

NP100/200 Installation Guide

Ceiling Mounted and Desktop

Rev 1.0

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Product Description

Type:	1-chip DLP projector, 0.55" DLP	Brightness:	NP100: 2000 ANSI Lumens NP200: 2100 ANSI Lumens
Resolution:	NP100: 800 x 600 NP200: 1024 x 768	Fan Noise:	35dB / 33dB @ 1 meter
Dimensions:	10.7" (W) x 3.5" (H) x 8.1" (D)	Weight:	5.3 lbs
Power Consumption:	228W (max)	BTU's:	870 BTU/hour

Lens Specifications

Throw Ratio:	1.9 – 2.1:1 (for 100" diagonal)	Focal Length:	21.83mm – 24.00mm
Offset Angle:	12.8° - 14.0° (for 100" diagonal)	F/#:	2.41 - 2.55
Screen Sizes:	27" - 300" diagonal (4:3)	Manual Focus/Manual Zoom	

Notes

- For screen sizes not indicated on the projection tables, use the formulas below.
If the figures on the tables do not match the results of formulas, use the figures in the table.
- All calculations are based on a 4:3 aspect ratio.
- Distances are in inches, for millimeters multiply by 25.4.
- Distances may vary ±5%.

Formulas

The Projection Formulas use the image width for calculation. For proper projection placement, determine the image width for the desired screen size. Use the Screen Formulas below to calculate all screen dimensions. Plug in the width for "W" in the Projection Formulas.

Refer to the diagrams and charts for popular screen sizes on page 2:

Definitions:

- W = Image Width
- H = Image Height (size)
- B = Vertical distance between lens center and screen center
- C = Throw distance
- D = Vertical distance between lens center and screen top
(screen bottom for desktop application)

4:3 Screen Formulas:

- W = H x 4/3
- H = W x 3/4
- Screen Diagonal = W x 5/4

Projection Formulas:

- B = 0.489W
- C (wide) = 1.948W
- C (tele) = 2.15W
- D = 0.113W
- α (wide) = \tan^{-1} (B/C(wide))
- α (tele) = \tan^{-1} (B/C(tele))

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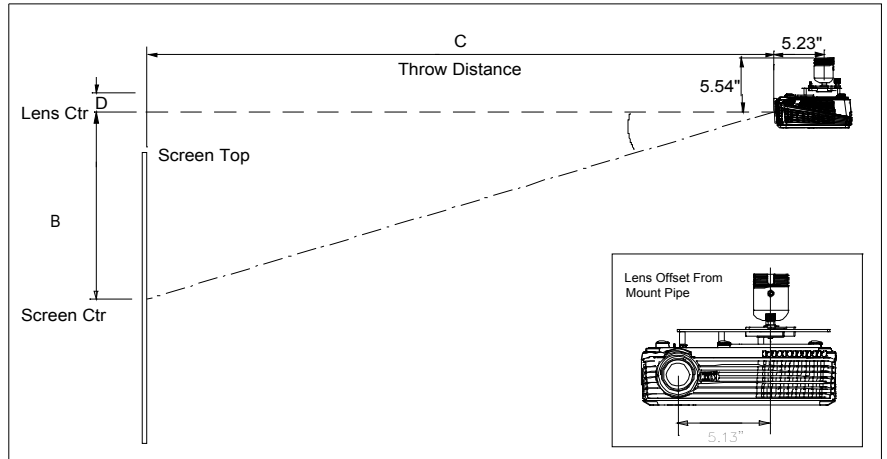
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Diagrams and Distance Charts

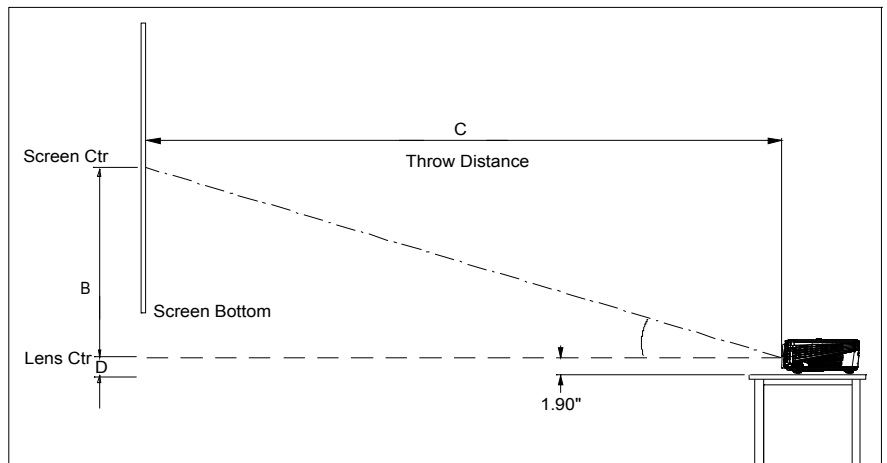
The following shows the proper relative positions of the projector and screen. Refer to the table to determine the position of installation.

