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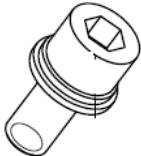

About the VIVITEK Support 11

Important Notice

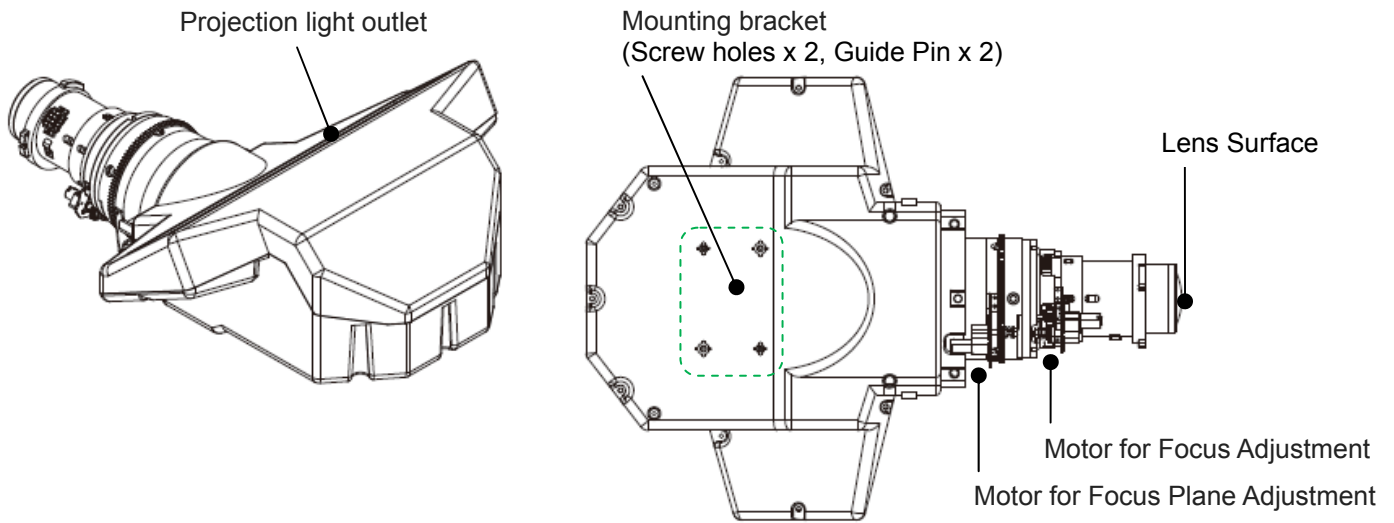
Before using the Ultra Short Lens, make sure to read below important notice.

- Be sure to turn the power off and disconnect the power cable from the wall outlet before replacing the Lens. Improper operation may cause to electrical shock or injury to eyes by intense light from the projector.
- Please remove the lens cap before installing the lens to the projector, the projection light may heat the lens cap and melt it, this may raise safety issue or damage the projector.
- Make sure the projective film on the Lens is removed before turning on the projector; the protective film may be melt during projection then resulting in damage or deformation.
- Do not place any object near the projection light path, the intense light from the projection lens may result in fire or burn injures.
- Use a clean, soft and dry cloth or Lens cleaning wipes to wipe away dirt or dust adhered on the lens.
- Do not use the cloth containing oil, dust or water for cleaning. Once dust and dirt adhered on the lens surface, please clean the glass with lens cleaning wipe.
- Keep all the original packing material even you finish the installation, the packing material may be used for avoiding damage during transportation.

