shift, see the User's Manual supplied with the projector.
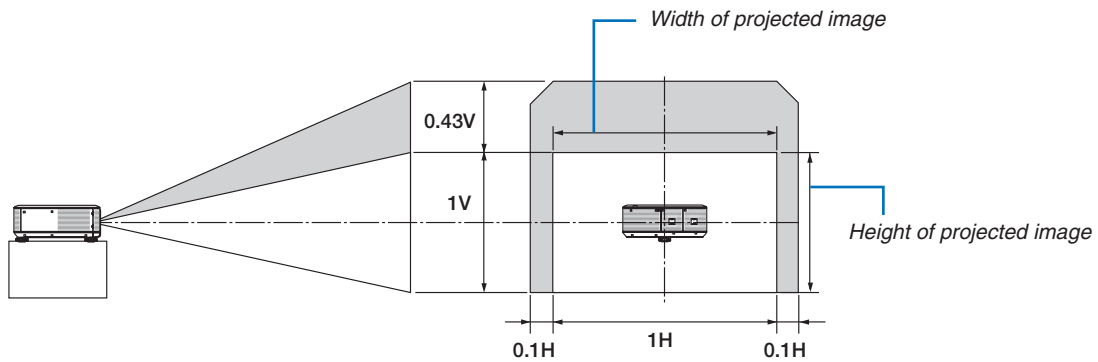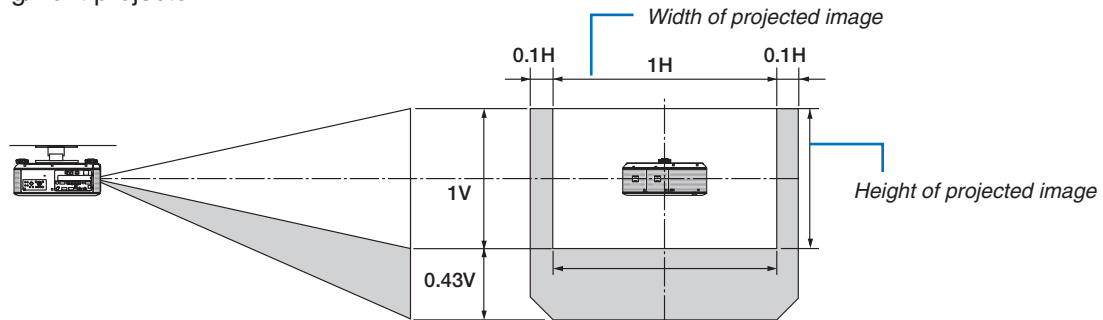
PX750U/PX700W

