

# Assembling the Christie One rigging frame

With the Christie One rigging frame, the projector can be secured to trusses or structures built for the purpose of positioning the projector.

With the frame:

- Up to three projectors can be stacked in landscape orientation.
- A single projector can be positioned in portrait mode but no stacking is permitted.

Christie ships the frame separately from the projector.

## Affected products

The Christie One rigging frame is designed for use with the following projectors.

- HS Series projectors (D13HD-HS, D13WU-HS, D13HD2-HS, D13WU2-HS, D16HD-HS, D16WU-HS, D20HD-HS, D20WU-HS, DWU1612-HS, DWU2022-HS)
- H Series (D12HD-H and D12WU-H)
- Q Series (DWU951-Q, DHD951-Q, DWX951-Q, DXG1051-Q, DWU851-Q, DHD851-Q, DWX851-Q)
- GS Series (DHD635-GS, DWU635-GS, DHD635-GS China, DWU635-GS China, DHD630-GS, DWU630-GS, DHD630-GS China Black, DWU630-GS China, DHD630-GS Black, DWU630 GS Black, DHD1075-GS, DWU1075-GS, DHD1075-GS China, DWU1075-GS China, DWU6322-GS, DWU7062-GS, DWU1082-GS, DHD850-GS, DWU850-GS, DHD700-GS, DWU700-GS)

## Required components

The following components are required.

Christie One rigging frame (P/N: 140-113106-03 or higher)

## Safety warnings and guidelines

Read all safety and warning guidelines before starting this procedure.



**Danger!** If not avoided, the following results in death or serious injury.

- Do not stack the device unless specified in this manual.
- The supporting structure must safely support the combined load of the product, all attached hardware, and components following all local safety standards and regulations.
- Use all mounting points, including the safety point, when installing the product overhead.



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

- Only use this frame with the specified products.
- Safety straps must be used when stacking two or more rigging frames.
- Always install safety straps when the frame and projector are installed overhead.
- Do not stack empty frames.
- Projectors must be installed in frames before stacking.



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

- Use appropriate packaging when shipping the product installed in the frame.
- The 0.84-1.02:1 short zoom lens (P/N: 140-114107-XX) when used with an HS Series projector can have limited lens movement (see below) due to the size of the lens barrel and interface with the stacking frame. Do not perform a lens calibration with this lens when inside the stacking frame.

Limitations:

Pitch: +1.8/-2.55 degrees

Roll: +/-1.6 degrees

Yaw: +/-1.5 degrees

## Tools required

The following tools are required for installing the rigging frame.

- 3 mm hex key (Christie One rigging frame)
- 4 mm hex key (Christie One rigging frame)
- 5 mm hex key (Q Series, GS Series)
- 6 mm hex key (H Series, HS Series)

### Optional tools

- Adjustment tool provided with the Christie One rigging frame



## Physical specifications

Learn the weight and physical dimensions of the Christie One rigging frame.

- Weight: 40.37 kg (89 lbs)
- Dimensions: 790 mm x 790 mm x 483 mm

## Securing the projector to the stacking frame

Secure the projector to the stacking frame before stacking additional projectors.



**Danger!** If not avoided, the following results in death or serious injury.

- TIP HAZARD! Stacked frames must be secured together using all locking pins.
- Use all mounting points, including the safety point, when installing the product overhead.

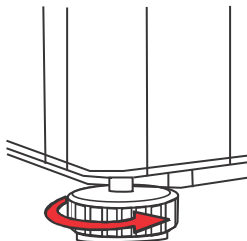


**Warning!** If not avoided, the following could result in death or serious injury.

- A minimum of four people or appropriately rated lift equipment is required to safely lift, install, or move the product.
- The supporting structure must safely support the combined load of the product, all attached hardware, and components following all local safety standards and regulations.

1. Turn off the projector.  
Allow the cooling fans to stop before proceeding with step 2.
2. Disconnect the projector from AC power.
3. Remove lens from projector, if installed.
4. Verify the base plate of the frame is in a flat position and is level.
5. Adjust the feet of the projector.
  - For HS Series, Q Series, and GS Series, adjust the feet of the projector so there is no extension.
  - For H Series, extend the projector feet out 4 mm before placing in the frame.