Packing Check List

Item	Part	Description	Qty.
1		Ultra short throw with adaptor bracket	1
2		Bracket assembly This bracket assembly is composed by one base bracket and four arms, it's is a part of support kit for joining Ultra Short Throw Lens and the projector. Use flat screw to fix the bracket assembly on the bottom of the projector and joint the arm with projection lens by hex socket cap screw.	2
3		Flat screw 4*0.7*20mm: The screws are used for fixing bracket assembly to the bottom of the projector	1
4		Hex socket cap screw, 6*1*14 mm Hex socket cap screws are used for jointing the arm of bracket assembly and the projection lens.	2
5		Wrench The wrench is used to drive hex socket cap screw	1

Projection Lens Overview



Note

- There is one lens cap to cover the lens cap, please remove the lens cap before installing the lens to the projector. The projected light may heat the lens cap and melt it; it may raise safety issue or damage the projector.
- One protective film is attached on projection light outlet for avoiding scratch or dust on this protection surface, please remove the protective film before tuning on the projector. Improper operation may cause to the projective film.

Installing the Projection Lens

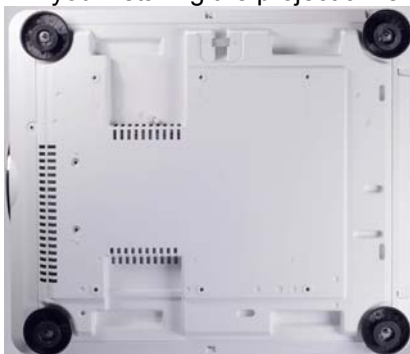
Before Installing the Projection Lens

The lens is designed to allow large image projection, which allowable throw distance is limited. The image is projected to the rear of the projector through the front top of the projector. For the best projected image quality, please take close notice on the following points:

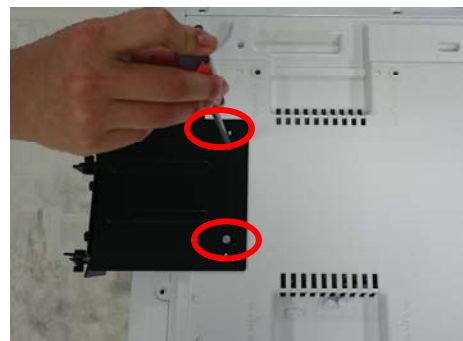
- Make sure all the accessories are ready.
- Make sure that the projector power supply is switched off before attaching or detaching the projection lens
- Place the projector on a flat table; this can be helpful to install the projection lens more convenient.
- Do not touch the electric contact points of the projection lens or it may cause to contact malfunctions.
- Do not touch the glass of the lens, the fingerprints or smudges on the glass may be magnified and lower the quality of Projected image.
- After removing the projection lens, store it safely away from vibration or impacts. Suggest you to keep it in the original package after you take it out from the projector
- Make sure to loosen the screws at the joints of support kits before fine tuning the lens position or performing Center Lens function, improper operation may cause to malfunctioned Lens shift or damage the projection lens.
- Make sure Lens type setting is changed to Non-UST Lens from OSD menu once you change to other projection lens. The default lens position of Ultra short Throw Lens (UST Lens) is different to other zoom lenses; the setting may limit the lens shift range and move the lens to different initial lens position after you perform Center Lens function.
- Make sure Lens Control Lock on OSD is disabling before performing lens adjustment. The Lens Shift, Zoom, Focus and Center Lens functions are disabled if turning on Lens Control Lock.
- For best projection effect, recommend to use flat screen and place the projector in parallel with the projector. The image may be distorted if the projection screen is not flat or not in parallel with the rear of projector,
- Check if the support kit is installed properly if the projection image is not clear after adjusting the focus and focus plane

Starting the lens Installation

1. Turn over the projector as below figure, the front of the projector is aligned with the edge of the table. This can help you installing the projection lens more convenient.



2. Assemble bracket assembly on the bottom of the projector with two flat screws
Align the hole on the bracket with two guide pin on the bottom of the projector, use screw driver to fix two flat screws as below figure.



