

Installation and Setup Manual

020-102550-01

Optional Lenses Q Series



NOTICES

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WARRANTY

Products are warranted under Christie's standard limited warranty, the complete details of which are available by contacting your Christie dealer or Christie. In addition to the other limitations that may be specified in Christie's standard limited warranty and, to the extent relevant or applicable to your product, the warranty does not cover:

- a. Problems or damage occurring during shipment, in either direction.
- b. Projector lamps (See Christie's separate lamp program policy).
- c. Problems or damage caused by use of a projector lamp beyond the recommended lamp life, or use of a lamp other than a Christie lamp supplied by Christie or an authorized distributor of Christie lamps.
- d. Problems or damage caused by combination of a product with non-Christie equipment, such as distribution systems, cameras, DVD players, etc., or use of a product with any non-Christie interface device.
- e. Problems or damage caused by the use of any lamp, replacement part or component purchased or obtained from an unauthorized distributor of Christie lamps, replacement parts or components including, without limitation, any distributor offering Christie lamps, replacement parts or components through the internet (confirmation of authorized distributors may be obtained from Christie).
- f. Problems or damage caused by misuse, improper power source, accident, fire, flood, lightning, earthquake or other natural disaster.
- g. Problems or damage caused by improper installation/alignment, or by equipment modification, if by other than Christie service personnel or a Christie authorized repair service provider.
- h. Problems or damage caused by use of a product on a motion platform or other movable device where such product has not been designed, modified or approved by Christie for such use.
- i. Problems or damage caused by use of a projector in the presence of an oil-based fog machine or laser-based lighting that is unrelated to the projector.
- j. For LCD projectors, the warranty period specified in the warranty applies only where the LCD projector is in "normal use" which means the LCD projector is not used more than 8 hours a day, 5 days a week.
- k. Except where the product is designed for outdoor use, problems or damage caused by use of the product outdoors unless such product is protected from precipitation or other adverse weather or environmental conditions and the ambient temperature is within the recommended ambient temperature set forth in the specifications for such product.
- l. Defects caused by normal wear and tear or otherwise due to normal aging of a product.

The warranty does not apply to any product where the serial number has been removed or obliterated. The warranty also does not apply to any product sold by a reseller to an end user outside of the country where the reseller is located unless (i) Christie has an office in the country where the end user is located or (ii) the required international warranty fee has been paid.

The warranty does not obligate Christie to provide any on site warranty service at the product site location.

PREVENTATIVE MAINTENANCE

Preventative maintenance is an important part of the continued and proper operation of your product. Please see the Maintenance section for specific maintenance items as they relate to your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, will void the warranty.


REGULATORY

The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense.

CAN ICES-3 (A) / NMB-3 (A)

이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

ENVIRONMENTAL

The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol  means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, there are separate collection systems for used electrical and electronic products. Please help us to conserve the environment we live in!

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Introduction

This guide provides information for installing and removing projection lenses for the listed projector models.



The methods for installing and removing lenses differ according to projector model. Ensure you follow the correct procedures for your specific projector model.

Affected products

The following products are affected.

- Christie DHD851-Q
- Christie DWU851-Q
- Christie DWX851-Q
- Christie DHD951-Q
- Christie DWU951-Q
- Christie DWX951-Q
- Christie DXG1051-Q
- Christie DHD1052-Q
- Christie DWU1052-Q

Safety and warning guidelines

Read all safety and warning guidelines before installing or using the lens.



Warning! If not avoided, the following could result in death or serious injury.

- Do not operate the product after any impact with another object.
- Do not operate the product without a lens installed.
- Do not look directly into the lens or at the lamp. The extremely high brightness can cause permanent eye damage.
- SHOCK HAZARD! Disconnect the product from AC before moving, servicing, cleaning, removing components, or opening any enclosure.
- TIP HAZARD! Do not install a lens without securely mounting the projector first.



Notice. If not avoided, the following could result in property damage.

- Always place the lens cap onto the lens when moving the projector to avoid scratching the lens.
- Remove the lens cap before turning the product on to avoid damaging the lens.
- Only use cleaning solutions recommended by Christie. All other cleaning solutions may cause product damage and will void the warranty.
- Do not reuse lens tissues.
- Always use a lens plug when installing or moving the product. This prevents contaminants from entering the product.
- Do not place objects over the lens while the projector is on.

Mounting safety and warning guidelines

Read all safety and warning guidelines before installing the mounting brackets.



Warning! If not avoided, the following could result in death or serious injury.

- All procedures must be performed by Christie qualified technicians.
- TIP HAZARD! Do not place, hang, or apply weight to the device or any of its components.



Caution! If not avoided, the following could result in minor or moderate injury.

- SHOCK HAZARD! Disconnect the product from AC before moving, servicing, cleaning, removing components, or opening any enclosure.
- Do not install on a structure susceptible to vibration, movement, or change due to impact.



Notice. If not avoided, the following could result in property damage.

- SHOCK HAZARD! All harnessing must be properly routed and secured as originally installed, especially in high voltage areas.
- FIRE HAZARD! Do not use a power cord, harness, or cable that appears damaged.

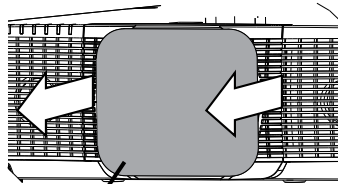
Installing the zoom lenses for Q Series

Learn how to install and remove the zoom lenses for the Q Series projectors.