Distances are in inches. For millimeters multiply by 25.4.

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Distance Chart for popular 4:3 screens

Screen Size (4:3)			B	C		D	α	
Diagonal	Width(W)	Height (H)	inches	w ide - tele		inches	degrees	
inches	inches	inches	inches	inches	inches	inches	degrees	degrees
30	24	18	12	N/A	- 52	3	N/A	- 12.8
60	48	36	23	94	- 103	5	14.0	- 12.8
67	53.6	40.2	26	104	- 115	6	14.0	- 12.8
72	57.6	43.2	28	112	- 124	7	14.0	- 12.8
84	67.2	50.4	33	131	- 144	8	14.0	- 12.8
90	72	54	35	140	- 155	8	14.0	- 12.8
100	80	60	39	156	- 172	9	14.0	- 12.8
120	96	72	47	187	- 206	11	14.0	- 12.8
150	120	90	59	234	- 258	14	14.0	- 12.8
180	144	108	70	281	- 310	16	14.0	- 12.8
210	168	126	82	327	- 361	19	14.0	- 12.8
240	192	144	94	374	- 413	22	14.0	- 12.8
270	216	162	106	421	- 464	24	14.0	- 12.8

Note: For screen sizes not indicated on the projection tables, use the formulas on page 1.

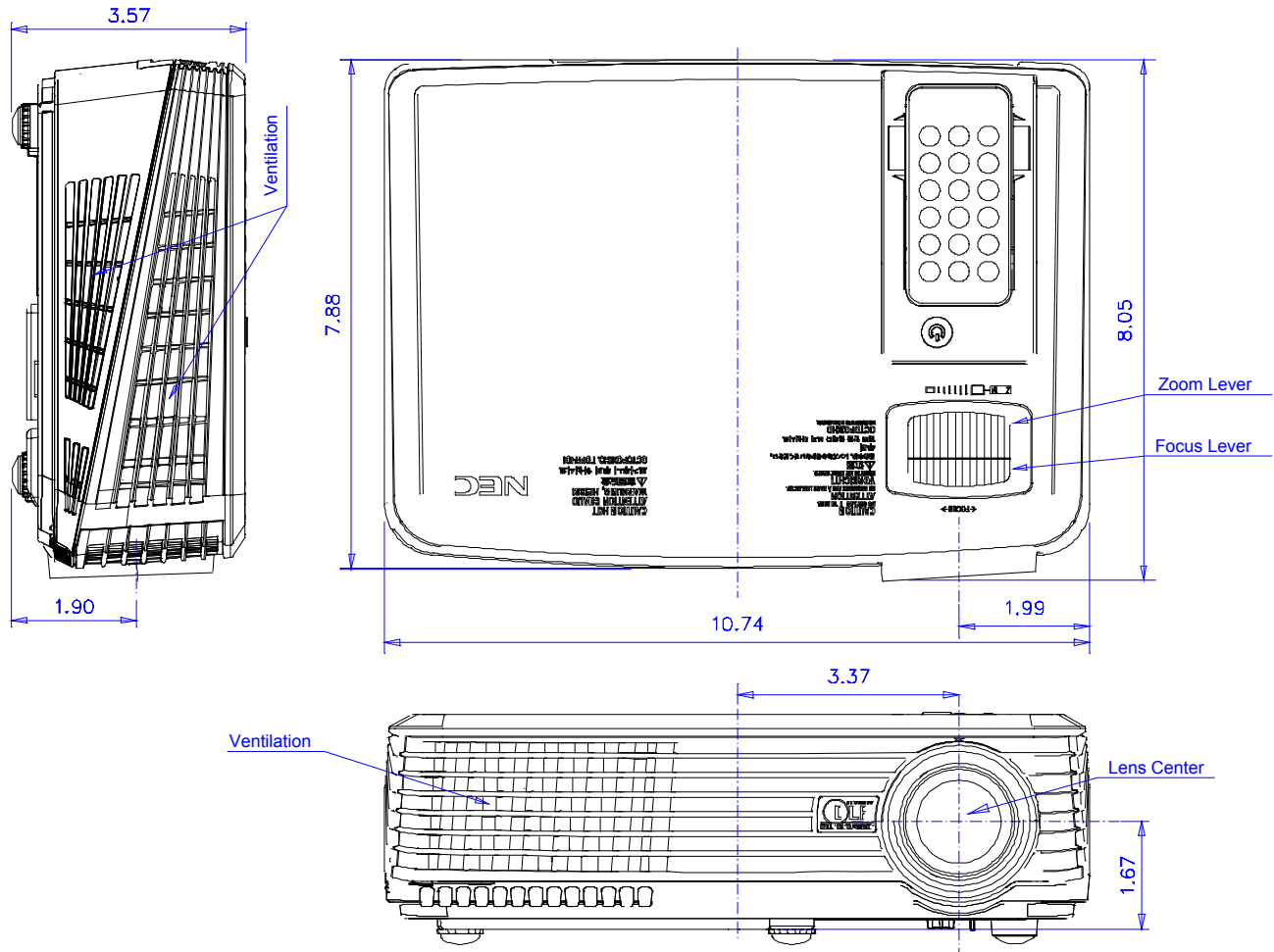
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Cabinet Dimensions

