

Installation Guide for the

# QuickCAT Universal

Ceiling Mount for PTZ Cameras

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# Contents

Before You Start .....	1
Safety Information .....	1
Symbols in this Guide .....	2
Tools .....	3
Unpacking the Ceiling Mount .....	4
Installation .....	5
Deciding Which Installation Method to Use .....	5
Installing the Tile Bridge Above the Ceiling Tile .....	6
Installing the Tile Bridge Flush with the Ceiling Tile .....	8
Determining How to Anchor the Support Wires .....	9
Anchoring to Existing Objects .....	10
Anchoring to Concrete .....	10
Anchoring to Wood .....	11
Securing the Tile Bridge .....	12
Installing the Column .....	13
Adjusting the Column Rotation .....	14
Installing the Camera Interface .....	14
Attaching the Camera .....	15
Connecting the Camera .....	16
Last Steps .....	17
Warranty Information .....	18

## Before You Start

- Read the safety information.
- Be sure you understand the symbols used in this guide.
- Be sure you have the tools you need.
- Be sure you received all the parts that should be included.

## Safety Information



The WARNING symbol and keyword alert you to the possibility of serious injury or death if you do not follow the associated instructions.



The CAUTION symbol and keyword alert you to the risk of damage to equipment or other property. You must read the instructions before installing the product.



**WARNING:** Read, understand, and follow the instructions in this manual. Failure to do so can result in serious injury and equipment damage, and may void the warranty. The installer is responsible for properly assembling and installing the mounting system using the instructions in this manual.



**WARNING:** Ensure that the structure which will support the mounting system is able to support five times the weight of the mounting system and the equipment mounted on it. If necessary, reinforce the structure before installing the mounting system. Failure to do so can result in serious injury and equipment damage, and may void the warranty. The installer is responsible for properly assembling and installing the mounting system using the instructions in this manual.



**WARNING:** Use this mounting system only as described in this manual, and only for the products listed as compatible with this mount. Use of this mounting system for any other purpose or product has not been tested and may result in injury or equipment damage.



**WARNING:** Do not install or use this equipment if it is damaged. Doing so may result in injury or damage to other equipment. Call Technical Support to return the mounting system.



**WARNING:** Do not install or use this product outdoors. Doing so may result in injury or damage to other equipment.



**CAUTION:** This mounting system is designed to be used with a suspended ceiling secured by a Chief WireVice system.

## Symbols in this Guide

	<p><b>Mark with a pencil</b>                  Marcar con lápiz                  Stiftmarkierung                  Marcar com lápis                  Segno a matita                  Potloodmerkteken                  Marquage au crayon</p>		<p><b>Tighten the fastener</b>                  Apretar elemento de fijación                  Befestigungsteil festziehen                  Apertar fixador                  Serrare il fissaggio                  Bevestiging vastdraaien                  Serrez le fixation</p>
	<p><b>Drill</b>                  Perforar                  Bohrloch                  Fazer furo                  Praticare un foro                  Gat boren                  Percez un trou</p>		<p><b>Loosen the fastener</b>                  Aflojar elemento de fijación                  Befestigungsteil lösen                  Desapertar fixador                  Allentare il fissaggio                  Bevestiging losdraaien                  Desserrez le fixation</p>
	<p><b>Phillips screwdriver</b>                  Destornillador Phillips                  Kreuzschlitzschraubendreher                  Chave de fendas Phillips                  Cacciavite a stella                  Kruiskopschroevendraaier                  Tournevis à pointe cruciforme</p>		<p><b>By hand</b>                  A mano                  Von Hand                  Com a mão                  A mano                  Met de hand                  À la main</p>
	<p><b>Hex-head wrench</b>                  Llave de cabeza hexagonal                  Sechskantschlüssel                  Chave de cabeça sextavada                  Chiave esagonale                  Zeskantsleutel                  Clé à tête hexagonale</p>		<p><b>Adjust</b>                  Ajustar                  Einstellen                  Ajustar                  Regolare                  Afstellen                  Ajuster</p>
	<p><b>Security wrench</b>                  Llave de seguridad                  Sicherheitsschlüssel                  Chave de segurança                  Chiave di sicurezza                  Veiligheidsleutel                  Clé de sécurité</p>		<p><b>Remove</b>                  Quitar                  Entfernen                  Remover                  Rimuovere                  Verwijderen                  Retirez</p>
	<p><b>Open-end wrench</b>                  Llave de boca                  Gabelschlüssel                  Chave de bocas                  Chiave a punte aperte                  Steeksleutel                  Clé à fourche</p>		<p><b>Optional</b>                  Opcional                  Optional                  Opcional                  Opzionale                  Optie                  En option</p>