Installing the zoom lens

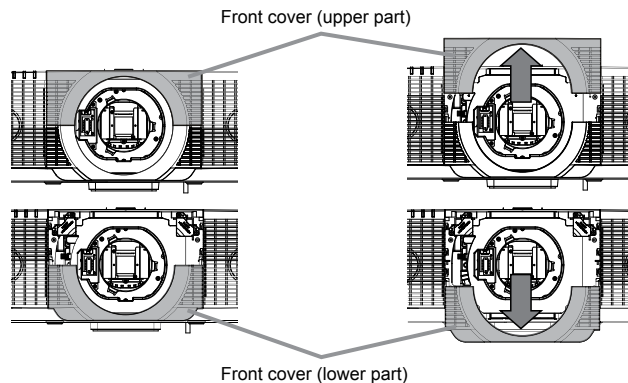
Only use lenses designed for the projector model.

1. Pull out the dust protector to remove it.
Christie recommends keeping the dust protector and packing materials for future use.



Dust protector

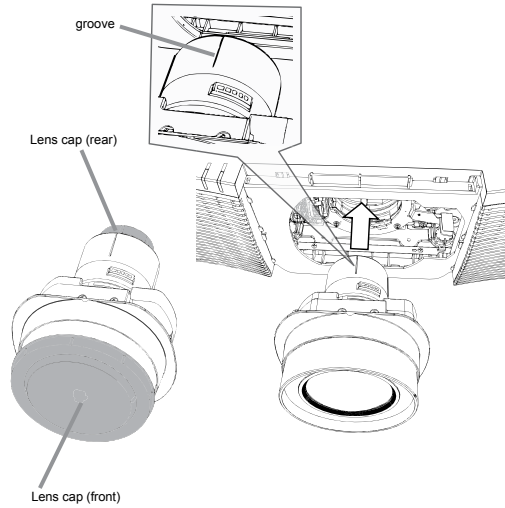
2. Remove the front cover:
 - a) Slide the upper part of the front cover upward while pressing the front cover from the underside and remove from the projector.
 - b) Slide the lower part of the front cover downward while pressing the front cover from the upper-side and remove from the projector.



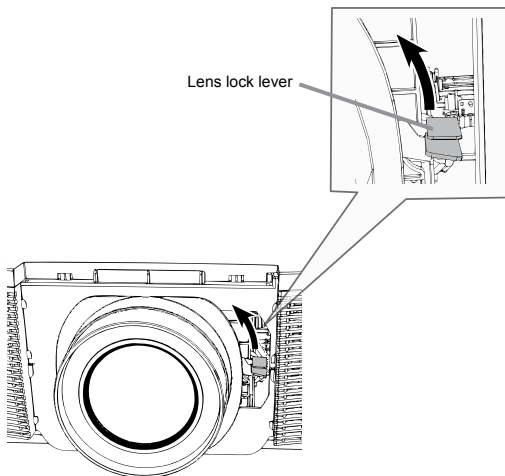
3. Install the lens:
 - a) Remove the lens cap from the lens.
 - b) Turn the lens groove upward.

- c) Slide the lens into the projector.

To avoid any malfunctions, ensure the surface of the lens does not come in contact with the projector.

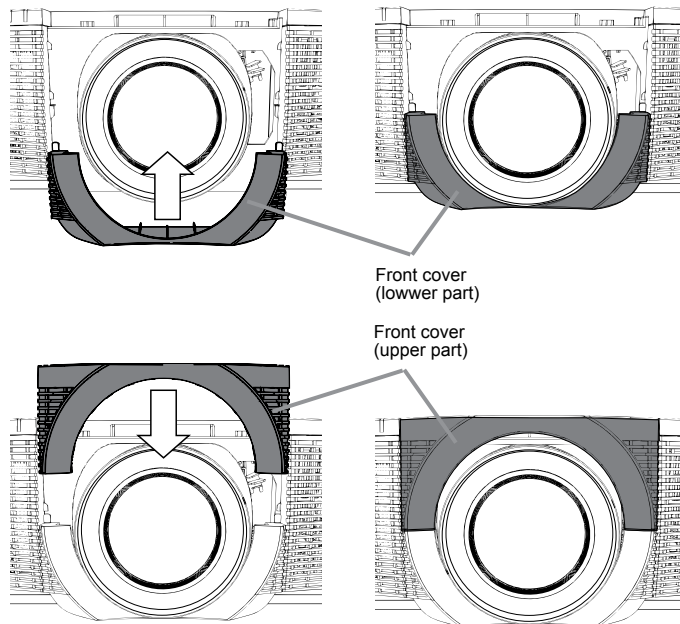


- d) Support the lens and move the lens lock lever upward until the lever clicks into the locked position.



- e) To prevent the lens from falling off, after attaching the lens, check that it is securely mounted and that the lens does not move.

4. Re-install the upper and lower front covers.



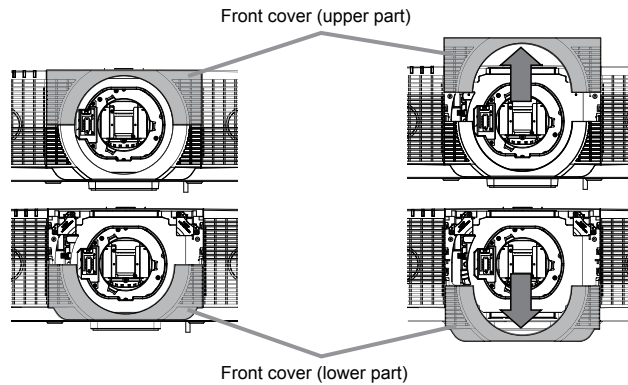
Removing the zoom lens

Use the correct method of removing the lens.