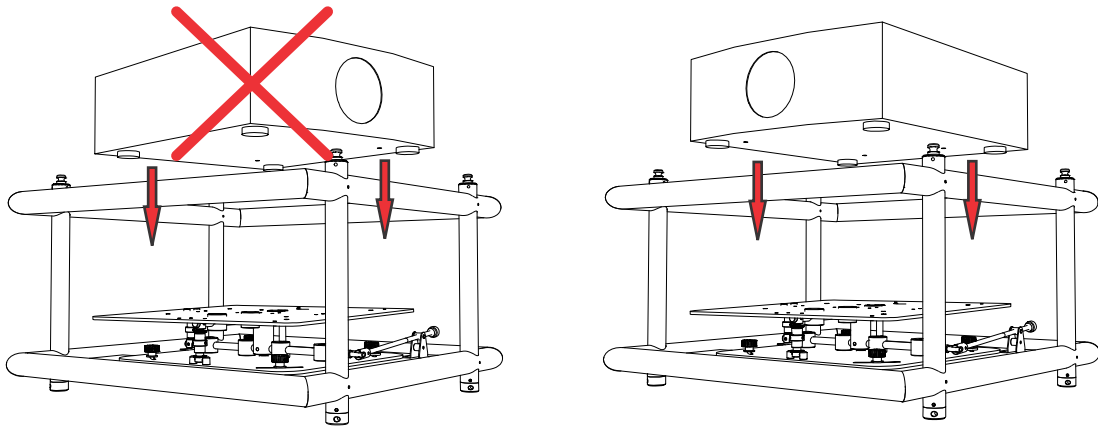
The projector must sit flat on the base plate.



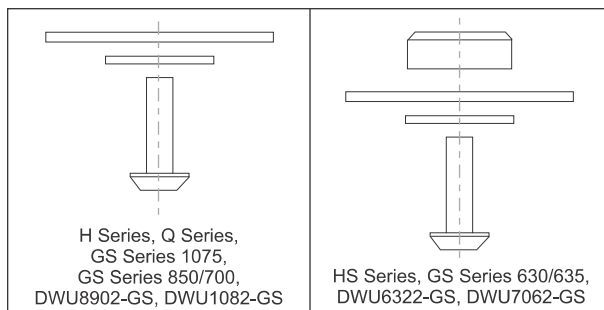
6. Place the four spacers provided with the frame over the four appropriate mounting holes on top of the base/mounting plate.
  - For HS Series, place the four spacer provided with the frame over the four HS Series mounting holes on top of the base plate.
  - For GS Series 630/635, DWU6322-GS, and DWU7062-GS only, place the four spacers provided with the frame over the four orange GS Series mounting holes on top of the mounting plate.

Ensure the holes on the base plate and spacers are aligned.

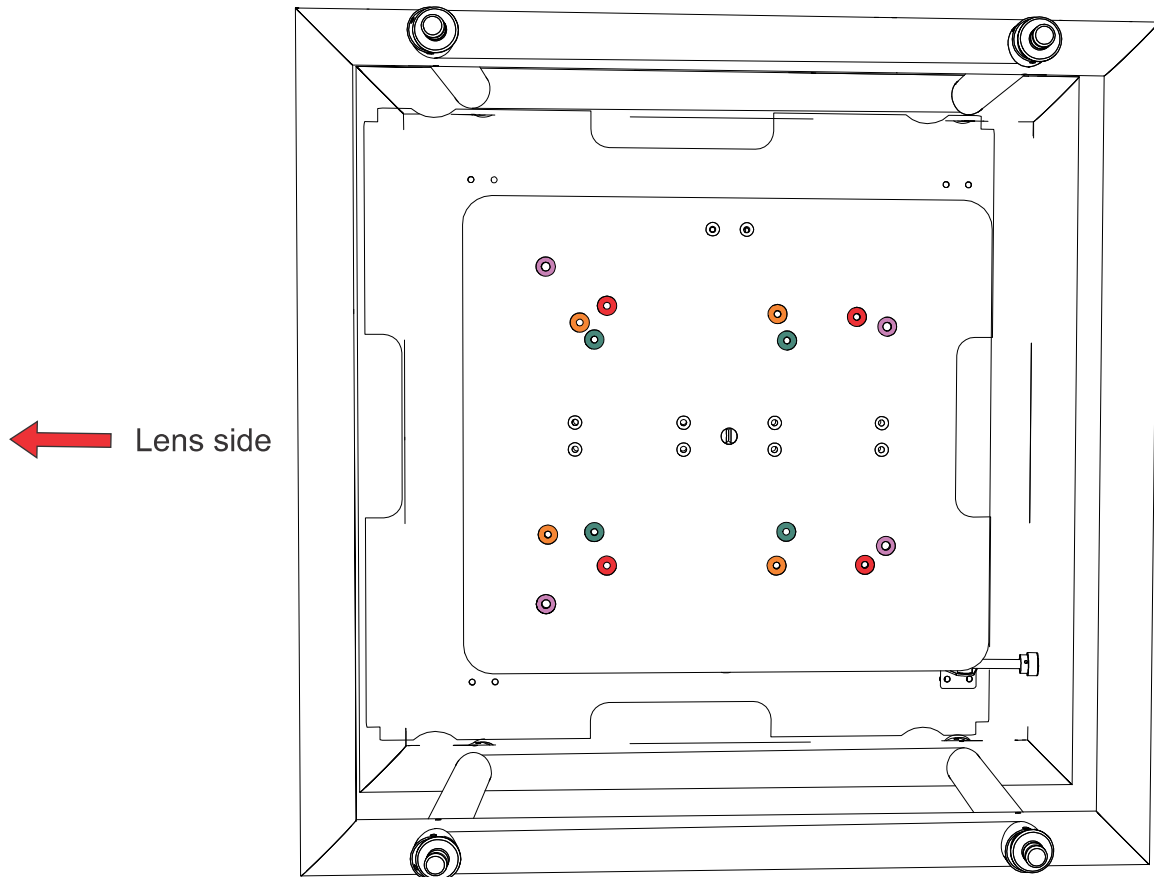
- Lift the projector onto the base plate through the top opening of the frame. Ensure the lens mount faces the front of the frame, as indicated below.