3. Turn over the projector to the front as below figure.



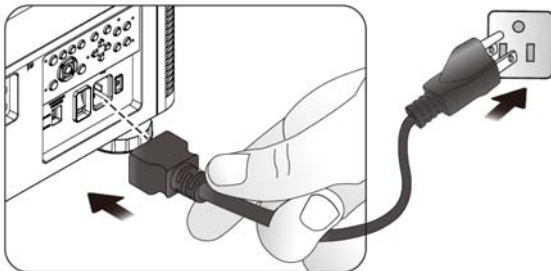
4. Align the "↑" symbol on the lens label with the "*" symbol on the top cover of the projector (align to the center of the lens hole), and pull in the lens. Make sure the lens is pushed into the holder and turn it clockwise to the "Lock" position.



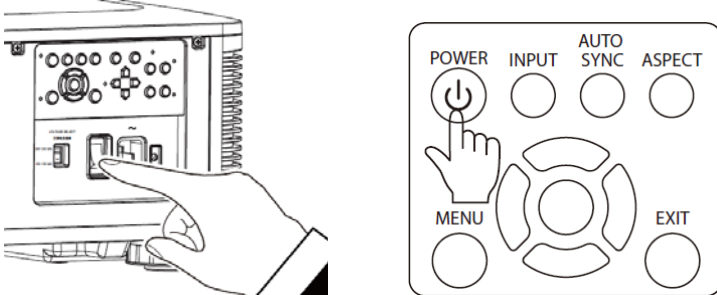
Note:

- Before installing the lens on the projector, recommend to place the projector on a table and the front of the projector is aligned with the edge of the table. This can help you installing the projection lens more convenient.

5. Adjust the projecting position of Lens:
 - a. Plunge in the power cable



- b. Turn on the AC switch then turn the projector on by power button.



CAUTION:

Make sure the projective film on the Lens is removed before turning on the projector; the protective film may be melt during projection then resulting in damage or deformation.

c. Enter OSD menu then select Lens type option on ALIGNMENT page, press Enter or ► button to choose UST Lens option. The projector can move the lens to initial workable position for Ultra Short Throw lens automatically after performing Center Lens function as following step.

INPUT	PICTURE	ALIGNMENT	CONTROL	SERVICE
Lens Lock			Off	←/▶
Lens Control				←/▶
Lens Type			non-UST Lens	←/▶
Lens Memory				←/▶
Center Lens				←/▶
Digital Zoom				←/▶
Warp				←/▶
Blanking				←/▶
Edge Blend				←/▶
Screen Format			16:10	

EXIT = Back Item Adjust ◀▶ Scroll ▲▼

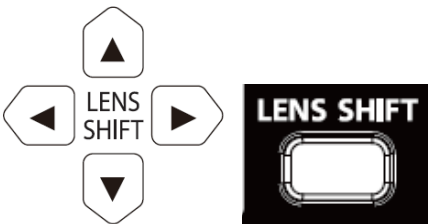
d. Perform Center Lens function to calibrate projection lens by the control button or OSD menu, the calibration can get more precise lens adjustment and move the lens to workable position automatically for the projection.

Note:

- Setting Lens type option to UST Lens will change the default lens position after performing Center Lens function, please select UST Lens in this option if using ultra short throw lens. Otherwise, please select non-UST lens. Improper setting may limit the lens shift range and move the lens to incorrect default position after performing Center Lens function.

6. Fine tune the projected image position

The initial position can get best projection performance, some of Vivitek projectors may offers wider adjustable shift range for flexibility in installation, the adjustable shift range are ±5% in horizontal shift, +7% for moving up, -3% for moving down. Please tune the lens shift to desired position by Lens Shift buttons on the control panel or remote control, and check the projection performance.



Note:

- Make sure to loosen the screws at the joints of support kits before fine tuning the lens position or performing Center Lens function, improper operation may cause to malfunctioned Lens shift or damage the projection lens.

