LT75Z Installation Data

Desktop and Ceiling Mount

Ver 2.0

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Product Description

Type:	Single Chip DLP™	Dimensions:	9.6”(W) x 7.7”(D) x 2.41”(H)
Native Resolution:	800 x 600 (SVGA)	Weight:	3.3 lbs
Brightness:	1000 ANSI Lumens		

Lens Specifications

Throw Ratio:	2.0:1(Wide) / 2.4-2.5:1(Tele)	Focal Length:	28.3 – 34.0 mm
Offset Angle:	14.4°-14.8° (Wide) / 11.9°-12/3° (Tele)	F/#:	2.6 – 2.8
Screen Sizes:	30” – 300” Diagonal	Focus Adjustment:	Manual Focus / Manual Zoom

Notes

- For Screen Sizes of 25 to 300 inches 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.
- The ceiling must be strong enough to support the LCD projector and the installation must be in accordance with any local building codes.
- All calculations are based on 4:3 aspect ratio.
- Distances are in inches, for millimeters multiply by 25.4.
- Distances may vary ±5%.

Formulas

Units: Inches (for millimeters multiply final number by 25.4)

H = Screen Diagonal (4:3) x 4/5
V = Screen Diagonal (4:3) x 3/5
Screen Diagonal (4:3) = Screen Height (V) x 5/3

H = Screen Width (4:3)
V = Screen Height (4:3)

B = 0.5228H
C (Wide) = 2.0562H – 1.870
C (Tele) = 2.4845H – 1.833
D = 0.1478H

α (wide) = $\tan^{-1}$ (B/C(wide))
α (tele) = $\tan^{-1}$ (B/C(tele))

B = Vertical distance between lens center and screen center
C = Throw distance

D = Vertical distance between lens center and top of screen (bottom of screen for desktop application)

α = Throw angle

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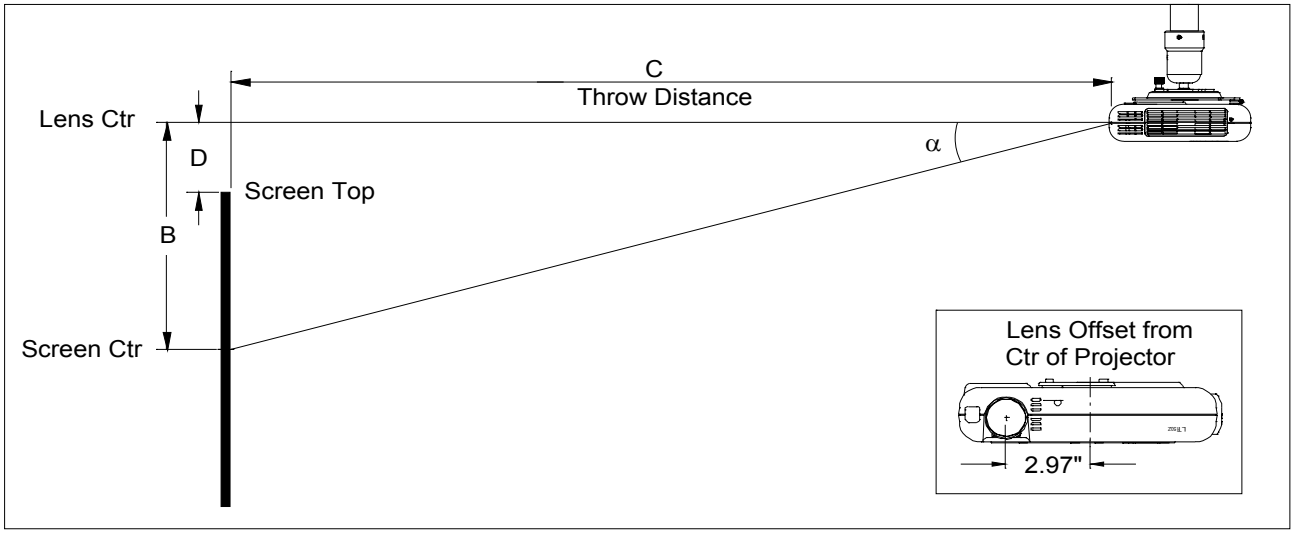
Projection Distance and Screen Size for Ceiling Mount

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.