- Secure the projector to the base plate using four hex socket head screws and washers provided with frame.
  - For H Series and HS series projectors, use M8 x 1.25 x 40 mm bolts and washers and secure with a 6 mm hex key. The M8 bolts must be tightened to a torque of 38 Nm.
  - For GS Series 630/635 GS Series, DWU6322-GS, and DWU7062-GS projectors, use M6 x 1.0 x 35 mm bolts and washers. The M6 bolts must be tightened to a torque of 16 Nm.
  - For GS Series 1075, GS Series 850/700, DWU1082-GS, and DWU8902-GS projectors, use M6 x 1.0 x40 bolts and washers. The M6 bolts must be tightened to a torque of 16 Nm.
  - For Q Series projectors, use M6 x 1.0 x 16 mm bolts and washers and secure with a 5 mm hex key. The M6 bolts must be tightened to a torque of 16 Nm. The Q Series, GS Series 850/700, GS Series 1075, DWU1082-GS, and DWU8902-GS hardware includes optional adhesive washers than can be used between the frame mounting plate and the projector to help align the projector for installation.



Refer to the image below for the mounting points on the base plate for each projector series.



- Purple—H and HS series screws M8 x 1.25 x 40 mm bolts and washers
- Green—Q series screws M6 x 1.0 x 16 mm bolts and 3 mm thick adhesive washers
- Orange—GS Series 630-GS/635, DWU6322-GS, and DWU7062-GS screws M6 x 1.0 x 35 mm and washers for M6
- Red—GS Series 1075, GS Series 850-GS/700 Series, DWU8902-GS, and DWU1082-GS screws M6 x 1.0 x 40 mm and 3 mm thick adhesive washers for M6

## Stacking multiple framed projectors

Up to three framed projectors can be stacked in landscape orientation only, and then rigged in an upright or inverted position. Stacking in portrait orientation is not permitted.



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- TIP HAZARD! Stacked frames must be secured together using all locking pins.
- Do not stack the device unless specified in this manual.



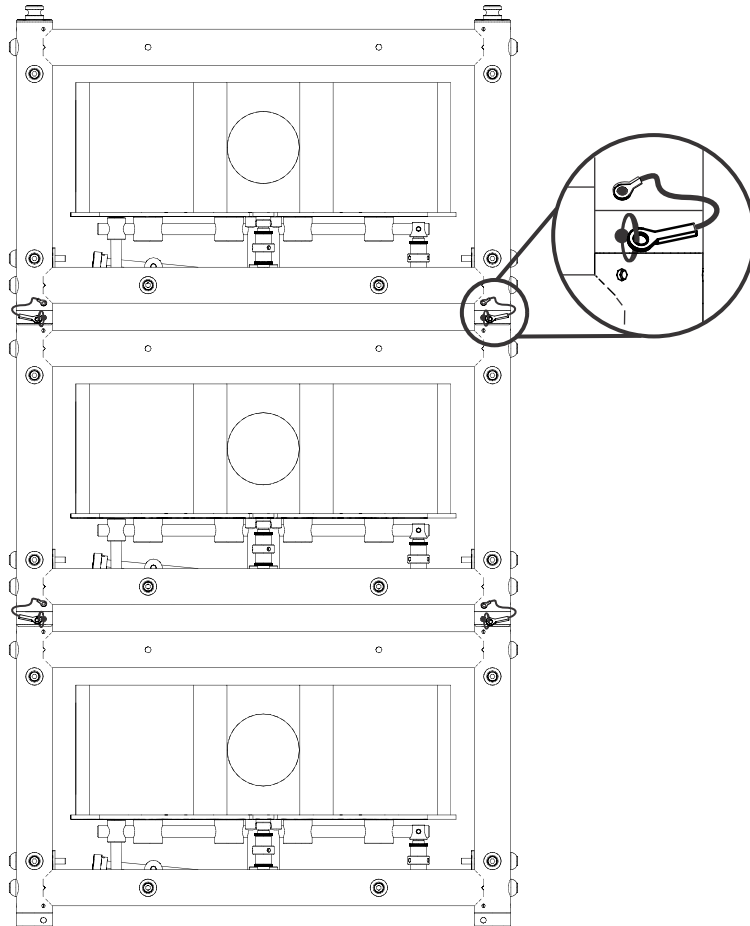
**Warning!** If not avoided, the following could result in death or serious injury.