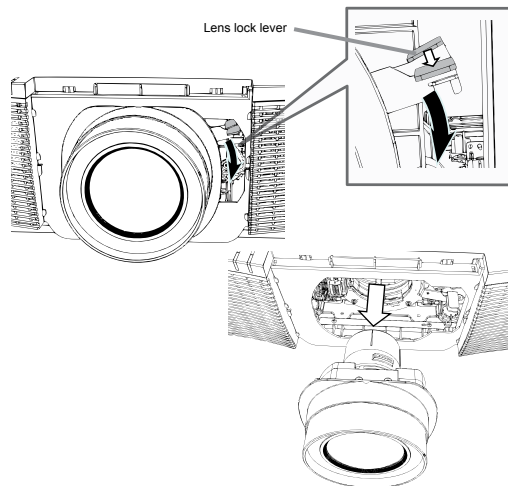
1. Move the lens to the center position:
 - a) Press **LENS SHIFT**.
 - b) To access the CENTERING feature, from the LENS SHIFT dialog, press **INPUT**.
 - c) To center the lens, press the **Right** arrow.

To center the lens in standby mode, on the control panel, press **FUNCTION** and **LENS SHIFT** at the same time for three seconds.

2. Turn off and unplug the projector.
3. Allow the projector to sufficiently cool down.
4. Remove the front cover:
 - a) Slide the upper part of the front cover upward while pressing the front cover from the underside and remove from the projector.
 - b) Slide the lower part of the front cover downward while pressing the front cover from the upside and remove from the projector.



5. To remove the lens:
 - a) Support the lens.
 - b) Lower the lens lock lever to the lowest position.
You can move the lever while the upper plate touches the lower one.
 - c) Remove the lens from the projector.
To avoid any malfunctions, ensure the surface of the lens does not come in contact with the projector.

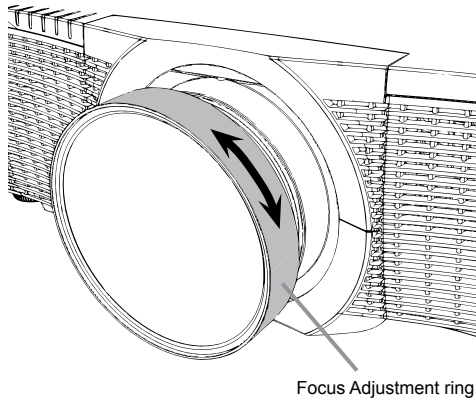


6. To prevent any substances getting into the lens installation area, insert a dust protector.

Focusing the ultra short throw lens

The focus balance from the center of the screen to the surrounding area varies on the screen size. The ultra short throw lens has a focus adjustment function to adjust this balance.

1. To focus the adjustment of the image at the center of the screen, use the remote control or control panel.
2. To focus adjustment of the image at the surrounding area of the screen, rotate the focus adjustment ring as shown below.



Installing the ultra short throw fixed lens

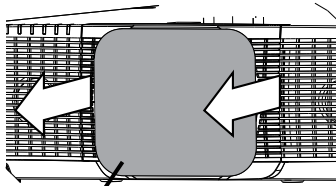
Learn how to install and remove the ultra short throw fixed lens for the Q Series projectors.

Installing the ultra short throw fixed lens

Only use lenses designed for the projector model.

1. Pull out the dust protector to remove it.

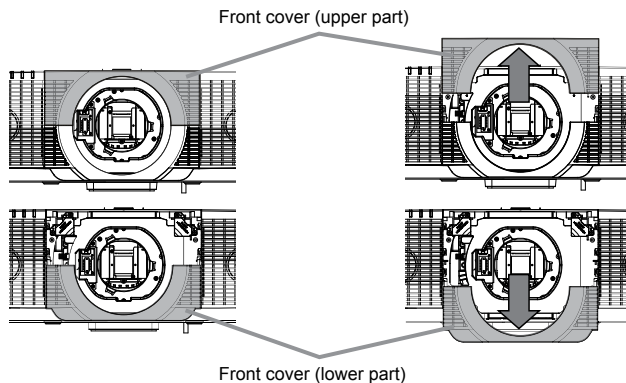
Christie recommends keeping the dust protector and packing materials for future use.



Dust protector

2. Remove the front cover:

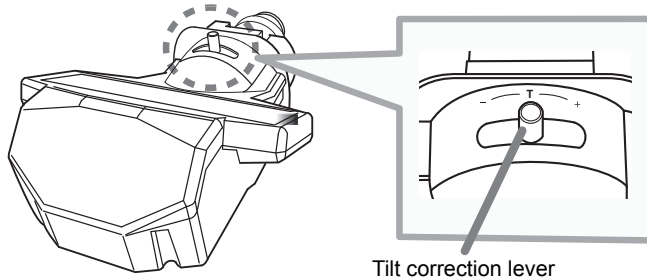
- a) Slide the upper part of the front cover upward while pressing the front cover from the underside and remove from the projector.
- b) Slide the lower part of the front cover downward while pressing the front cover from the upper-side and remove from the projector.



3. For the ultra short throw fixed lens only, adjust the balance of the focus using the Tilt Correction function equipped in the lens.