Ceiling Mount Installation



Distance Chart

Screen Size			B	C	D	α
Diagonal	Width(H)	Height(V)		wide - tele		wide - tele
inches	inches	inches	inches	inches	inches	degrees
30	24	18	12.5	47.5 - 57.8	3.5	14.8 - 12.2
40	32	24	16.7	63.9 - 77.7	4.7	14.7 - 12.2
60	48	36	25.1	96.8 - 117.4	7.1	14.5 - 12.1
67	53.6	40.2	28.0	108.3 - 131.3	7.9	14.5 - 12.0
72	57.6	43.2	30.1	116.6 - 141.3	8.5	14.5 - 12.0
84	67.2	50.4	35.1	136.3 - 165.1	9.9	14.5 - 12.0
90	72	54	37.6	146.2 - 177.1	10.6	14.4 - 12.0
100	80	60	41.8	162.6 - 196.9	11.8	14.4 - 12.0
120	96	72	50.2	195.5 - 236.7	14.2	14.4 - 12.0
150	120	90	62.7	244.9 - 296.3	17.7	14.4 - 12.0
180	144	108	75.3	294.2 - 355.9	21.3	14.4 - 11.9
200	160	120	83.6	327.1 - 395.7	23.6	14.3 - 11.9

Note: *For screen sizes of 30 to 300 inches not indicated on the projection tables, use the formulas on page 1.*

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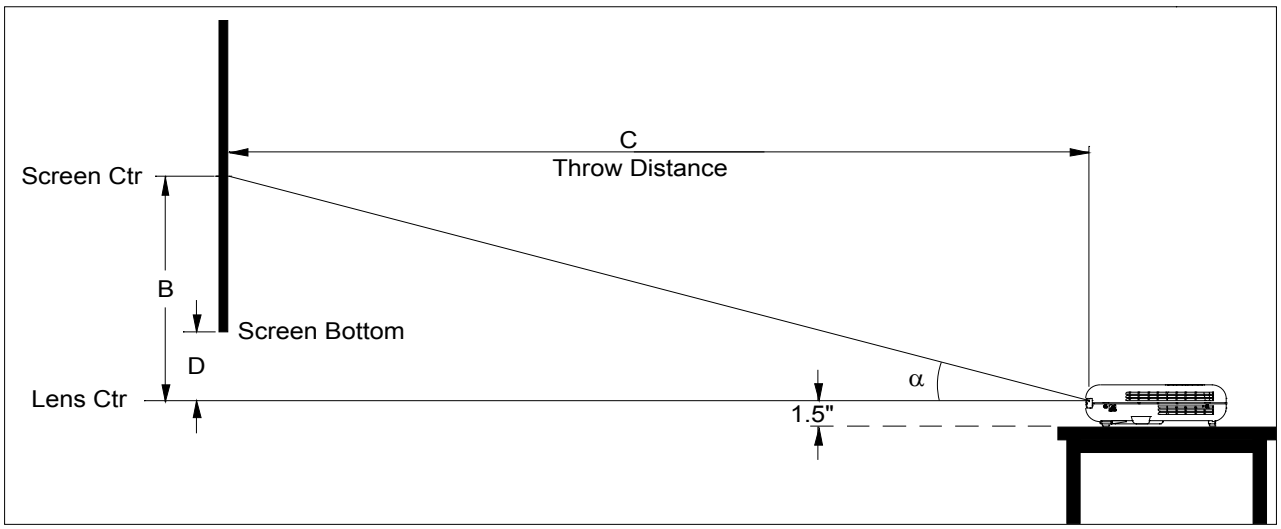
Projection Distance and Screen Size for Desktop

The following diagram shows the relationship between projector position and the screen.
Distances are in inches. For millimeters multiply by 25.4.