- A minimum of four people or appropriately rated lift equipment is required to safely lift, install, or move the product.
- The supporting structure must safely support the combined load of the product, all attached hardware, and components following all local safety standards and regulations.
- Do not stack empty frames.
- Projectors must be installed in frames before stacking.

1. Remove the locking pins from each stacking leg.
2. With one person positioned on each side of the framed projector, lift the assembly and place it onto the bottom frame.

Stacking in portrait orientation is not permitted

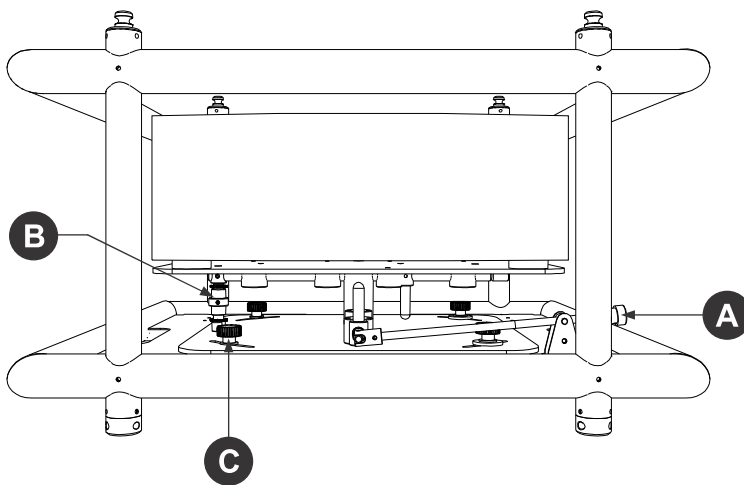
3. Verify the four stacking legs of the upper assembly are securely seated on the bottom frame.
4. Insert a locking pin through each of the stacking legs to lock the frames together. The steel ball on the end of the pin keeps the pin from releasing inadvertently.
5. Install safety straps (not included) between the frames. Safety straps must be adequately rated for the total load.
6. When stacking a third framed projector, repeat steps 1 to 4.



## Aligning stacked projectors

Stacked projectors must be correctly aligned to one another to achieve an optimally displayed image.

1. Hoist and secure a stack of projectors before aligning.
2. Loosen the locking screws on each adjustment knob.
3. Before adjusting the roll, loosen the four screws on the base plate; otherwise, the adjustment knob can break during adjustment.
4. Adjust pitch, roll, or yaw, manually or with the optional adjustment tool provided with the frame, until the image geometry is optimized.
  - a) To adjust the roll of the display clockwise, rotate the adjustment pin clockwise and vice-versa.
  - b) To adjust the pitch of the projector, loosen the two locking rings on the top and bottom of the adjustment screw. To tilt the image down, turn the adjustment screw to the right. To tilt the image up, turn the adjustment screw in the opposing direction.  
 If having trouble adjusting the adjustment screw, use a 4 mm hex key and place it in one of the holes on the adjustment screw, then turn in required direction. Once the image is properly adjusted, tighten the two locking rings.
  - c) To adjust the yaw of the projector, loosen the four adjustment knobs with a 6 mm hex key and make adjustments. Once properly adjusted, re-tighten the four adjustment knobs.



A	Roll—Rotates the image clockwise or counter-clockwise.
B	Pitch—Moves the image up and down.
C	Yaw—Moves the image to the left or right.

5. For pitch and yaw, ensure the gap between the pin and the plate is more than 0.5 mm. The pin limits the adjustment within the useful range.
6. To lock adjustments, tighten the setscrews with a 3 mm hex key on each adjustment knob.