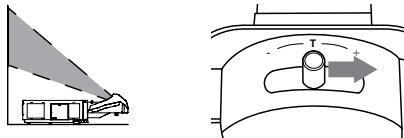
The balance of focus at the peripheral part of the projected image changes when installing the lens in the projector and projecting on a screen. How to perform the tilt correction differs depending on whether the installation on the table or ceiling mount.

Perform the tilt correction before installing the lens in the projector as a malfunction can occur if performed with the lens installed.

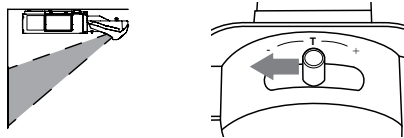


Tilt correction lever

- For installation on the table, move the tilt correction lever in the direction of (+).



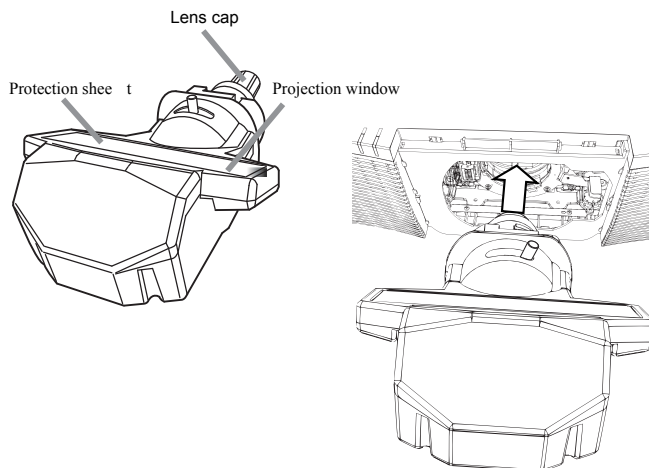
- For installation on the ceiling, move the tilt correction lever in the direction of (-).



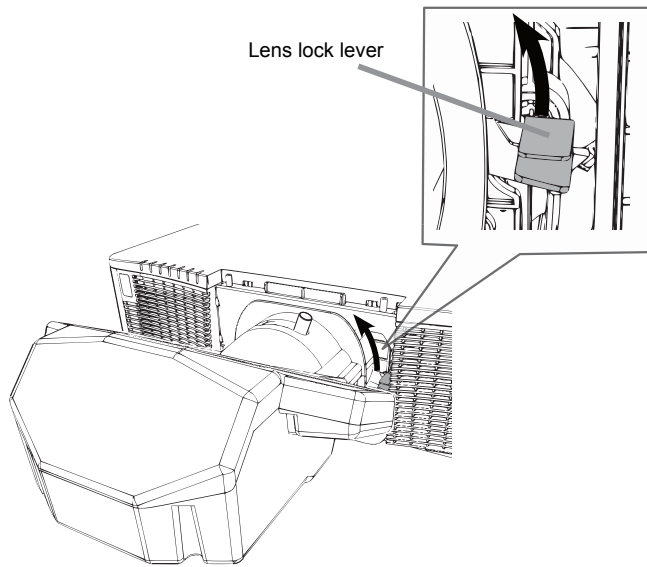
4. Install the lens:

- Remove the protection sheet pasted to the projection window and the lens cap from the lens.

Failing to remove the protection sheet may cause it to melt.

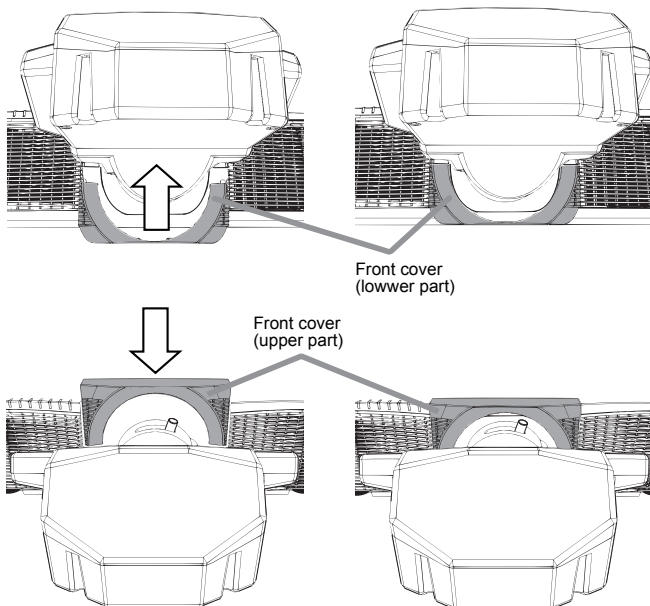


- Support the lens and move the lens lock lever upward until the lever clicks into the locked position.



c) To prevent the lens from falling off, after attaching the lens, check that it is securely mounted and that the lens does not move.

5. Re-install the upper and lower front covers.



Removing the ultra short throw fixed lens

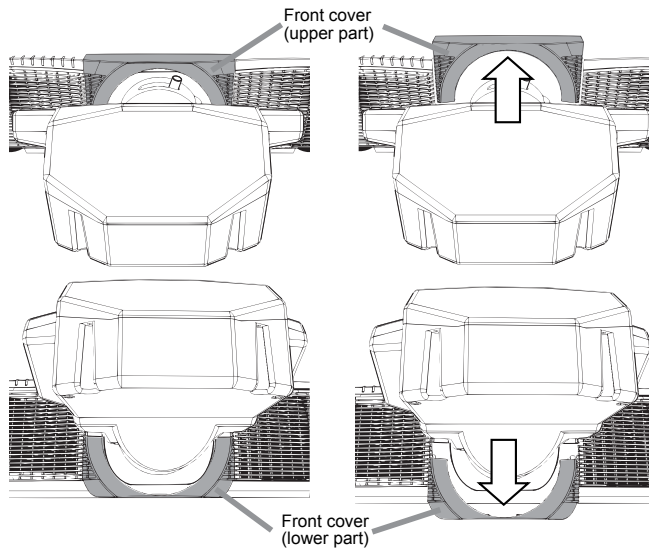
Use the correct method of removing the lens.