Desktop Setup



Distance Chart

Screen Size			B	C	D	α
Diagonal	Width(H)	Height(V)		wide - tele		wide - tele
inches	inches	inches	inches	inches	inches	degrees
30	24	18	12.5	47.5 - 57.8	3.5	14.8 - 12.2
40	32	24	16.7	63.9 - 77.7	4.7	14.7 - 12.2
60	48	36	25.1	96.8 - 117.4	7.1	14.5 - 12.1
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200	160	120	83.6	327.1 - 395.7	23.6	14.3 - 11.9

Note: *For screen sizes of 30 to 300 inches not indicated on the projection tables, use the formulas on page 1.*

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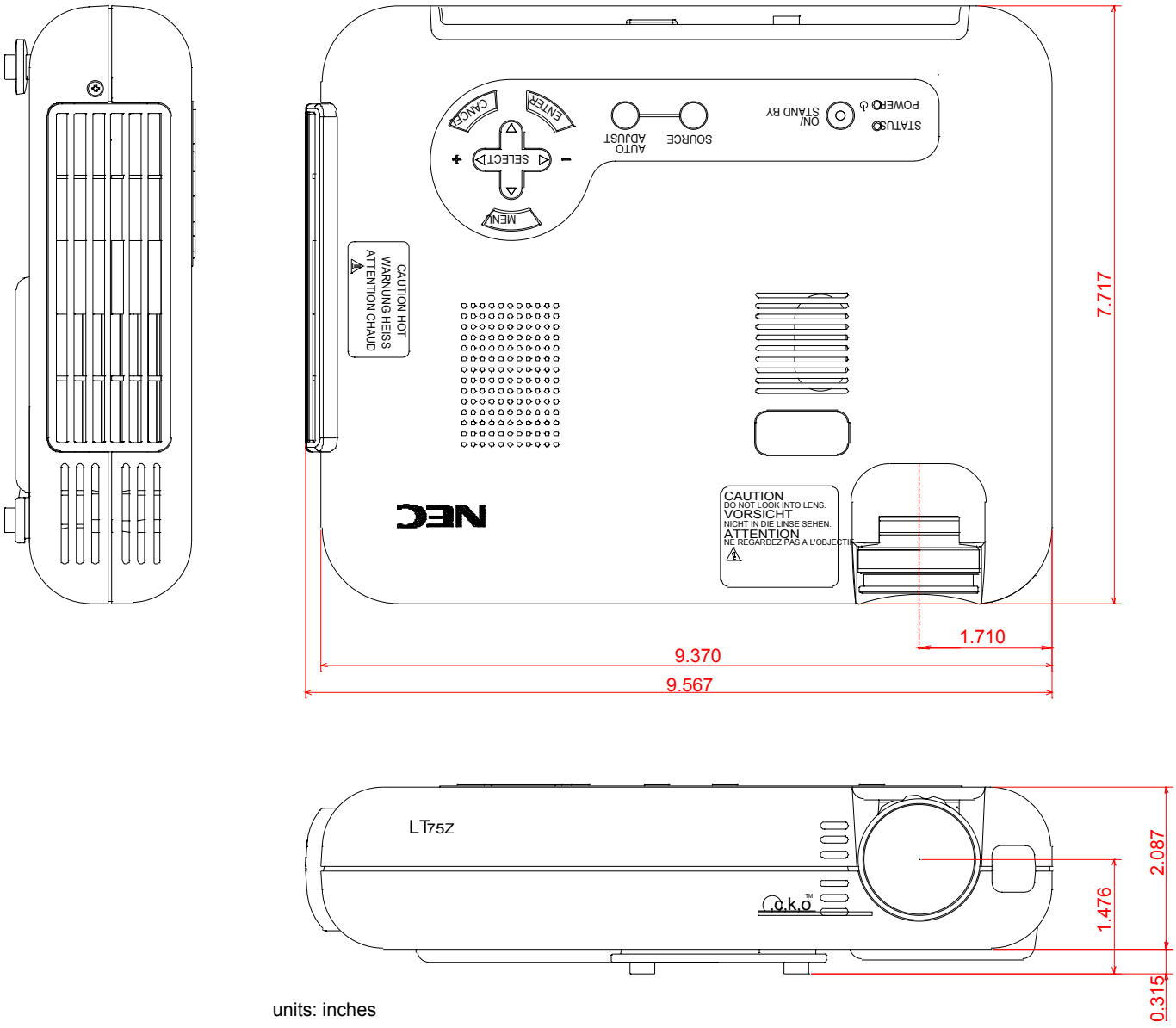
Cabinet Dimensions

