

# Installing the ultra short throw lens

The ultra short throw (UST) lens allows you to position your projector as close as possible to the screen.

## Affected products

The following products are affected:

- D13HD2-HS
- D13WU2-HS
- D16HD-HS
- D16WU-HS
- D20HD-HS
- D20WU-HS
- Christie 4K7-HS
- Christie 4K10-HS

## Required components

The following components are required.

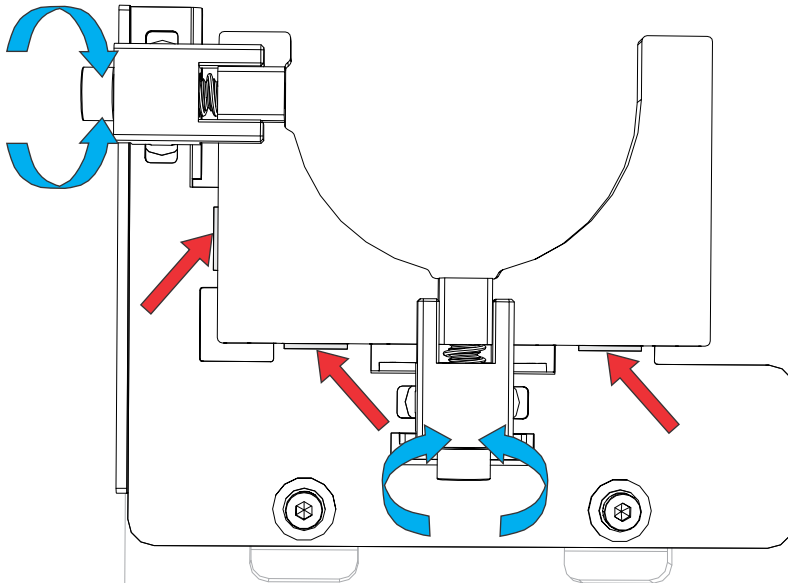
- UST lens bracket kit (P/N: 003-006916-XX)
- 3 mm Allen key
- 5 mm Allen key
- 6 mm Allen key
- Hexagon wrench

## Mounting the lens support bracket

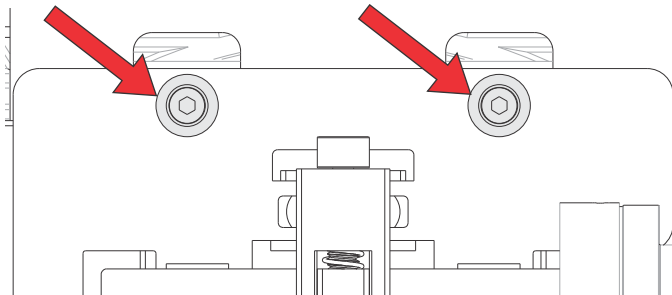
The lens holders are replaceable parts marked with an A for the HS Series 2K models and T for the 4K7-HS and 4K10-HS models.

1. Turn on the projector and perform a lens calibration.
  - If you have a non-ultra short throw lens (standard lens) installed, perform a lens calibration by selecting **Menu > Configuration > Lens Settings > Lens Calibration**.
  - If you do not have a non-ultra short throw lens, complete the following steps:

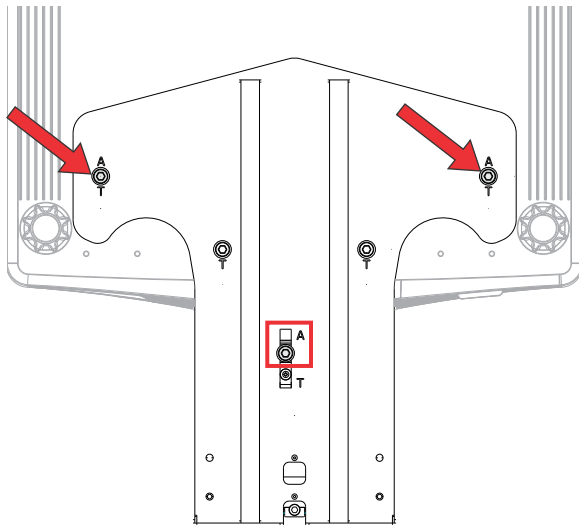
- a. Connect to the projector using RS232 or Ethernet (default IP address 192.168.0.100).
- b. Perform a lens calibration by sending the serial API command (LCB+HOME 1) to the projector.
2. Turn off the power to the projector.
3. Remove the non-ultra-short throw lens, if installed.
4. Before mounting the bracket, align the mark lines as shown below.



