

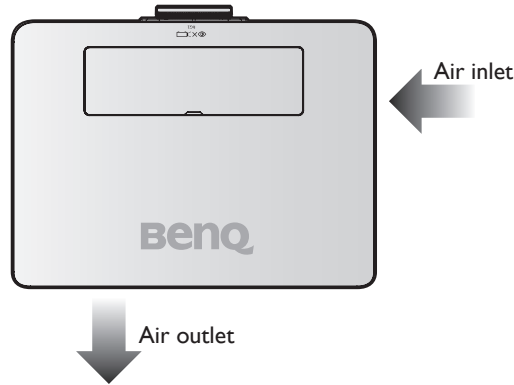
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Notice

Cooling notice

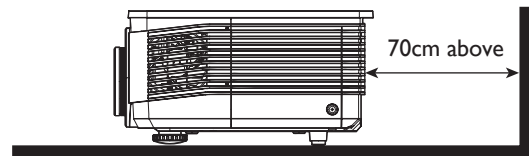
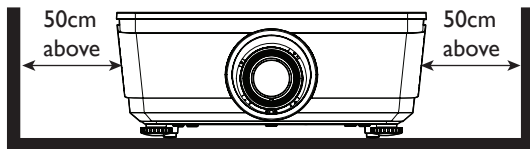
- **Ventilation**



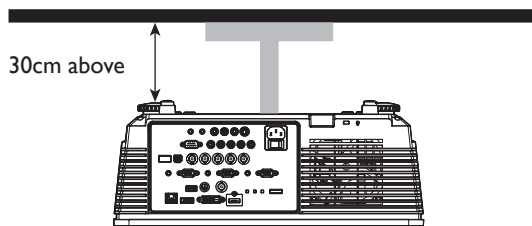
- **Caution for installation**

For proper ventilation of the projector, make sure to leave some space around the projector as shown in the illustration below:

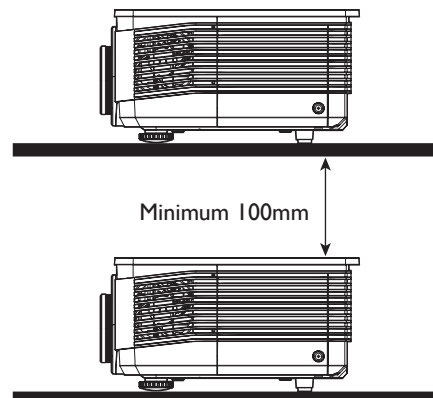
- **Table**



- **Ceiling**



- **Stacking**

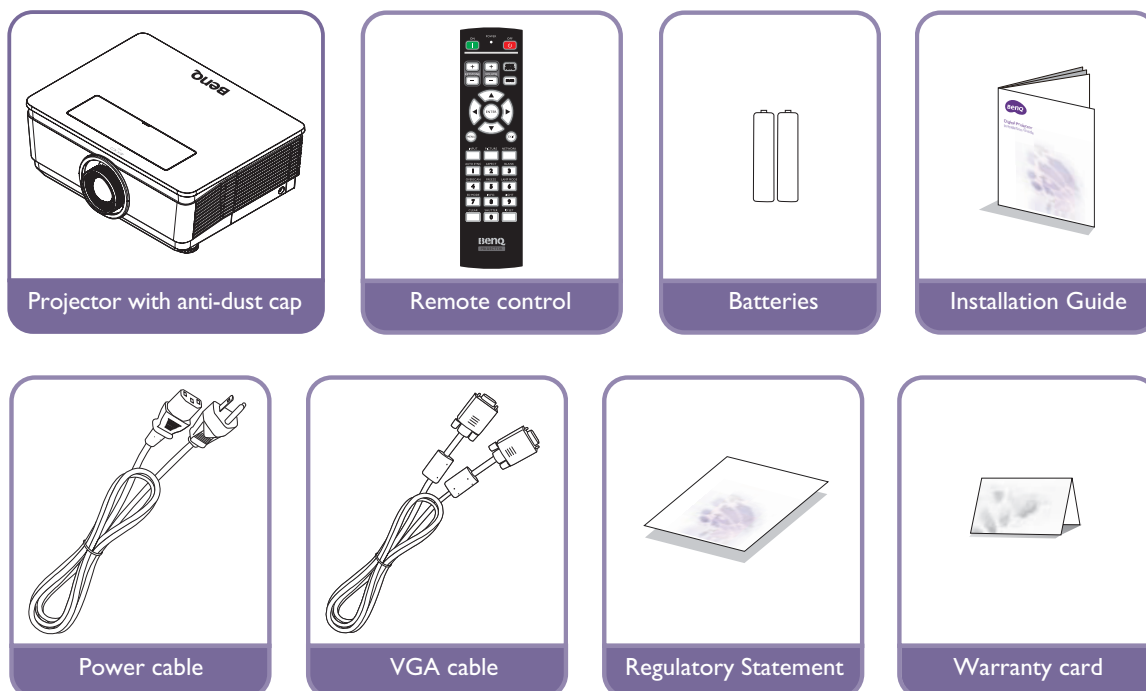


When edge blending

- To avoid the image shaking or some pixels in the display may be misaligned, do not use the projector in the following location:
 - In a building close to a construction site.
 - In a room where an air conditioner unit is working and it vibrates.
 - In a place where the temperature changes dramatically that may cause thermal contraction.
- Before making any adjustment, leave the projector lit for at least 15 minutes after its light source is turned on. This allows the internal temperature of the projector to stabilize.