7. Attach the metal arm to the bracket on the projection lens

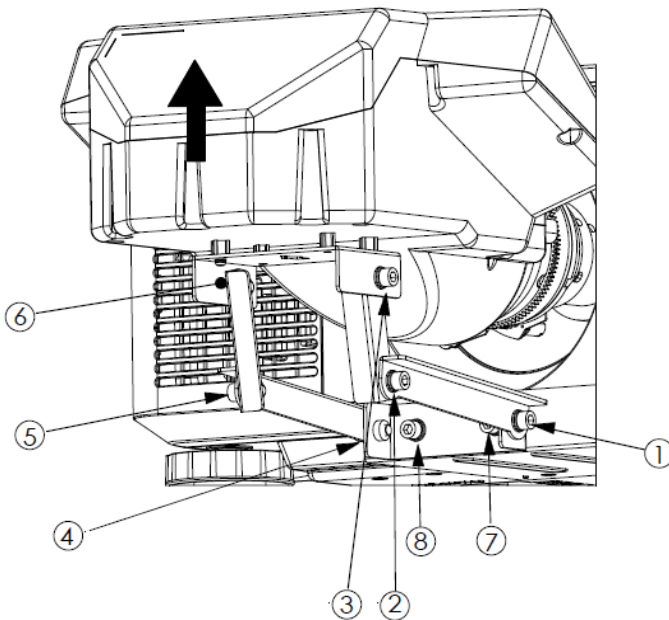
Use two screws to attach the metals arm to the bracket on the projection lens as below figure, the screws shall be kept loose till you finish all of necessary lens shift adjustment.



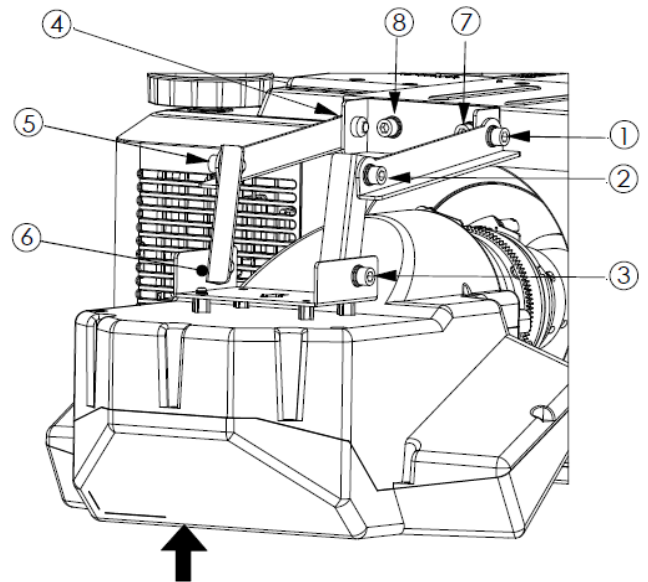
8. Tighten the screws to fix the projection lens
 Hold the lens and lift it a little in the opposite direction of gravity and use wrench to tighten each screw according to the sequence as below illustration.



Table Installation



Ceiling Installation

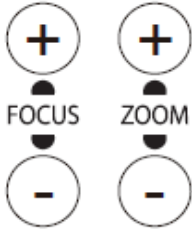


Note:

- The projection lens is fixed firmly after you tighten the screws; make sure to loosen all of the screws on the support kits before operating Lens Shift or Lens Center function.
- Some of Vivitek projectors may offer wider adjustable shift range for flexibility in installation, the initial position by Center Lens can get best projected performance please check the performance of the projected image if adjusting the lens position.

9. Adjust the focus and focus plane.

The lens is equipped with powered adjustment for the focus and focus plane, you can adjust the focus effect by ZOOM or FOCUS button on the remote control or control panel.



Focus Adjustment : Adjust focus effect by FOCUS +/- buttons

ZOOM +/- buttons: Adjust the focus plan by ZOOM +/- buttons

- Press FOCUS+ or FOCUS- button and check the focus effect on central area of the screen till the image becomes clear and the focus effect is acceptable.
- Check top and bottom area of the projected image if the image is clear. If not, press ZOOM+ or ZOOM – button to adjust the focus plane to get the clear image on top or bottom area.
- Repeat a and b till full image becomes clear.