1. Move the lens to the center position:
 - a) Press **LENS SHIFT**.
 - b) To access the **CENTERING** feature, from the **LENS SHIFT** dialog, press **INPUT**.

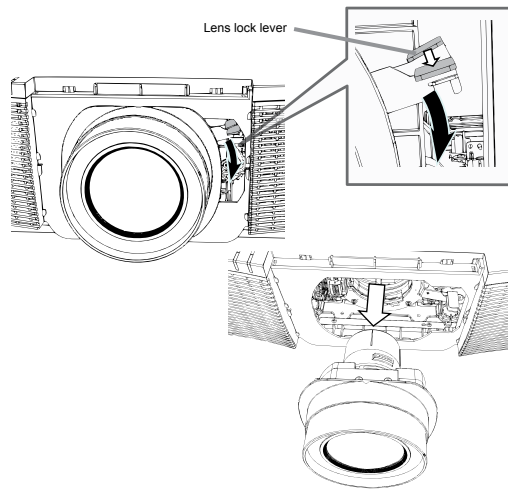
c) To center the lens, press the **Right** arrow.

To center the lens in standby mode, on the control panel, press **FUNCTION** and **LENS SHIFT** at the same time for three seconds.

2. Turn off and unplug the projector.
3. Allow the projector to sufficiently cool down.
4. Remove the front cover:
 - a) Slide the upper part of the front cover upward while pressing the front cover from the underside and remove from the projector.
 - b) Slide the lower part of the front cover downward while pressing the front cover from the topside and remove from the projector.

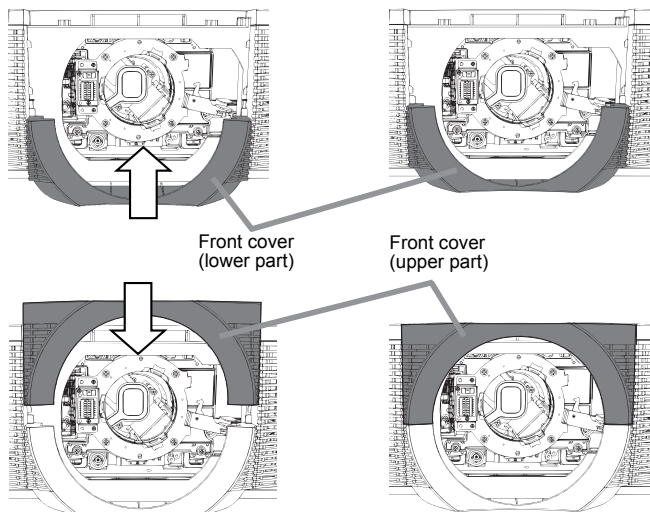


5. To remove the lens:
 - a) Support the lens.
 - b) Lower the lens lock lever to the lowest position.
You can move the lever while the upper plate touches the lower one.
 - c) Remove the lens from the projector.
To avoid any malfunctions, ensure the surface of the lens does not come in contact with the projector.



d) Attach the lens cap to the lens.

6. Re-install the front cover.



7. To prevent any substances getting into the lens installation area, insert a dust protector.

Installing the supporting brackets

The supporting brackets are required when using the ultra short throw fixed lens.

Required components

The following components are required to install the supporting brackets.

- 1 support bracket (mount bracket A)
- 1 lens mount bracket (mount bracket B)
- 4 M6x16 hex-head screws

- 2 M4x10 screws
- 2 collars
- 1 hex key

Prerequisites for mounting a projector on the ceiling

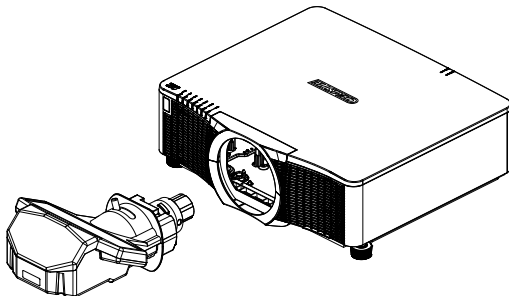
Note the following when mounting the projector on the ceiling.

- Before performing the mounting design and construction work, verify that the weight of the projector and ceiling mount can be fully supported.
- To protect itself, the projector has a temperature sensor that turns off the power if its internal temperature rises abnormally. Christie recommends the following to prevent the temperature rising abnormally:
 - Do not install the projector in locations where the temperature is outside the operating temperature range indicated in the User manual for the projector.
 - Periodically clean the air filter on the inside of the air intake. For information on cleaning frequency and procedures, see the User manual for the projector.
 - If installed in a location with lots of dust, the cleaning mentioned above must be done more frequently; therefore, mount the projector in a location where it can easily be accessed.
 - To facilitate ventilation from the exhaust outlet, allow for at least 50 cm of space around the projector.
 - Do not install in locations subject to sudden changes in temperature, such as near an air conditioner.
- The remote control may not function properly if the signal receiver on the projector is subject to strong light, such as direct sunlight or fluorescent lighting at point blank range. Install so the receiver is not subject to direct light.