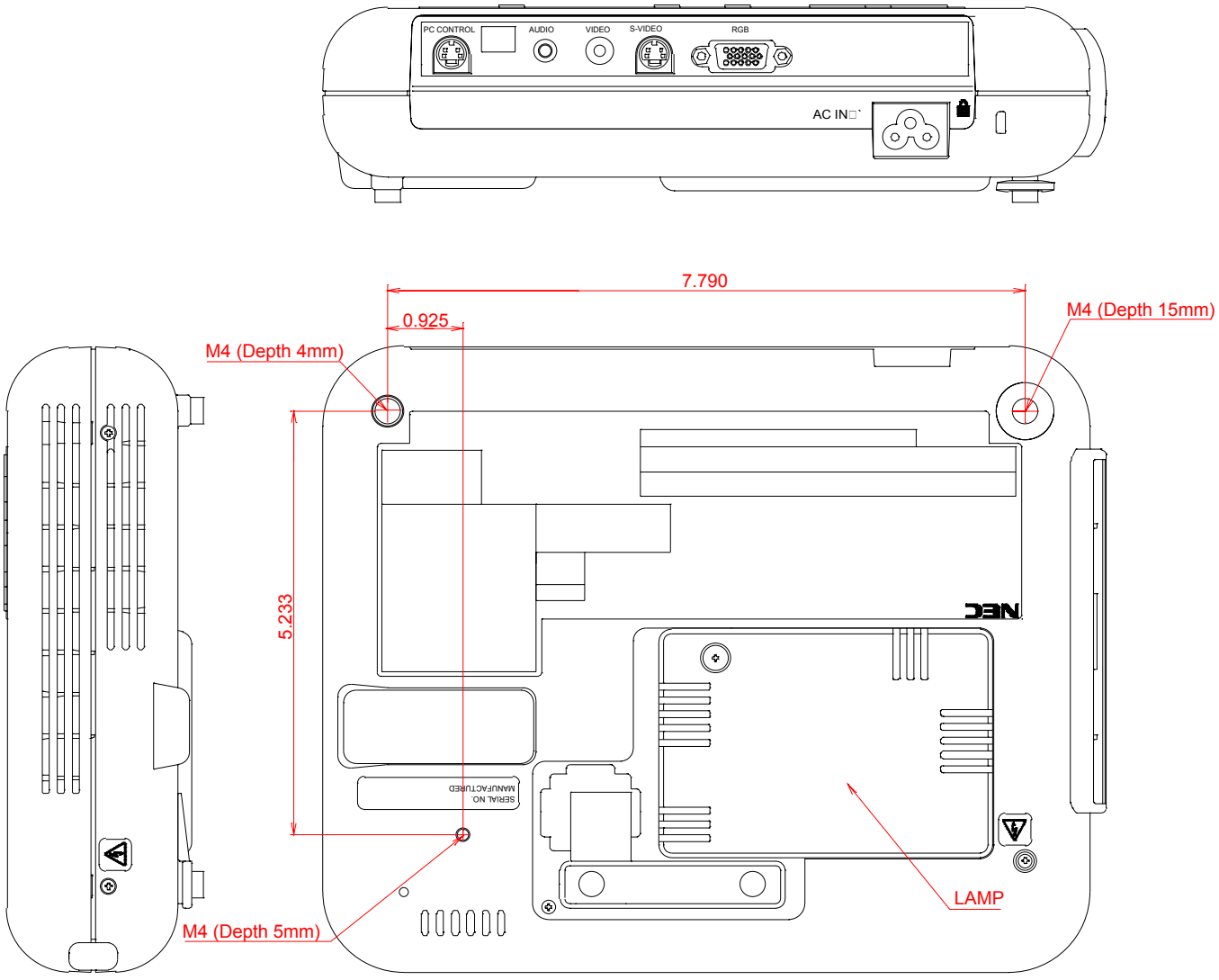
The following diagrams show the cabinet dimensions for the LT75Z.
Dimensions are in inches. For millimeters multiply by 25.4.