Product information

Packing content



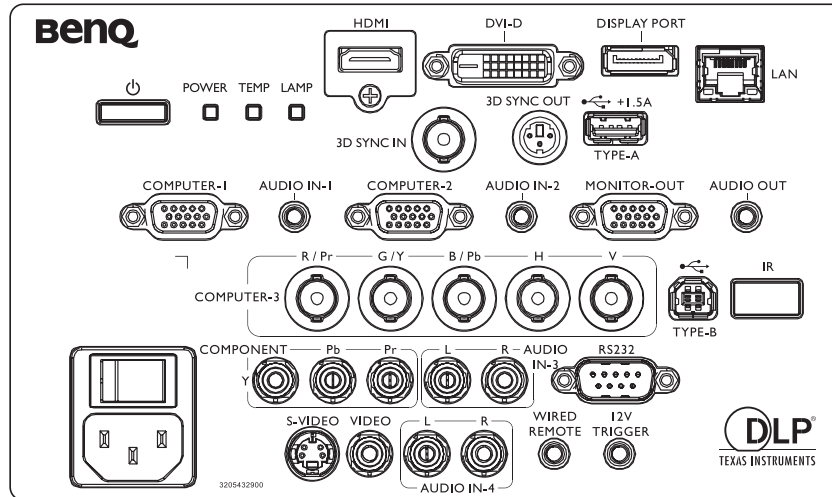
Specification

	PX9230
Projection system	DLP Single 0.7 XGA DMD Chip
Native resolution	1024*768 pixels, 4:3
Brightness	6000 Lumens
Light source	UHP Lamp
Power consumption	480Watts (Normal mode)/ 355Watts (Eco mode)
Dimension	431.0 × 167.0 × 320.5 mm
Weight	8.5 kg (without lens)

Note:

- The brightness is supplied by standard lens, the value will depends on lenses.
- The brightness output will vary depending on each units and actual usage.
- Please find the latest user's manual on the local website.

Terminals



HDMI

Connection to HDMI source.

DISPLAY PORT

Connection to DISPLAY PORT source.

3D SYNC IN

Connect 3D sync in cable from a computer or an enabled device.

USB 1.5A

Support 5V/1.5A output.

AUDIO IN-1/2

Connection to an audio input source via an audio cable.

AUDIO OUT

Connection to a speaker or headset.

USB TYPE-B

Maintenance exclusive port for authorized maintenance personnel only.

AUDIO IN-3/-4(L/R)

Connection to an audio input source via an audio or audio L/R cable.

S-VIDEO

Connection to S-VIDEO source.

WIRED REMOTE

Connection to remote control for wire remote control.

DVI-D

Connection to DVI source.

LAN

For connection to RJ45 Cat5/Cat6 Ethernet cable to control the projector through a network.

3D SYNC OUT

Connection to 3D IR sync signal transmitter.

COMPUTER-1, COMPUTER-2

15-pin VGA port for connection to RGB, component HD source, or PC.

MONITOR OUT

Connection to other display equipment for concurrent playback display.

COMPUTER-3 (R/Pr, G/Y, B/Pb, H, V)

Connection to RGB signal with BNC type input terminal.

COMPONENT (Y, Pb, Pr)

Connect to Component source.

RS-232

Standard 9-pin D-sub interface for connection to PC control system and projector maintenance.

VIDEO

Connection to a video source.

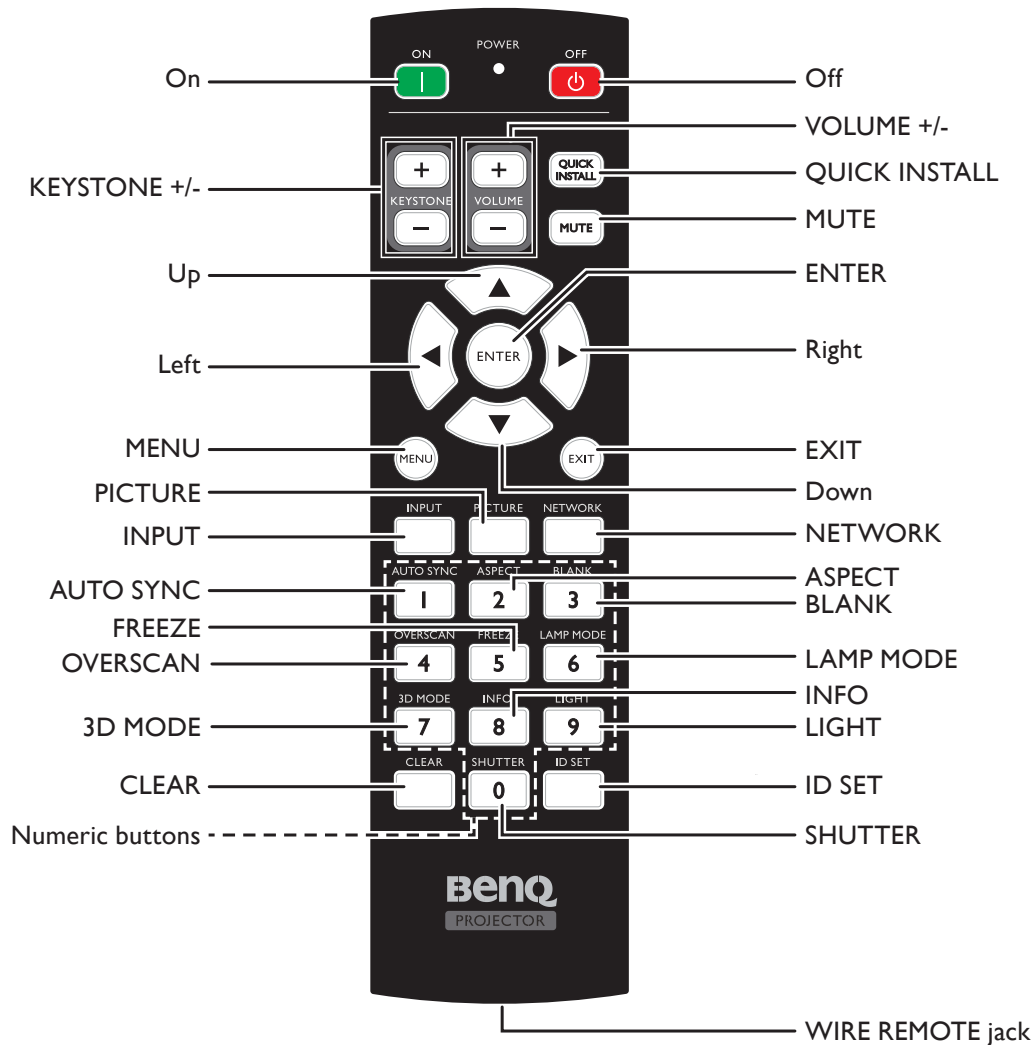
12V TRIGGER

3.5mm mini earphone jack, employs 200mA display relay to provide 12(+/-1.5)V output and short circuit protection.