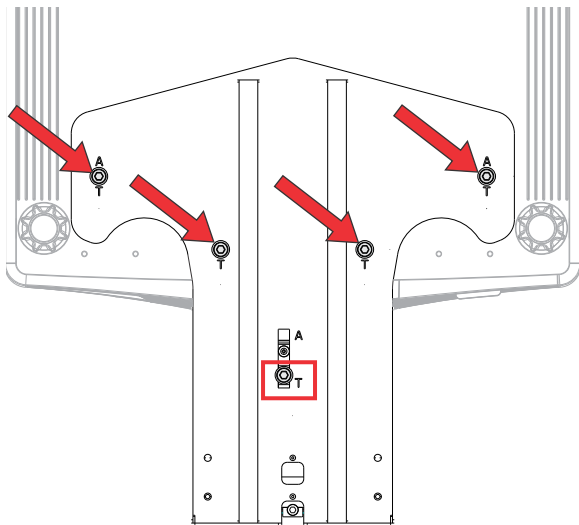
5. If the two highlighted M4 x L22 screws have tightened, loosen the screws by one turn.



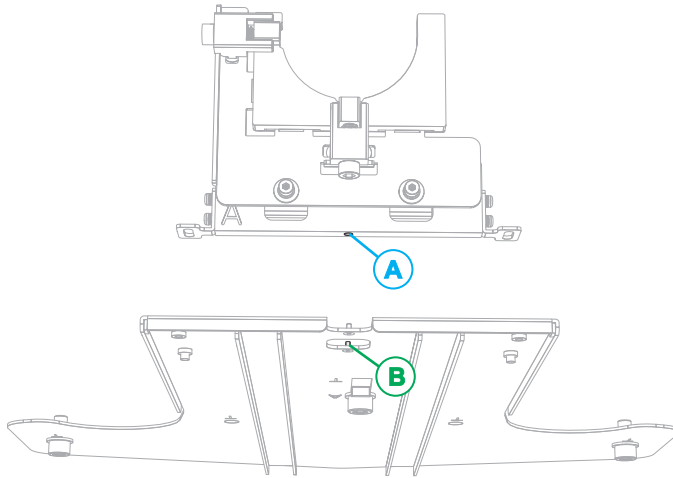
6. Flip the projector onto its top side.
7. Secure the support base (without lens bracket attached) to the projector.
  - For HS Series 2K, fasten two M8 x 16 screws and washers. For the front screw, slide to hook the projector front cover and then secure the screw.



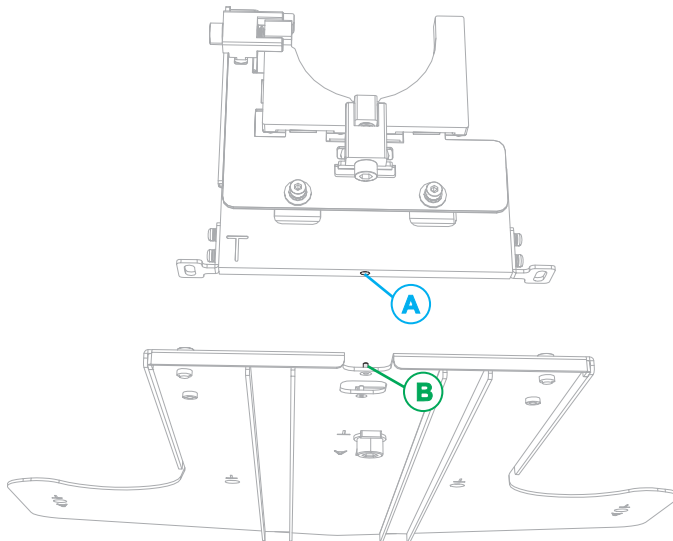
- For 4K7-HS and 4K10-HS, secure at the front position and fasten four M8 x 16 screws and washers.