The following drawings show the cabinet dimensions. Dimensions are in inches. For millimeters multiply by 25.4.



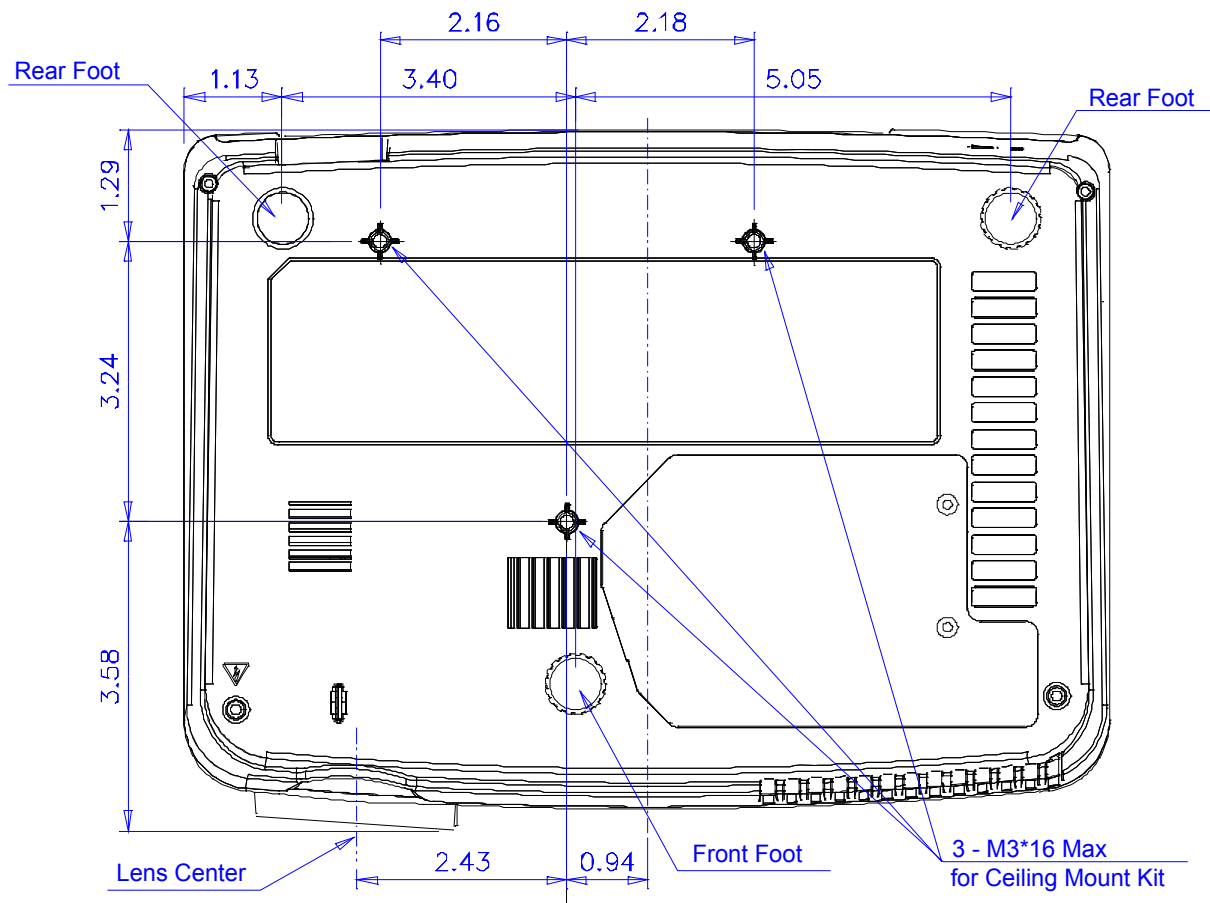
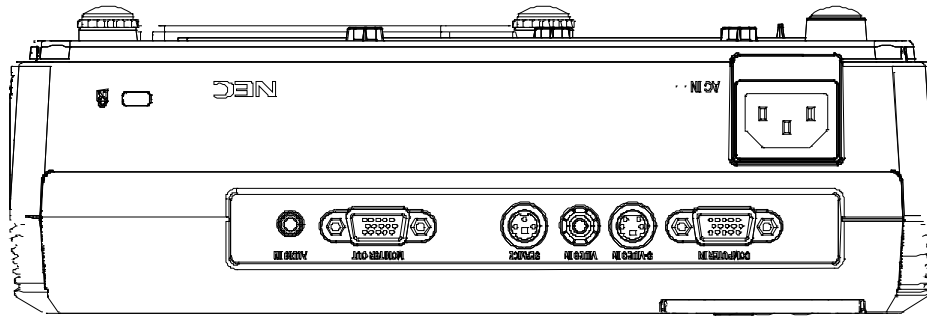
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Cabinet Dimensions (continued)