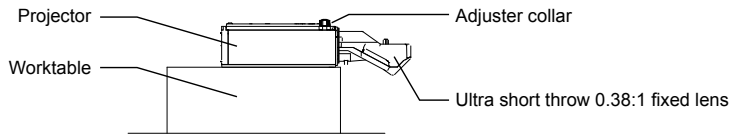
Mounting the lens support brackets

Follow these instructions to mount the ultra short throw fixed lens on the support brackets.

1. Turn off and unplug the projector.
2. Allow the projector to sufficiently cool down.
3. *Install the ultra short throw fixed lens (on page 11).*

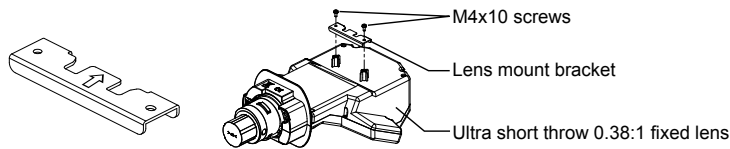


4. On a work table, place cushioning materials so no force is applied to the ultra short throw fixed lens.
5. Place the projector upside-down on the cushioning making sure the lens is facing away from the table.

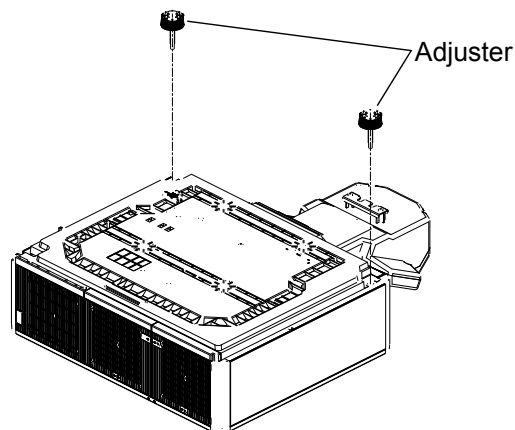


- Using the two M4x10 screws, attach the mount bracket to the ultra short throw fixed lens and torque to 0.98 Nm (10 kgf-cm).

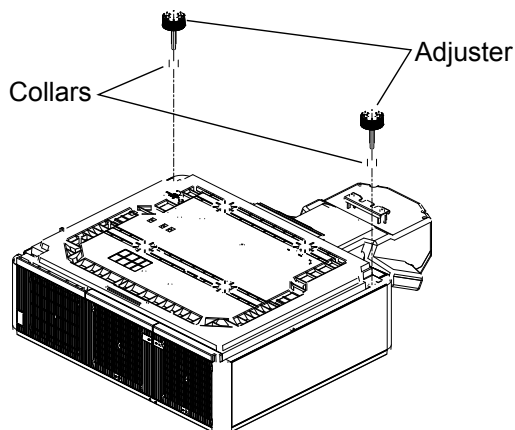
Note the direction of the arrow on the lens mount bracket.



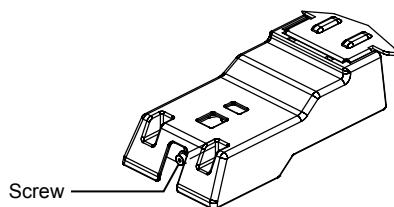
- Remove the two adjusters from the projector.



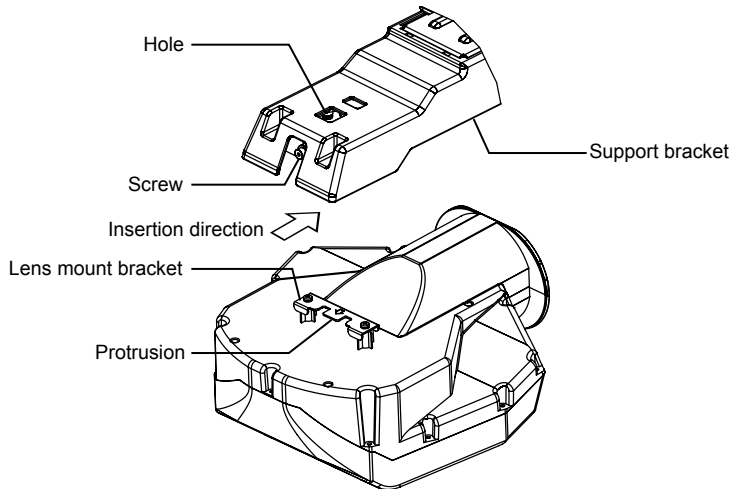
- Insert the two collars into the removable adjusters and mount the projector.



- Using the hex key, loosen the screw until it stops.