Caution:

Make sure the port is valid before inserting a wired remote controller. The remote controller may be damaged in case of an invalid port, e.g. a wired remote controller is connected to trigger output.

Remote control



• Remote ID setting

Press **ID SET** to set remote ID.

Press **ID SET** for three seconds. The **POWER** indicator on the remote control blinks, then press 01~99 to designate an ID.

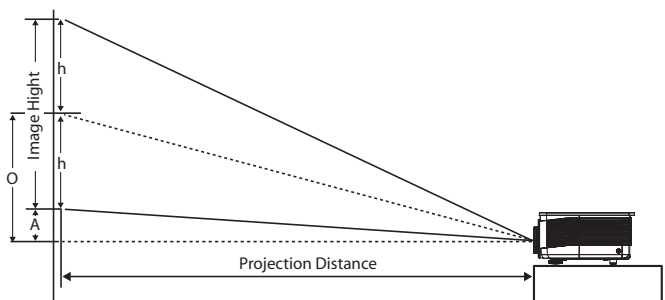
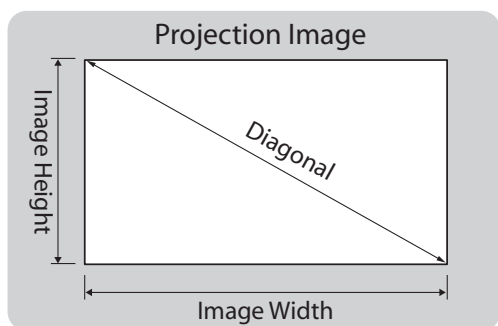
Press **CLEAR** and **ID SET** for five seconds. The **POWER** indicator on the remote control blinks a single instance to signify a switch from control by projector only or control by projector to remote control.

Installation

Lens

Model	Lens Type	Part Number	Throw Ratio	Lens Shift
LS2ST3	Wide fix	5J.JDH37.002	0.81	Vertical: -10%-50% Horizontal: -5%-5%
LS2ST1	Wide zoom	5J.JDH37.011	1.14-1.347	Vertical: -10%-50% Horizontal: -5%-5%
LS2SD2	Standard	5J.JEN37.001	1.6-2	Vertical: -10%-50% Horizontal: -5%-5%
LS2LT1	Semi long	5J.JDH37.032	2-3	Vertical: -10%-50% Horizontal: -5%-5%
LS2LT2	Long zoom	5J.JDH37.041	3.11-5.18	Vertical: -10%-50% Horizontal: -5%-5%

Projection table



Screen size						Wide Fix Lens		Wide Zoom Lens				Standard Lens			
Diagonal		Width		Height		Distance									
						NA		Wide		Tele		Wide		Tele	
Inch	m	Inch	m	Inch	m	Inch	m	Inch	m	Inch	m	Inch	m	Inch	m
80	2.03	64	1.63	48	1.22	52	1.32	73	1.85	86	2.19	102	2.60	128	3.25
100	2.54	80	2.03	60	1.52	65	1.65	91	2.32	108	2.74	128	3.25	160	4.06
120	3.05	96	2.44	72	1.83	78	1.98	109	2.78	129	3.28	154	3.90	192	4.88
150	3.81	120	3.05	90	2.29	97	2.47	137	3.47	162	4.11	192	4.88	240	6.10
200	5.08	160	4.06	120	3.05	130	3.29	182	4.63	216	5.47	256	6.50	320	8.13
300	7.62	240	6.10	180	4.57	194	4.94	274	6.95	323	8.21	384	9.75	480	12.19
400	10.16	320	8.13	240	6.10	259	6.58	365	9.27	431	10.95	512	13.00	640	16.26

Screen size						Semi Long Lens				Long Zoom			
Diagonal		Width		Height		Distance							
						Wide		Tele		Wide		Tele	
Inch	m	Inch	m	Inch	m	Inch	m	Inch	m	Inch	m	Inch	m
80	2.03	64	1.63	48	1.22	128	3.25	192	4.88	199	5.06	332	8.42
100	2.54	80	2.03	60	1.52	160	4.06	240	6.10	249	6.32	414	10.53
120	3.05	96	2.44	72	1.83	192	4.88	288	7.32	299	7.58	497	12.63
150	3.81	120	3.05	90	2.29	240	6.10	360	9.14	373	9.48	622	15.79
200	5.08	160	4.06	120	3.05	320	8.13	480	12.19	498	12.64	829	21.05
300	7.62	240	6.10	180	4.57	480	12.19	720	18.29	746	18.96	1243	31.58
400	10.16	320	8.13	240	6.10	640	16.26	960	24.38	995	25.28	1658	42.10