Desk/front projection

Width of projected image

0.5V

1V

Height of projected image

0.1H 1H 0.1H

Ceiling/front projector

Width of projected image

0.1H 1H 0.1H

1V

Height of projected image

0.5V

PX800X
Desk/front projection

Width of projected image

0.43V

1V

Height of projected image

0.1H 1H 0.1H

Ceiling/front projector

Width of projected image

0.1H 1H 0.1H

1V

Height of projected image

0.43V

Adjusting the focus

1. Focus on the projected image around the optical axis. (Powered focus)

The drawing below shows an example when the projected image is shifted upward. In this case the optical axis is at the bottom edge of the projected image.
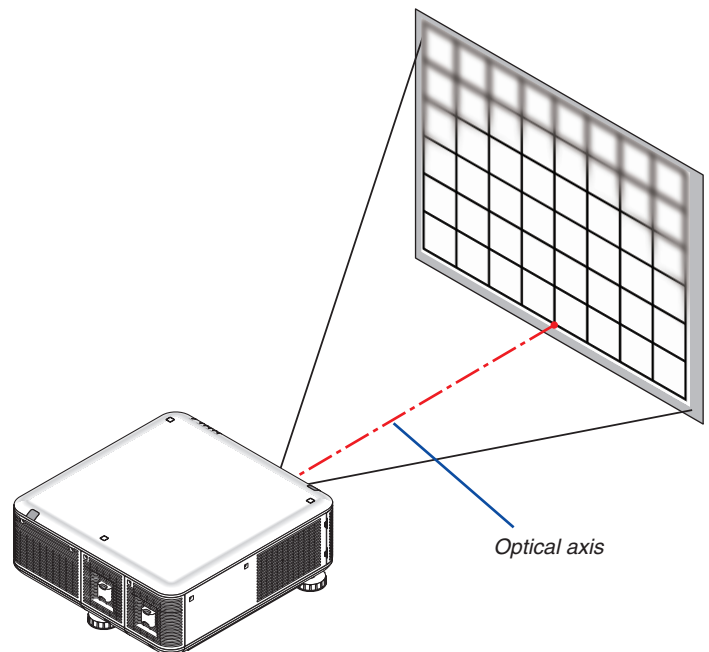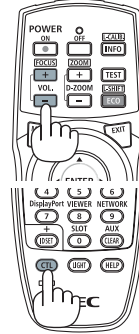
Adjusting with buttons on the cabinet

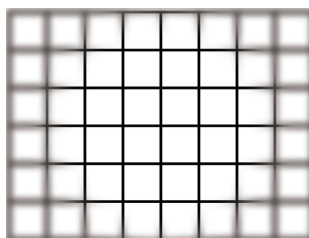Use the FOCUS (+) or (-) button on the projector cabinet.
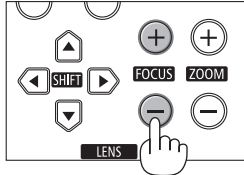
Adjusting with the remote control

Hold the CTL button and press the VOL/FOCUS +/– button.
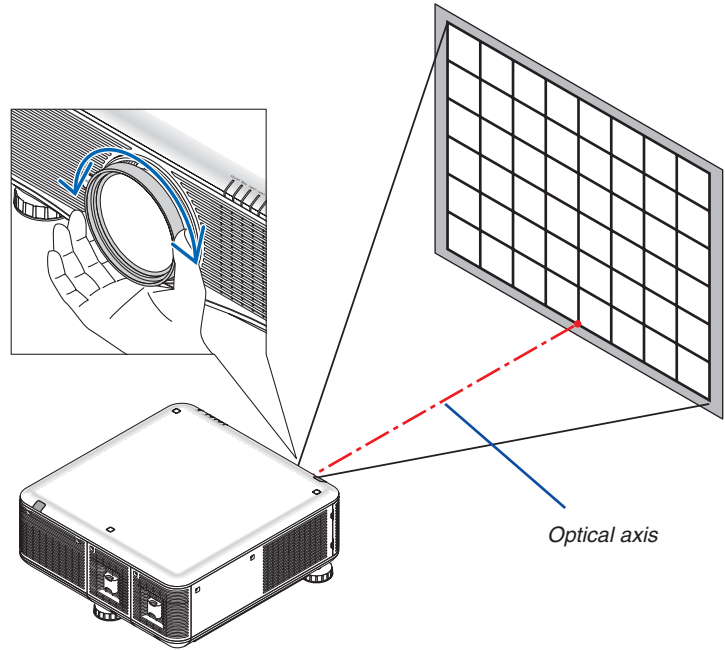
Optical axis

* With the lens shift in the center position the optical axis is at the center of the image. In this case, adjust the focus at the center of the projected image.

2. Adjust the focus at the edges of the projected image. (Manual focus)

Turn the edge focus ring clockwise or counterclockwise.

Optical axis

This completes adjusting the projected image's overall focus.

• For zooming in or out, see the User's Manual supplied with the projector.

NOTE:

The NP31ZL supports the Lens Memory function, which allows you to store changes for Lens Shift, Zoom, and Focus.

If you accidentally move the Edge focus ring (drawing shown below) after having stored adjusted values, the adjusted values stored in the Lens Memory will not be correctly applied.

After having removed the lens from the projector and mounted it back, call up the adjusted values stored in the Lens Memory and then follow Step 2 in the procedure above to adjust the focus at the edges of the projected image again.

Edge focus ring