units: inches

Cabinet Dimensions (continued)

The following diagrams show the cabinet dimensions for the LT75Z.
Dimensions are in inches. For millimeters multiply by 25.4.



units: inches

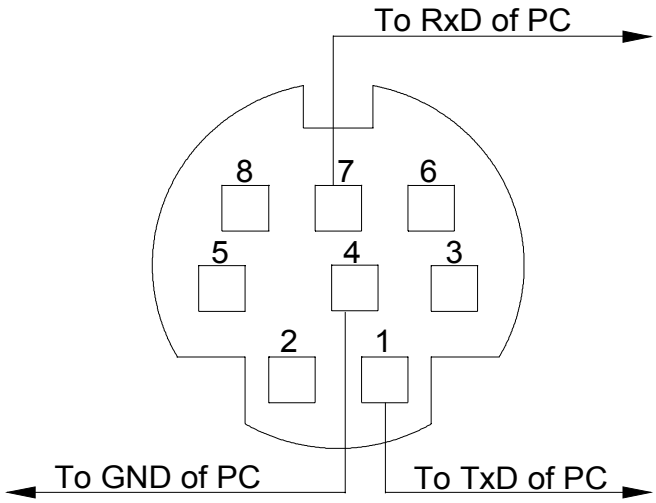
PC Control Codes

Function	Code Data							
POWER ON	02H	00H	00H	00H	00H	02H		
POWER OFF	02H	01H	00H	00H	00H	03H		
INPUT SELECT RGB	02H	03H	00H	00H	02H	01H	01H	09H
INPUT SELECT VIDEO	02H	03H	00H	00H	02H	01H	06H	0EH
INPUT SELECT S-VIDEO	02H	03H	00H	00H	02H	01H	0BH	13H
INPUT SELECT PC CARD VIEWER	02H	03H	00H	00H	02H	01H	1FH	27H
PICTURE MUTE ON	02H	10H	00H	00H	00H	12H		
PICTURE MUTE OFF	02H	11H	00H	00H	00H	13H		
SOUND MUTE ON	02H	12H	00H	00H	00H	14H		
SOUND MUTE OFF	02H	13H	00H	00H	00H	15H		
ON SCREEN MUTE ON	02H	14H	00H	00H	00H	16H		
ON SCREEN MUTE OFF	02H	15H	00H	00H	00H	17H		

Cable Connection

Communication Protocol:
Baud Rate: 38400 bps
Data Length: 8 bits
Parity: No Parity
Stop Bit: One bit
X on/off: None
Communications: Full duplex

PC Control Connector (DIN-8P)



NOTE 1: *Pins 2, 3, 5, 6 and 8 are used inside the projector.*
NOTE 2: *For long cable runs it is recommended to set communication speed within projector menus to 9600 bps.*