The following drawings show the cabinet dimensions. Dimensions are in inches. For millimeters multiply by 25.4.



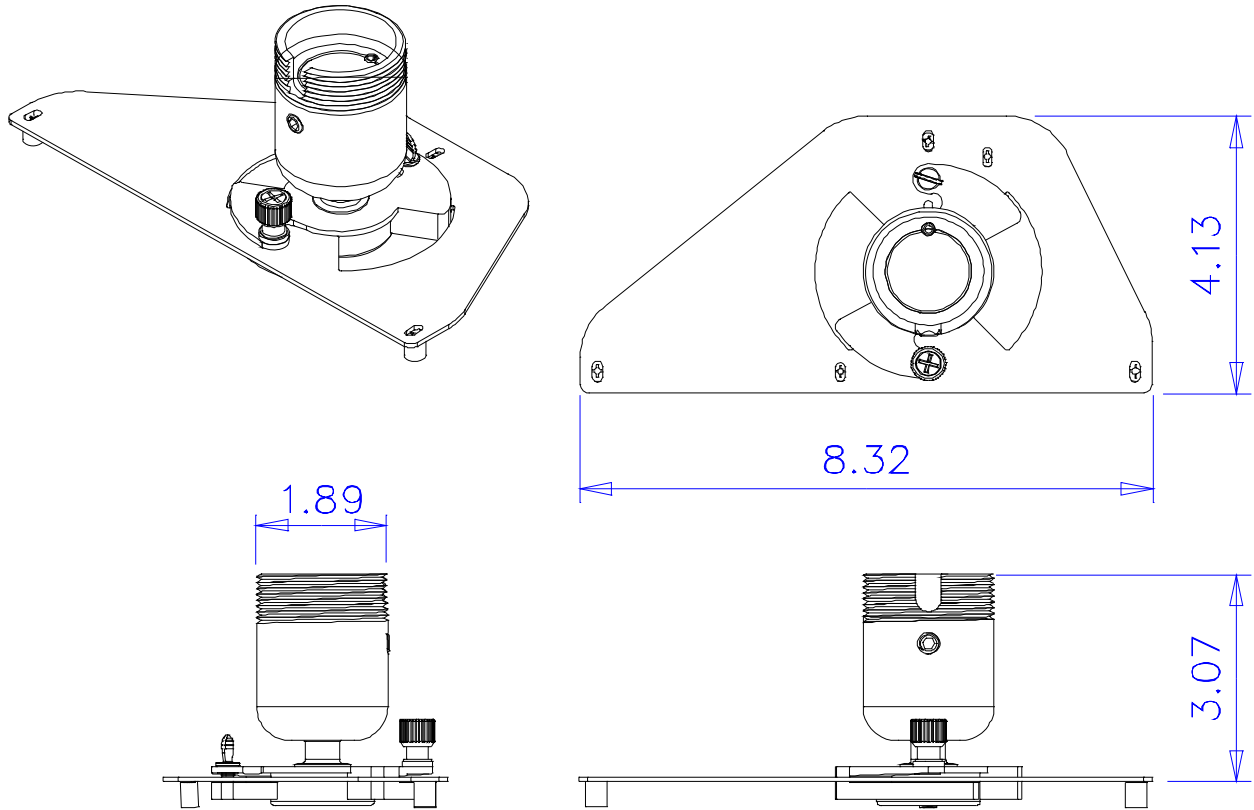
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Optional Ceiling Mount Dimensions (Model #: NP40CM)

The following drawings show the ceiling mount dimensions. Dimensions are in inches. For millimeters multiply by 25.4.



Input Panel