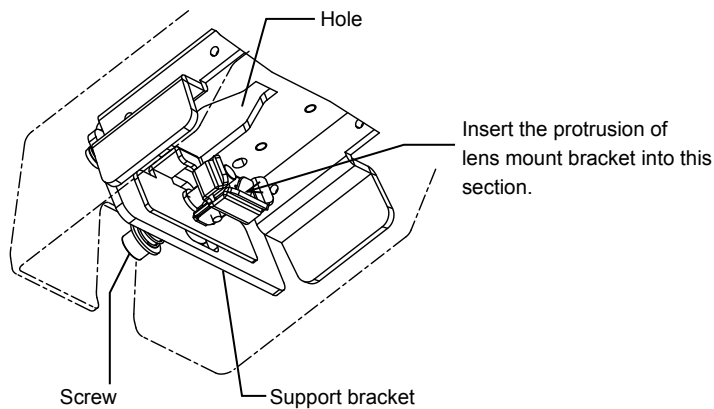
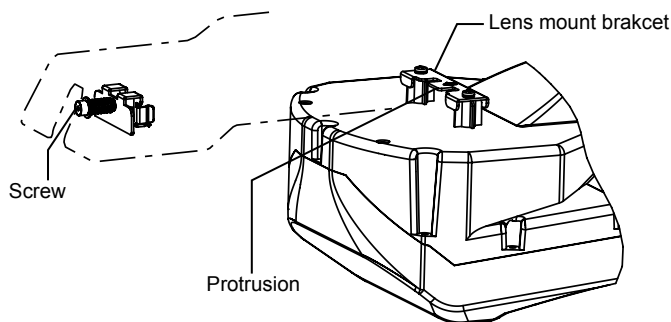


10. Attach the support bracket to the lens mount bracket.

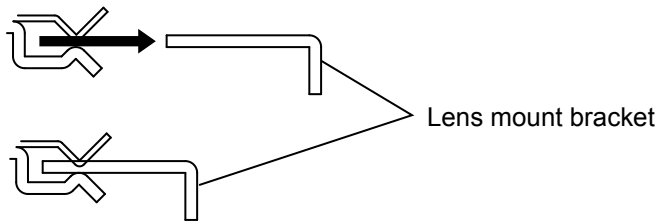


11. Move the screw of the support bracket up and down as well as left and right to insert it into the protrusion of the lens mount bracket.

To help with insertion, view from the top hole of the support bracket.



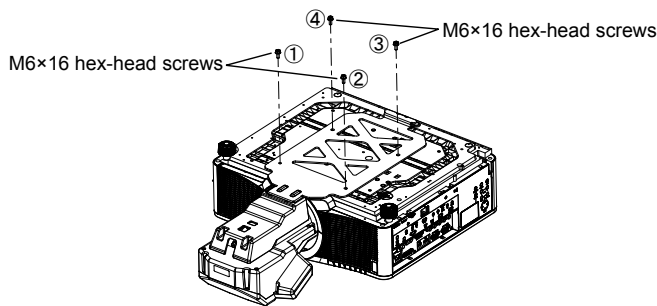
The following images shows the side view of the engaged section:



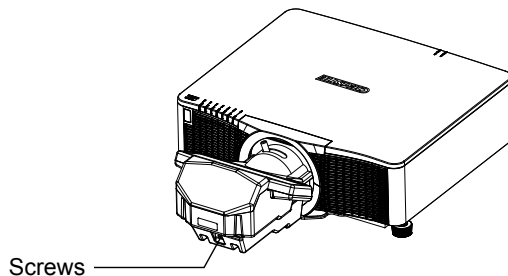
Installing the projector on a table top

Learn how to install the projector with an ultra short throw fixed lens on a table top.

1. To attach the support bracket to the projector, tighten the four M6×16 hex-head screws in the order shown below and torque to 1.96 Nm (20kgf·cm).



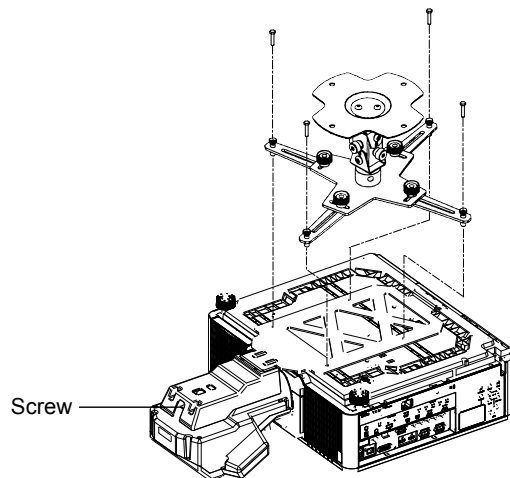
2. Flip the projector over.
3. To adjust to the correct screen position, use the vertical and horizontal shift adjustments. When adjusting the vertical and horizontal shift, always loosen the screw. Adjusting the vertical and horizontal shift without loosening the screw can damage the product.
4. When the screen is in position, firmly tighten the screw until it is locked in place.



Mounting the projector on the ceiling

Learn how to mount the projector with an ultra short throw fixed lens on a ceiling.

1. To mount the bracket of the ceiling mount to the projector and the mount bracket A, use the four M6×35 hex-head screws.



2. For the additional mounting procedures, refer to the *Ceiling Mount Bracket User's manual*.
3. To adjust to the correct screen position, use the vertical and horizontal shift adjustments. When adjusting the vertical and horizontal shift, always loosen the screw. Adjusting the vertical and horizontal shift without loosening the screw can damage the product.
4. When the screen is in position, firmly tighten the screw until it is locked in place.

Specifications

Learn about the product specifications. Due to continuing research, specifications are subject to change without notice.

Accessories

The following accessories are included with each lens.

Lens	Part number	Supplied accessories
Ultra short throw 0.8-1.0:1 lens	121-118101-XX	<ul style="list-style-type: none"> • Lens cap (front and rear) • <i>Optional Lens User's manual</i>
Short throw zoom 1.2-1.8-1.1-1.7 lens	121-119102-XX	
Standard zoom 1.7-2.5-1.7-2 lens	121-134109-XX	
Mid throw zoom 2.5-3.8-2.4-3.6 lens	121-122106-XX	
Long throw zoom 3.6-5.8-3.7-5.9 lens	121-123107-XX	
Ultra long throw 5.7-9.1-5.8-9.2 lens	121-124108-XX	
Ultra short throw 0.38:1 fixed lens	121-128102-XX	<ul style="list-style-type: none"> • Optical filter • Lens cap • <i>Optional Lens User's manual</i>

Lens specifications

Learn about the specifications for each lens.