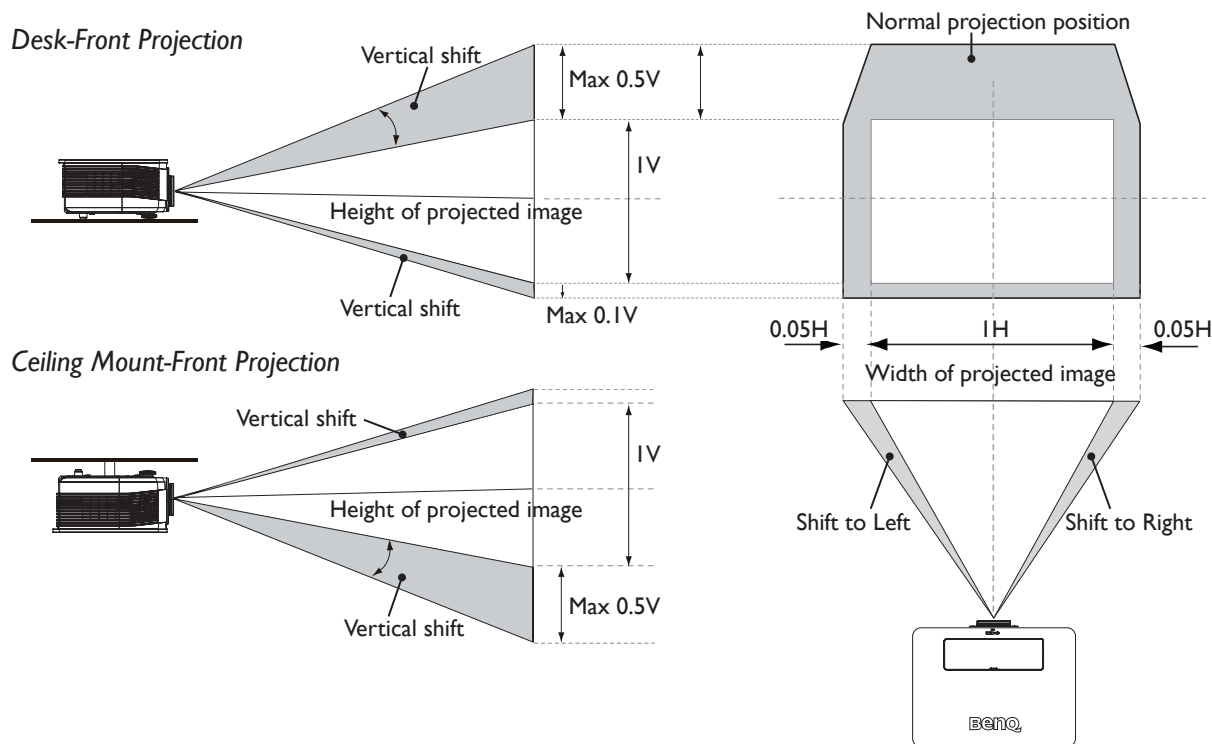
 Note:

- Ceiling installation must be done by a qualified professional. Contact your dealer for more information. It is not recommended you install the projector yourself.
- Only use the projector on a solid, level surface. Serious injury and damage can occur if the projector is dropped.
- Do not use the projector in an environment where extreme temperature occurs. The projector must be used at temperatures between 41 degrees Fahrenheit (5 degrees Celsius) and 104 degrees Fahrenheit (40 degrees Celsius).
- Screen damage will occur if the projector is exposed to moisture, dust or smoke.
- Do not cover the vents on the projector. Proper ventilation is required to dissipate heat. Damage to the projector will occur if the vents are covered.