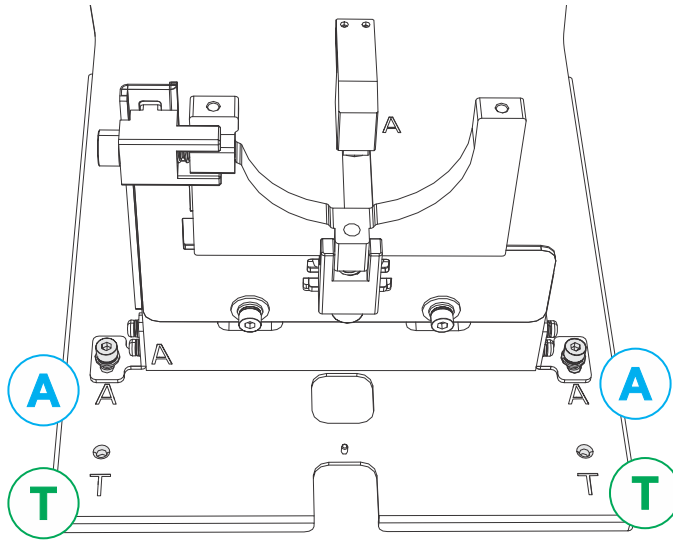
8. Flip the projector over.
9. Install the ultra short throw lens.
10. Attach the lens bracket to the support base using the location hole (A) and pin (B).
  - For HS Series 2K, make sure to use the lens bracket marked with an A.



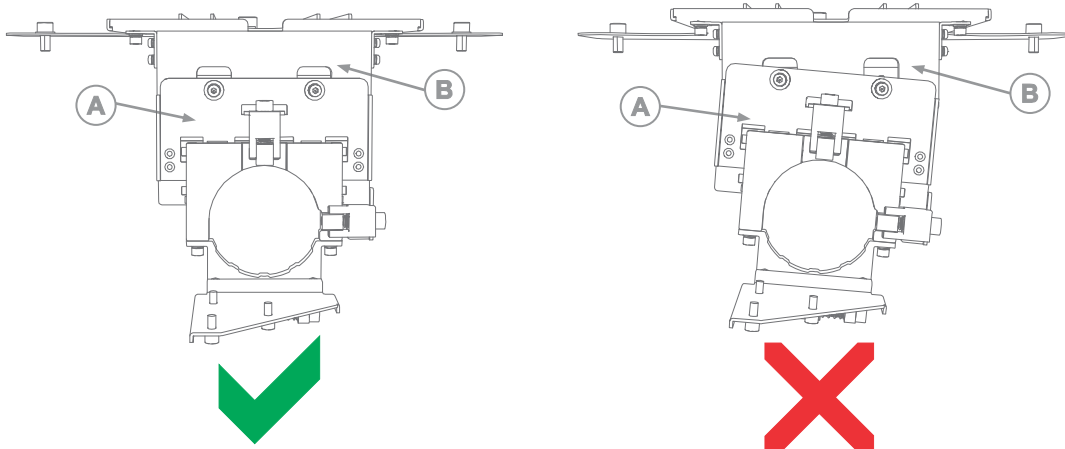
- For 4K7-HS and 4K10-HS, make sure to use the lens bracket marked with a T.



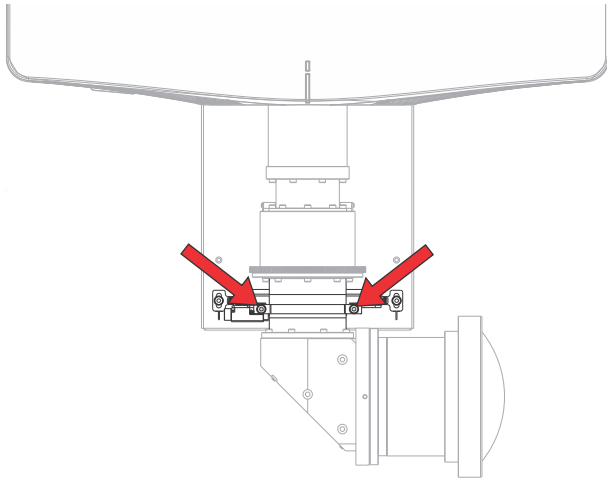
11. Lock the M4 x L10 screws (A for HS Series 2K and T for 4K7-HS and 4K10-HS) until tight and then loosen the screws by one turn.



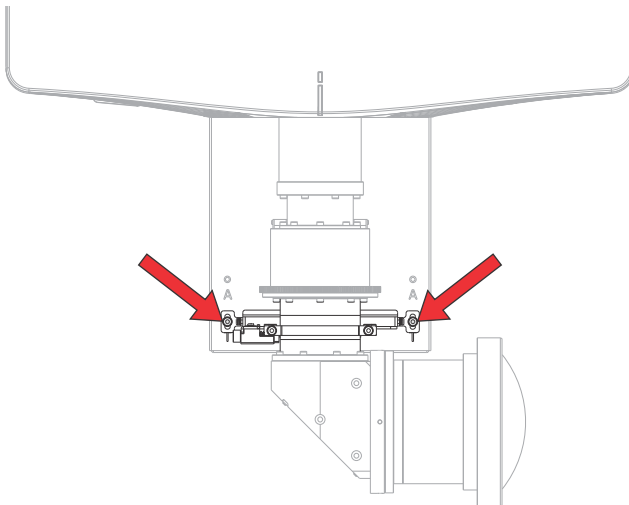
12. Shift the lens bracket to fit the L-UST lens neck.  
 Make sure the lens bracket plate (A) does not tilt with the lens holder (B).