Ultra short throw and short throw zoom lenses

Description		Ultra short throw lens	Short throw zoom lens
Supported model		DXG1051, DWX851, DWX951, DWU851, DWU951, DWU1052, DHD851, DHD951, and DHD1052	
Zoom/focus		Motorized	Motorized
Lens shift position	Vertical	DXG1051	10:0 - 1:1
			21.0:-1 - 1:1

Description			Ultra short throw lens	Short throw zoom lens
		DWX851, DWX951, DHD851, DHD951, and DHD1052	21.0:-1 - 1:1	7.7:-1 - 1:1
		DWU851, DWU951, and DWU1052	10:0 - 1:1	11.0:-1 - 1:1
	Horizontal		6:4 - 4:6	6:4 - 4:6
F-number			1.8 - 2.3	1.8 - 2.3
Focal length			11 - 14 mm	17 - 25 mm
Zoom ratio			1.3:1	1.5:1
Projection ratio		DWU851, DWU951, and DWU1051	0.8 - 1.0:1	1.2 - 1.8:1
		DWU851, DWU951, DWU1052, DHD851, DHD951, and DHD1052		1.1 - 1.7:1
Projection size			50 - 600 inch	50 - 600 inch
Weight (approximately)			1.8 kg	2.0 kg

Standard zoom, mid throw zoom, and long throw zoom lenses

Description			Standard zoom lens	Mid throw zoom lens	Long throw zoom lens
Supported model			DXG1051, DWX851, DWX951, DWU851, DWU951, DWU1052, DHD851, DHD951, and DHD1052		
Zoom/focus			Motorized	Motorized	Motorized
Lens shift position	Vertical	DXG1051	21.0:-1 - 1:1	21.0:-1 - 1:1	21.0:-1 - 1:1
		DWX851, DWX951, DHD851, DHD951, and DHD1052	7.7:-1 - 1:1	7.7:-1 - 1:1	7.7:-1 - 1:1
		DWU851, DWU951, and DWU1052	11.0:-1 - 1:1	11.0:-1 - 1:1	11.0:-1 - 1:1
	Horizontal		6:4 - 4:6	1.8 - 2.3	1.8 - 2.2
F-number			1.6 - 2.0	1.7 - 2.0	1.7 - 2.0
Focal length			24 - 36 mm	35 - 54 mm	51 - 83 mm
Zoom ratio			1.5:1	1.5:1	1.5:1
Projection ratio		DWG1051	1.7 - 2.5:1	2.5 - 3.8:1	3.6 - 5.8:1
		DWX851 and DWX951	1.7 - 2.6:1	2.5 - 3.8:1	3.7 - 5.9:1
		DWU851, DWU951, DWU1052, DHD851,	1.6 - 2.4:1	2.4 - 3.6:1	3.5 - 5.6:1

Description		Standard zoom lens	Mid throw zoom lens	Long throw zoom lens
	DHD951, and DHD1052			
Projection size		50 - 600 inch	50 - 600 inch	50 - 600 inch
Weight (approximately)		1.3 kg	1.8 kg	1.9 kg

Ultra long throw lens

Description		Ultra long throw lens	
Supported model		DXG1051, DWX851, DWX951, DWU851, DWU951, DWU1052, DHD851, DHD951, and DHD1052	
Zoom/focus		Motorized	
Lens shift position	Vertical	DXG1051, DHD851, DHD951, and DHD1052	21.0:-1 - 1:1
		DWX851 and DWX951	7.7:-1 - 1:1
		DWU851, DWU951, and DWU1052	11.0:-1 - 1:1
	Horizontal	6:4 - 4:6	
F-number		1.8 - 2.3	
Focal length		82 - 130 mm	
Projection ratio	DXG1051		5.7 - 9.1:1
	DWX851 and DWX951		5.8 - 9.2:1
	DWU851, DWU951, DWU1052, DHD851, DHD951, and DHD1052		5.5 - 8.8:1
Projection size		50 - 600 inch	
Weight (approximately)		1.8 kg	

Ultra short throw fixed lens

Description		Ultra short throw fixed lens	
Supported model		DXG1051, DWX851, DWX951, DWU851, DWU951, DHD851, and DHD951	
Focus		Motorized	
Lens shift position*	DXG1051		4.6 : -1 (+77.5%)
	DWX851, DWX951, DHD851, and DHD951		3.4 : -1 (+92.5%)
	DWU951 and DWU851		4.1 : -1 (+82.5%)

Description		Ultra short throw fixed lens
F-number		2.0
Focal length		5.6 mm
Projection ratio	DXG1051	0.39 : 1
	DWX851 and DWX951	0.40 : 1
	DHD851, DHD951, DWU951, and DWU851	0.38 : 1
Projection size		100 - 350 inch
Size		279(W) x 181(H) x 404(D) mm
Weight (approximately)		3.1 kg

*Depending on the projector, automatic recognition may not work causing part of the image to not be displayed due to the movement of the lens out of the regular lens shift position. Adjust the position within the range which does not cause the missing of the image. For details, consult with your dealer.

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