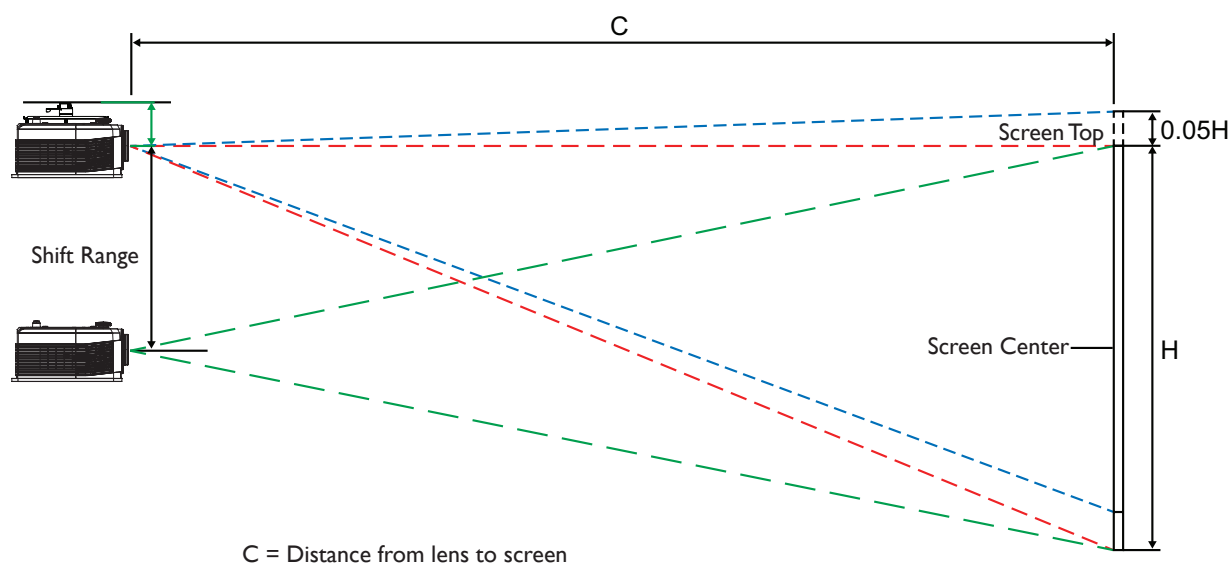
Lens shift range

• Lens shift adjustable range

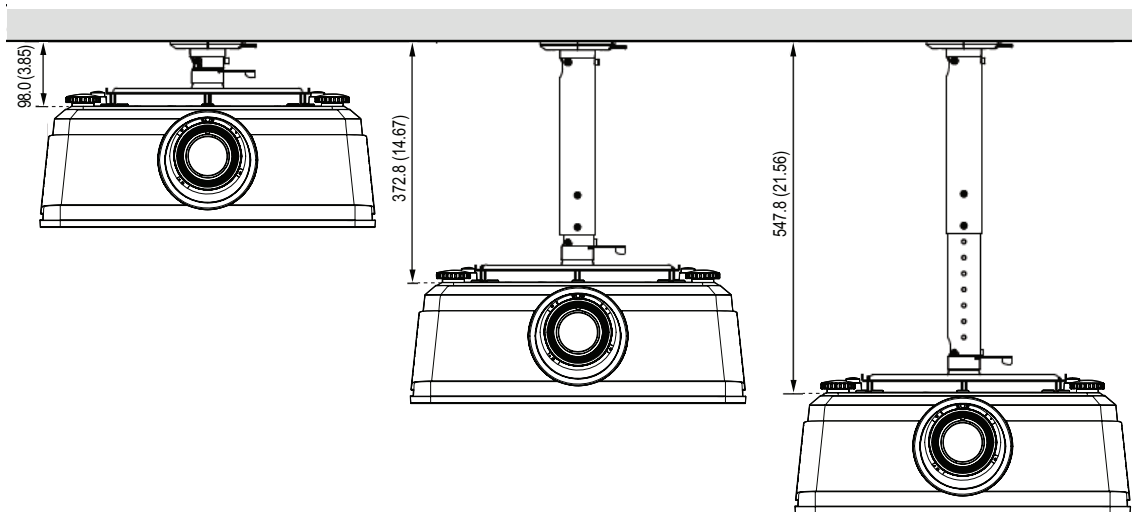
The adjustable range for lens shift is tabulated below and subject to the conditions listed.



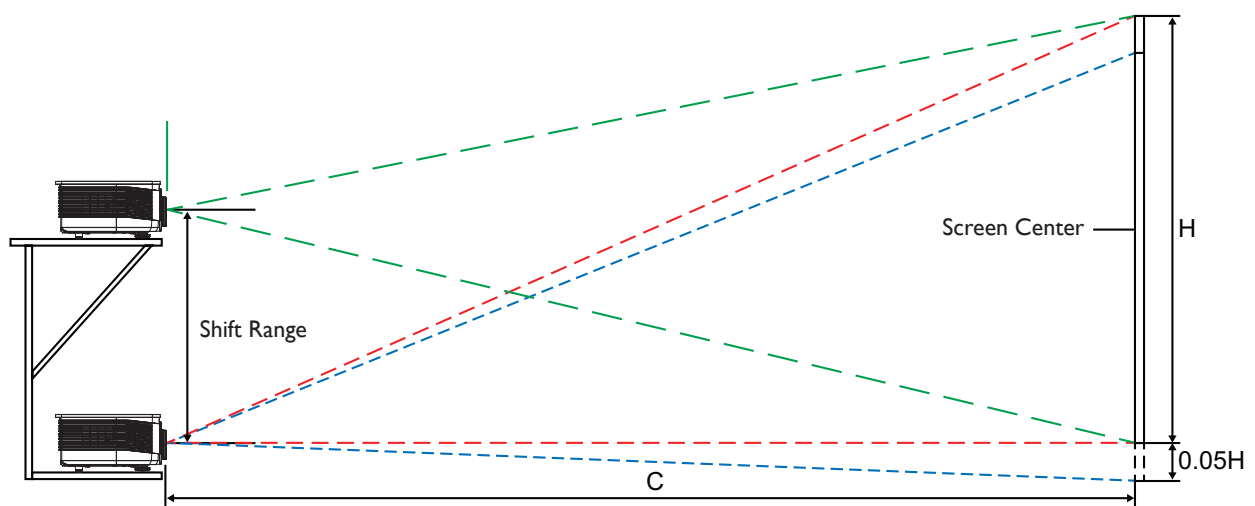
• Ceiling Mount Installation



BenQ PN	Description
5J.JCY10.001	Ceiling mount (CM00G4)