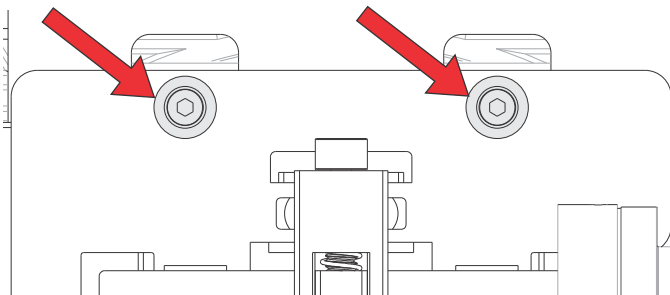
13. Use two M4 x L10 screws to secure the lens fixture to the lens bracket.



14. Tighten the two M4 x L10 screws from step 11.



15. Tighten the two M4 x L22 screws from step 2.

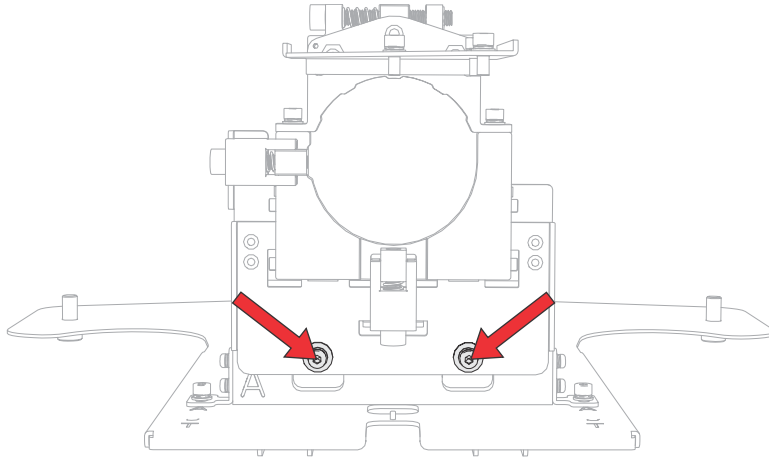


## Adjusting the ultra short throw lens

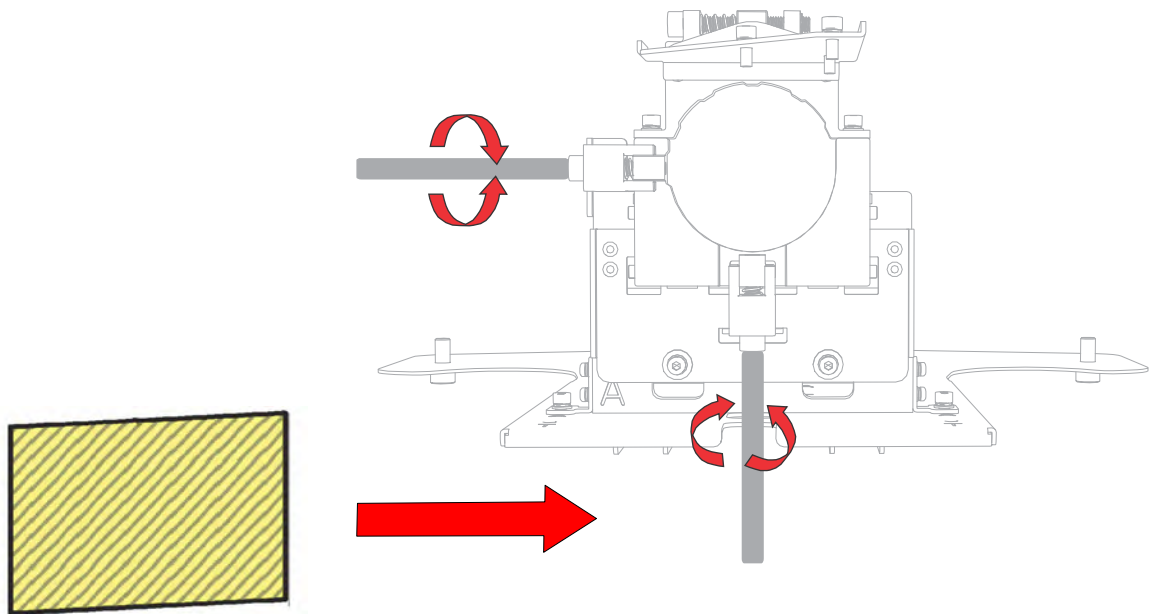
After mounting the lens support bracket, adjust the ultra short throw lens.