Note.

- For best projection effect, recommend to use flat screen and place the projector in parallel with the projector. The image may be distorted if the projection screen is not flat or not in parallel with the rear of projector,
- Check if the support kit is installed properly if the projection image is not clear after adjusting the focus and focus plane.

10. Lock the Lens control

If your projector is with Lens Lock function on OSD, recommend to lock the Lens Control for avoiding disoperation or unauthorized lens adjustment after you finish the installation and adjustment.

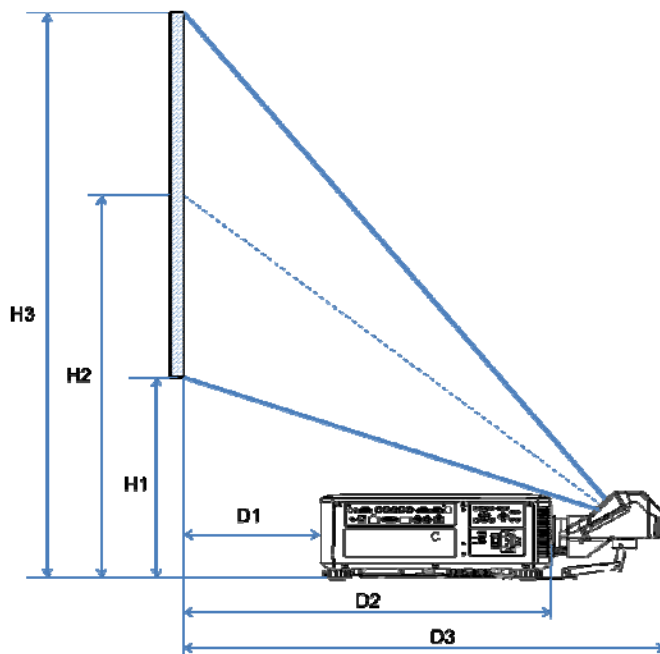
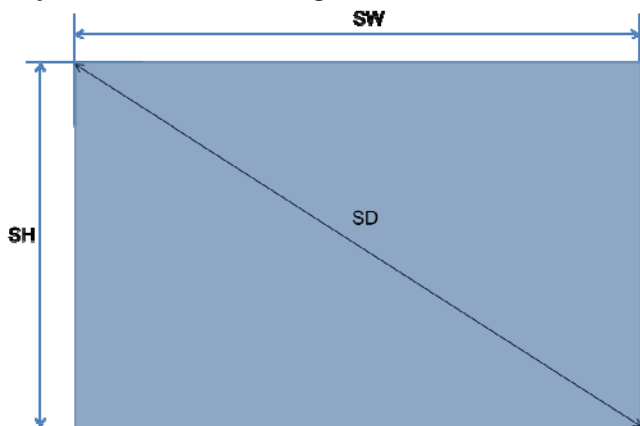
INPUT	PICTURE	ALIGNMENT	CONTROL	SERVICE
			Lens Lock	Off ↔/▶
			Lens Control	↔/▶
			Lens Type	non-UST Lens ↔/▶
			Lens Memory	↔/▶
			Center Lens	↔/▶
			Digital Zoom	↔/▶
			Warp	↔/▶
			Blanking	↔/▶
			Edge Blend	↔/▶
			Screen Format	16:10
EXIT = Back		Item Adjust ◀▶		Scroll ▲▼

Note:

- After the projection lens is fixed by support kit, improper lens shift operation may cause to imprecise lens shift adjustment or damage. Before adjusting the lens position, please make sure all of hex socket cap screws at the joints are loosen, the arm or bracket can be moved.
- In case of disoperation on lens control function happens, please detach the hex socket cap screw then perform Center Lens function to calibrate the lens parameter for precise lens adjustment.