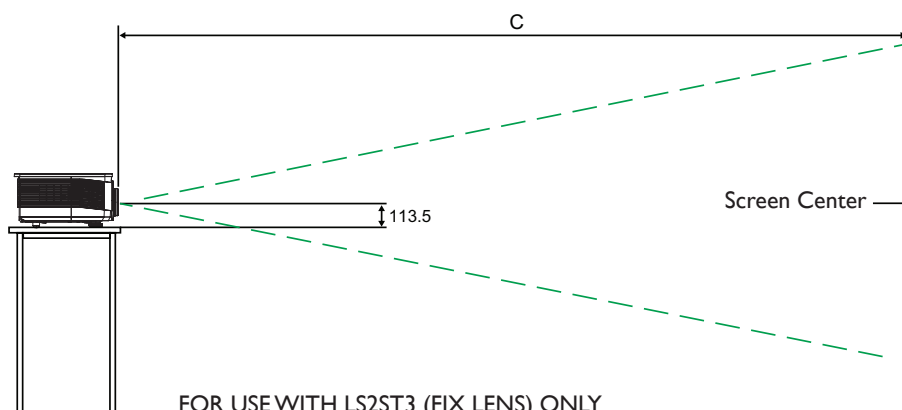


• Desktop Installation



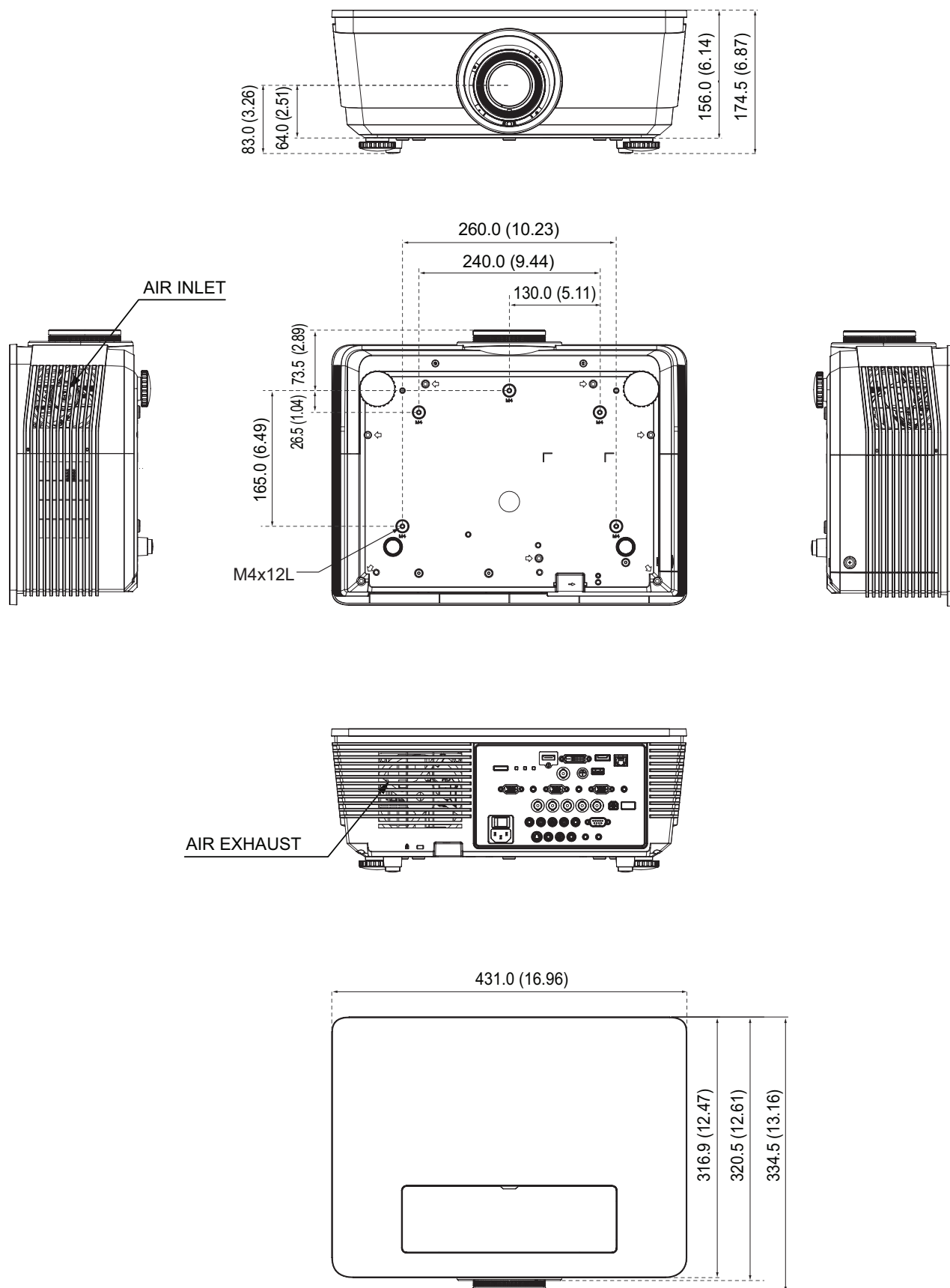
Note:

- The drawings apply to the standard lens only.
- Lens Shift feature is not available to LS2ST3 (Fix Lens). This lens should be used for "zero degree"/"no-offset" applications. See below:



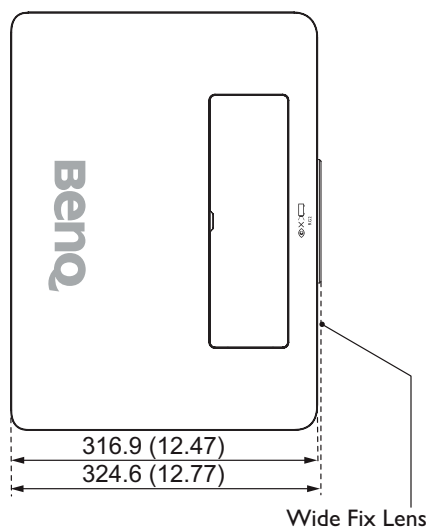
FOR USE WITH LS2ST3 (FIX LENS) ONLY

Projector dimension

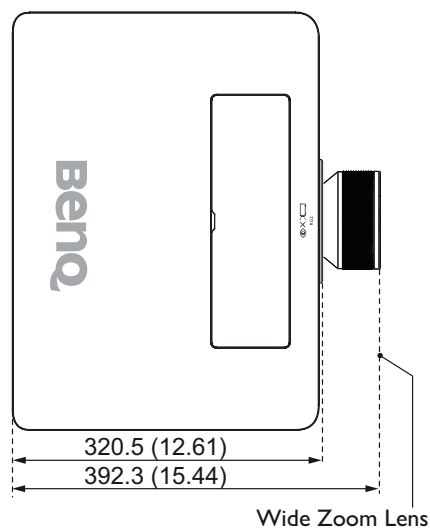


Lens dimension

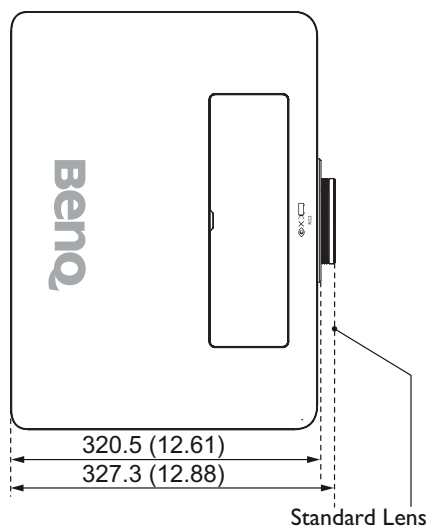
Optional Lens (Wide Fix: LS2ST3)