1. Turn on power to the projector.

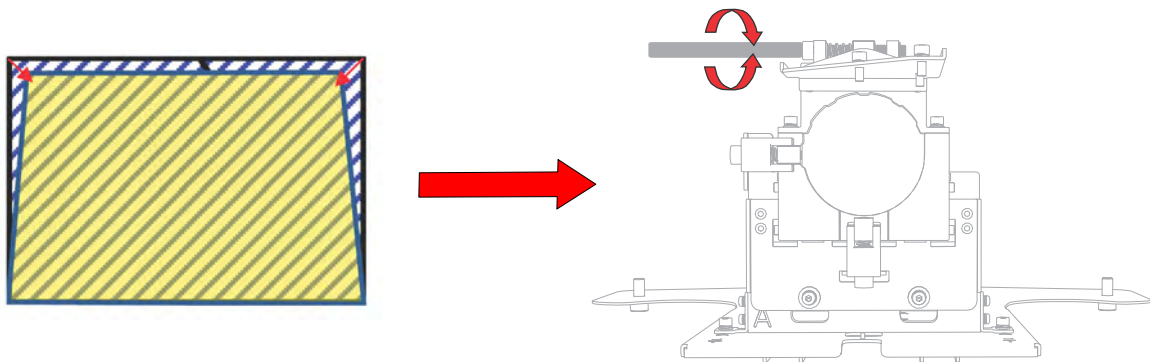
- Loosen by one turn the two M4 x L22 screws shown below.



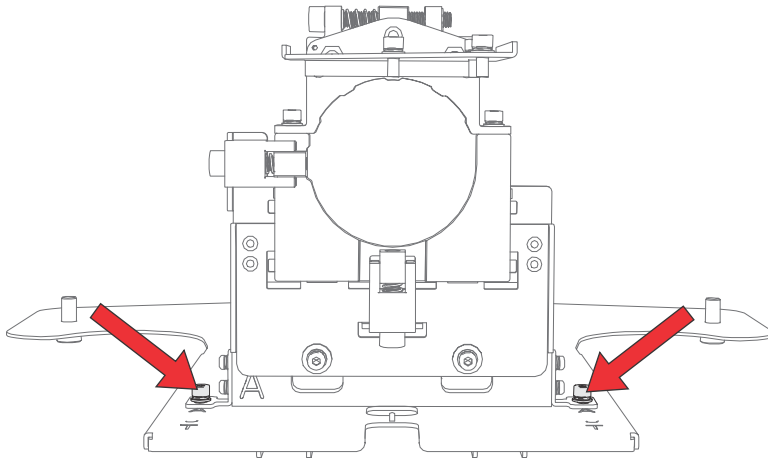
- Perform a lens calibration.
- To adjust the image position, use the Lens Shift function.  
Do not use the Lens Shift function when the two M4 x L22 screws are locked.
- Tighten the two M4 x L22 screws from step 2.  
If the tilt of the lens is too significant to fine-tune, gently lift up the lens to reduce the image offset before locking the screws.
- Adjust the two M6 screws to fine-tune image position.



- To fine tune the lens roll angle, adjust the M6 screw using a hexagon wrench.



8. Loosen by one turn the two M4 screws on the lens supporter, shown below.



9. Adjust the boresight.  
For information on how to adjust boresight, refer to the product *Installation and Setup guide*.
10. Tighten the two screws from step 8.
11. To ensure the Lens Shift function cannot be executed after the boresight has been adjusted, from the on-screen display, navigate to **Configuration > Lens setting > Lock all Lens Motors** and select **Locked**.

## Technical support

Technical support for Christie products is available at:

- North and South America: +1-800-221-8025 or [Support.Americas@christiedigital.com](mailto:Support.Americas@christiedigital.com)
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or [Support.EMEA@christiedigital.com](mailto:Support.EMEA@christiedigital.com)
- Asia Pacific
  - Australia: +61 (0)7 3624 4888
  - China: +86 10 6561 0240
  - India: +91 (80) 6708 9999
  - Japan: 81-3-3599-7481
  - Singapore: +65 6877-8737



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