Projection Distance and Size

Project Distance and Image Size



- SD : The diagonal length of the projected image
- SW : Projected image width
- SH : Projected image height
- D1 : The distance from the screen to the rear cover of the projector
- D2 : The distance from the screen to the front cover of the projector
- D3 : The distance from the screen to the front edge of Ultra Short Lens.
- H1 : The height from the bottom of the projector to the bottom edge of the projected image.
- H2 : The height from the bottom of the projector to the center of the projected image.
- H2 : The height from the bottom of the projector to the top edge of the projected image.

SD	SW		SH		D3		D2		D1		H3		H2		H1	
	inch	m	inch	m	inch	m	inch	m	inch	m	inch	m	inch	m	inch	m
100	2.17	85.26	1.36	53.36	0.85	33.42	0.56	22.12	-0.02	-0.95	2.08	81.97	1.40	55.25	0.73	28.61
110	2.38	93.80	1.49	58.71	0.92	36.40	0.64	25.10	0.05	2.03	2.28	89.63	1.53	60.24	0.79	30.92
120	2.60	102.32	1.63	64.04	1.00	39.38	0.71	28.08	0.13	5.01	2.47	97.25	1.66	65.21	0.84	33.22
130	2.81	110.82	1.76	69.37	1.08	42.36	0.79	31.06	0.20	7.99	2.66	104.90	1.78	70.19	0.90	35.53
140	3.03	119.33	1.90	74.69	1.15	45.34	0.86	34.04	0.28	10.97	2.86	112.53	1.91	75.17	0.96	37.83
150	3.25	127.83	2.03	80.02	1.23	48.32	0.94	37.02	0.35	13.95	3.05	120.15	2.04	80.14	1.02	40.13
160	3.46	136.36	2.17	85.36	1.30	51.30	1.02	40.00	0.43	16.93	3.25	127.81	2.16	85.13	1.08	42.45
170	3.68	144.89	2.30	90.70	1.38	54.28	1.09	42.98	0.51	19.90	3.44	135.45	2.29	90.11	1.14	44.75
180	3.90	153.42	2.44	96.04	1.45	57.25	1.17	45.96	0.58	22.88	3.63	143.10	2.42	95.10	1.20	47.06
190	4.11	161.95	2.58	101.39	1.53	60.23	1.24	48.93	0.66	25.86	3.83	150.76	2.54	100.09	1.25	49.37
200	4.33	170.47	2.71	106.73	1.61	63.21	1.32	51.91	0.73	28.84	4.02	158.40	2.67	105.07	1.31	51.67
210	4.55	179.03	2.85	112.09	1.68	66.19	1.39	54.89	0.81	31.82	4.22	166.08	2.80	110.07	1.37	53.99
220	4.76	187.57	2.98	117.44	1.76	69.17	1.47	57.87	0.88	34.80	4.41	173.74	2.92	115.06	1.43	56.30
230	4.98	196.11	3.12	122.80	1.83	72.15	1.55	60.85	0.96	37.78	4.61	181.40	3.05	120.05	1.49	58.61
240	5.20	204.65	3.26	128.15	1.91	75.13	1.62	63.83	1.04	40.76	4.80	189.07	3.18	125.04	1.55	60.92