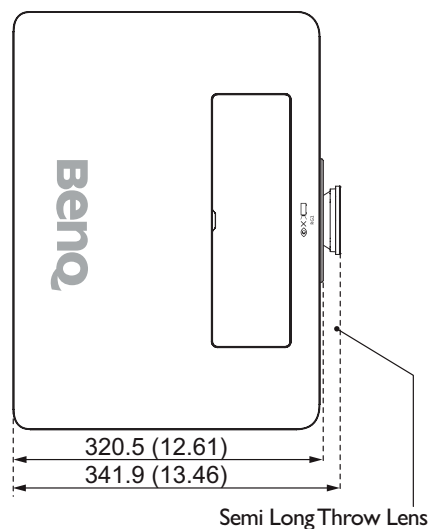
Optional Lens (Wide Zoom: LS2ST1)



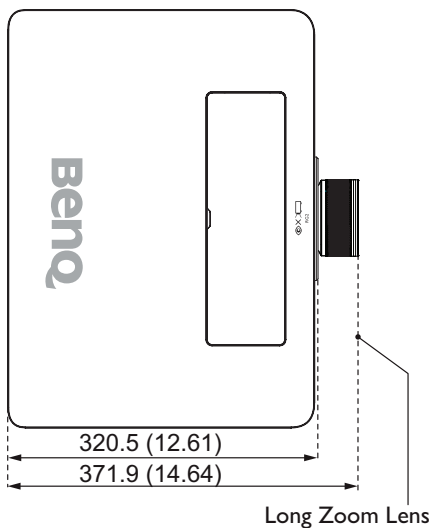
Optional Lens (Standard: LS2SD2)



Optional Lens (Semi Long Throw: LS2LT1)



Optional Lens (Long Zoom: LS2LT2)

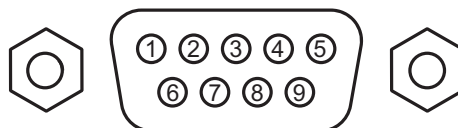


RS232 command

RS232 pin assignment

No.	Serial
1	N.C
2	RXD
3	TXD
4	N.C
5	Ground

No.	Serial
6	N.C
7	Short with pin8
8	Short with pin7
9	N.C



Function	Type	Operation	ASCII
Power	Write	Power On	<CR>*pow=on#<CR>
	Write	Power off	<CR>*pow=off#<CR>
	Read	Power Status	<CR>*pow=?#<CR>
Source Selection	Write	COMPUTER/YPbPr	<CR>*sour=RGB#<CR>
	Write	COMPUTER 2/YPbPr2	<CR>*sour=RGB2#<CR>
	Write	COMPUTER 3/YPbPr3	<CR>*sour=RGB3#<CR>
	Write	Component	<CR>*sour=ypbr#<CR>
	Write	DVI-D	<CR>*sour=dvid#<CR>
	Write	HDMI(MHL)	<CR>*sour=hdmi#<CR>
	Write	Composite	<CR>*sour=vid#<CR>
	Write	S-Video	<CR>*sour=svid#<CR>
	Write	DP	<CR>*sour=dp#<CR>
	Read	Current source	<CR>*sour=?#<CR>
Audio Control	Write	Mute On	<CR>*mute=on#<CR>
	Write	Mute Off	<CR>*mute=off#<CR>
	Read	Mute Status	<CR>*mute=?#<CR>
	Write	Volume +	<CR>*vol=+#<CR>
	Write	Volume -	<CR>*vol=-#<CR>
	Write	Volume level for customer	<CR>*vol=value#<CR>
	Read	Volume Status	<CR>*vol=?#<CR>
Audio source select	Write	Audio pass Through off	<CR>*audiosour=off#<CR>
	Write	Audio-Computer1	<CR>*audiosour=RGB#<CR>
	Write	Audio-Computer2	<CR>*audiosour=RGB2#<CR>
	Write	Audio-Video/S-Video	<CR>*audiosour=vid#<CR>
	Write	Audio-Component	<CR>*audiosour=ypbr#<CR>
	Write	Audio-HDMI	<CR>*audiosour=hdmi#<CR>
	Read	Audio pass Status	<CR>*audiosour=?#<CR>
Picture Setting	Write	Presentation	<CR>*appmod=preset#<CR>
	Write	sRGB	<CR>*appmod=srgb#<CR>
	Write	Bright	<CR>*appmod=bright#<CR>
	Write	Standard/Vivid	<CR>*appmod=std#<CR>
	Write	User1	<CR>*appmod=user1#<CR>
	Write	User2	<CR>*appmod=user2#<CR>
	Write	3D	<CR>*appmod=threed#<CR>
	Write	Contrast +	<CR>*con=+#<CR>