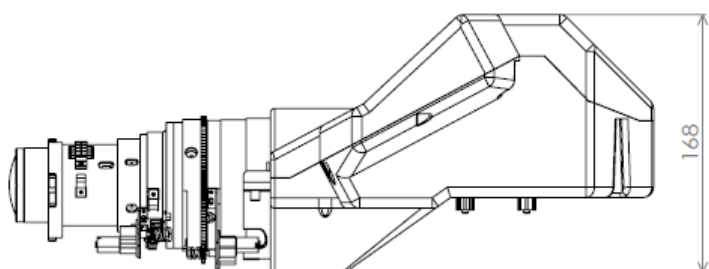
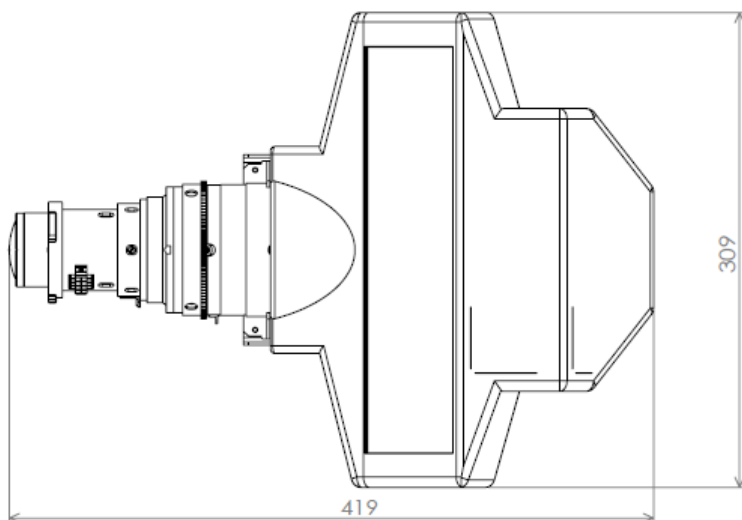
SD	SW		SH		D3		D2		D1		H3		H2		H1	
inch	m	inch	m	inch	m	inch	m	inch	m	inch	m	inch	m	inch	m	inch
250	5.41	213.18	3.39	133.50	1.98	78.11	1.70	66.81	1.11	43.74	5.00	196.72	3.30	130.02	1.61	63.22
260	5.63	221.74	3.53	138.86	2.06	81.09	1.77	69.79	1.19	46.72	5.19	204.40	3.43	135.02	1.66	65.54
270	5.85	230.29	3.66	144.22	2.14	84.07	1.85	72.77	1.26	49.70	5.39	212.07	3.56	140.02	1.72	67.85
280	6.07	238.83	3.80	149.58	2.21	87.05	1.92	75.75	1.34	52.68	5.58	219.74	3.68	145.01	1.78	70.16
290	6.28	247.38	3.94	154.93	2.29	90.03	2.00	78.73	1.41	55.66	5.78	227.40	3.81	150.00	1.84	72.47
300	6.50	255.91	4.07	160.28	2.36	93.01	2.08	81.71	1.49	58.64	5.97	235.06	3.94	154.99	1.90	74.78
310	6.72	264.47	4.21	165.65	2.44	95.99	2.15	84.69	1.57	61.62	6.17	242.74	4.06	159.99	1.96	77.09
320	6.93	273.02	4.34	171.01	2.51	98.97	2.23	87.67	1.64	64.60	6.36	250.41	4.19	164.99	2.02	79.41
330	7.15	281.57	4.48	176.36	2.59	101.94	2.30	90.65	1.72	67.57	6.56	258.08	4.32	169.98	2.08	81.72
340	7.37	290.12	4.62	181.72	2.67	104.92	2.38	93.62	1.79	70.55	6.75	265.75	4.44	174.98	2.13	84.03
350	7.59	298.64	4.75	187.07	2.74	107.90	2.45	96.60	1.87	73.53	6.94	273.40	4.57	179.96	2.19	86.33

Projection Lens Specifications

F Value	2.0
Focus Length(f)	5.64mm
Throw Ratio	0:377:1, WUXGA, at 100" screen
Image Size (Minimum/ Maximum Image Diagonal)	100" – 350"
Focus Adjustment	Powered focus and focus plane adjustment
Dimensions	309(W) x 419(D) x 168(H)mm
Net Weight	Approx. 2.7Kg

Projection Lens Dimensions

(Unit: mm)



About the VIVITEK Support

If you cannot find solutions from this user guideline, please contact us using the contact information below:

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