Function	Type	Operation	ASCII
Picture Setting	Write	Contrast -	<CR>*con=-#<CR>
	Read	Contrast value	<CR>*con=?#<CR>
	Write	Brightness +	<CR>*bri=+#<CR>
	Write	Brightness -	<CR>*bri=-#<CR>
	Read	Brightness value	<CR>*bri=?#<CR>
	Write	Color +	<CR>*color=+#<CR>
	Write	Color -	<CR>*color=-#<CR>
	Read	Color value	<CR>*color=?#<CR>
	Write	Sharpness +	<CR>*sharp=+#<CR>
	Write	Sharpness -	<CR>*sharp=-#<CR>
	Read	Sharpness value	<CR>*sharp=?#<CR>
	Write	Color Temperature-Warm	<CR>*ct=warm#<CR>
	Write	Color Temperature-Normal	<CR>*ct=normal#<CR>
	Write	Color Temperature-Cool	<CR>*ct=cool#<CR>
	Read	Color Temperature Status	<CR>*ct=?#<CR>
	Write	Aspect 4:3	<CR>*asp=4:3#<CR>
	Write	Aspect 16:9	<CR>*asp=16:9#<CR>
	Write	Aspect 16:10	<CR>*asp=16:10#<CR>
	Write	Aspect Auto	<CR>*asp=AUTO#<CR>
	Write	Aspect Real	<CR>*asp=REAL#<CR>
	Read	Aspect Status	<CR>*asp=?#<CR>
	Write	Digital Zoom In	<CR>*zoomI#<CR>
	Write	Digital Zoom out	<CR>*zoomO#<CR>
	Write	Auto	<CR>*auto#<CR>
	Write	Brilliant color on	<CR>*BC=on#<CR>
	Write	Brilliant color off	<CR>*BC=off#<CR>
	Read	Brilliant color status	<CR>*BC=?#<CR>
Operation Settings	Write	Projector Position-Front Table	<CR>*pp=FT#<CR>
	Write	Projector Position-Rear Table	<CR>*pp=RE#<CR>
	Write	Projector Position-Rear Ceiling	<CR>*pp=RC#<CR>
	Write	Projector Position-Front Ceiling	<CR>*pp=FC#<CR>
	Read	Projector Position Status	<CR>*pp=?#<CR>
	Write	Quick cooling on	<CR>*qcool=on<CR>
	Write	Quick cooling off	<CR>*qcool=off<CR>
	Read	Quick cooling status	<CR>*qcool=?<CR>
	Write	Quick auto search	<CR>*QAS=on#<CR>
	Write	Quick auto search	<CR>*QAS=off#<CR>
	Read	Quick auto search status	<CR>*QAS=?#<CR>
	Write	Direct Power On-on	<CR>*directpower=on#<CR>
	Write	Direct Power On-off	<CR>*directpower=off#<CR>
	Read	Direct Power On-Status	<CR>*directpower=?#<CR>
	Write	Signal Power On-on	<CR>*autopower=on#<CR>
	Write	Signal Power On-off	<CR>*autopower=off#<CR>
	Read	Signal Power On-Status	<CR>*autopower=?#<CR>
	Write	Standby Settings-Network on	<CR>*standbynet=on#<CR>
	Write	Standby Settings-Network off	<CR>*standbynet=off#<CR>
	Read	Standby Settings-Network Status	<CR>*standbynet=?#<CR>
	Write	Standby Settings-Monitor Out on	<CR>*standbymnt=on#<CR>
	Write	Standby Settings-Monitor Out off	<CR>*standbymnt=off#<CR>
	Read	Standby Settings-Monitor Out Status	<CR>*standbymnt=?#<CR>

Function	Type	Operation	ASCII
Baud Rate	Write	2400	<CR>*baud=2400#<CR>
	Write	4800	<CR>*baud=4800#<CR>
	Write	9600	<CR>*baud=9600#<CR>
	Write	14400	<CR>*baud=14400#<CR>
	Write	19200	<CR>*baud=19200#<CR>
	Write	38400	<CR>*baud=38400#<CR>
	Write	57600	<CR>*baud=57600#<CR>
	Write	115200	<CR>*baud=115200#<CR>
	Read	Current Baud Rate	<CR>*baud=?#<CR>
Lamp Control	Read	Lamp Hour	<CR>*ltim=?#<CR>
	Write	Normal mode	<CR>*lampm=lnor#<CR>
	Write	Eco mode	<CR>*lampm=eco#<CR>
	Read	Lamp Mode Status	<CR>*lampm=?#<CR>
Miscellaneous	Read	Model Name	<CR>*modelname=?#<CR>
	Write	Blank On	<CR>*blank=on#<CR>
	Write	Blank Off	<CR>*blank=off#<CR>
	Read	Blank Status	<CR>*blank=?#<CR>
	Write	Freeze On	<CR>*freeze=on#<CR>
	Write	Freeze Off	<CR>*freeze=off#<CR>
	Read	Freeze Status	<CR>*freeze=?#<CR>
	Write	Menu On	<CR>*menu=on#<CR>
	Write	Menu Off	<CR>*menu=off#<CR>
	Write	Up	<CR>*up#<CR>
	Write	Down	<CR>*down#<CR>
	Write	Right	<CR>*right#<CR>
	Write	Left	<CR>*left#<CR>
	Write	Enter	<CR>*enter#<CR>
	Write	3D Sync Off	<CR>*3d=off#<CR>
	Write	3D Auto	<CR>*3d=auto#<CR>
	Write	3D Sync Top Bottom	<CR>*3d=tb#<CR>
	Write	3D Sync Frame Sequential	<CR>*3d=fs#<CR>
	Write	3D Frame packing	<CR>*3d=fp#<CR>
	Write	3D Side by side	<CR>*3d=sbs#<CR>
	Write	3D inverter disable	<CR>*3d=da#<CR>
	Write	3D inverter	<CR>*3d=iv#<CR>
	Write	3D nVIDIA	<CR>*3d=nvidia#<CR>
	Read	3D Sync Status	<CR>*3d=?#<CR>
	Write	Remote Receiver-front+rear	<CR>*rr=fr#<CR>
	Write	Remote Receiver-front	<CR>*rr=f#<CR>
	Write	Remote Receiver-rear	<CR>*rr=r#<CR>
	Read	Remote Receiver Status	<CR>*rr=?#<CR>
	Write	AMX Device Discovery-on	<CR>*amxdd=on#<CR>
	Write	AMX Device Discovery-off	<CR>*amxdd=off#<CR>
	Read	AMX Device Discovery Status	<CR>*amxdd=?#<CR>
	Read	Mac Address	<CR>*macaddr=?#<CR>
	Write	High Altitude mode on	<CR>*Highaltitude=on#<CR>
	Write	High Altitude mode off	<CR>*Highaltitude=off#<CR>
	Read	High Altitude mode status	<CR>*Highaltitude=?#<CR>
Service	Write	Error code system enable	<CR>*error=enable#<CR>
	Read	Error Code report	<CR>*error=report#<CR>