## Tools

Be sure you have the tools you need:

- Tape measure
- Pencil
- Drill
- Wire cutters (optional)
- #2 Phillips screwdriver
- Level

If *installing the tile bridge flush with the ceiling tile*, you will also need:

- Utility knife
- Straight edge

If *anchoring the support wires to concrete*, you will also need:

- 1/4 in. masonry drill bit
- Claw hammer

If *anchoring the support wires to wood*, you will also need:

- 5/32 in. drill bit

You may also want a suitable saw to cut the mount column to length.

## Unpacking the Ceiling Mount

Make sure you received all the items you expected.

Security hex head screw, 10-24 x 1/4 in. (1)



Hex head screw, 1/4-20 x 5/8 in. (1)



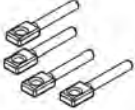
Security hex key (1)



Phillips head screws, 10-24 x 5/8 in. (8)



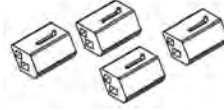
Concrete anchors (4)



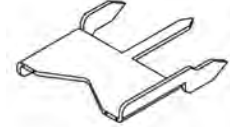
Screw eyes (4)



Cable locks (4)



Ceiling tile cutter (1)



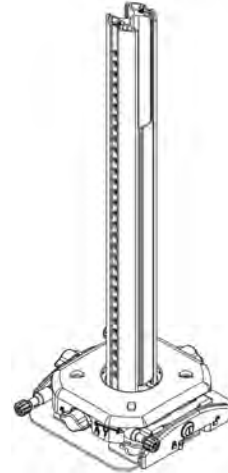
Looped support cables (4)



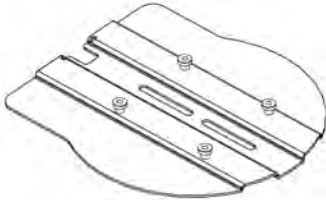
Trim ring (1)



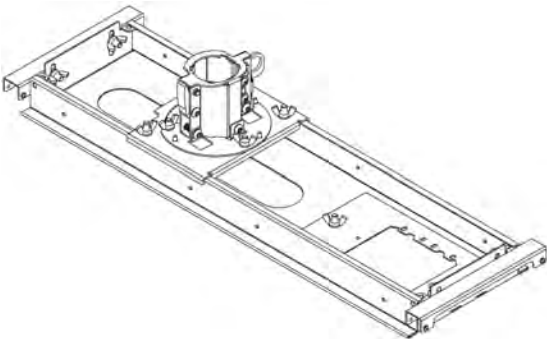
Column (1)



Camera mounting plate (1)



Tile bridge (1)



Some kits may also include a OneLINK camera extension with an EZCamera Interface Module (EZIM).



## Installation

Tasks in this procedure:

- Determine what portion of the mount will be visible, and place the tile bridge accordingly.
- Determine how the mount will be supported, and anchor the support wires accordingly.
- Secure the tile bridge and install the column.
- Attach the camera.
- Connect the camera.

### Deciding Which Installation Method to Use

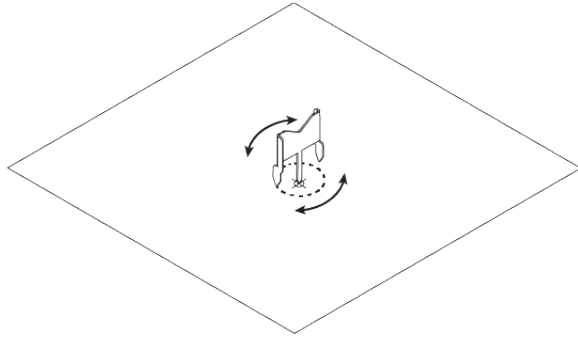
Determine what will be visible to people in the room – only the column and attached camera, or the tile bridge also.

	
<p>Only the column and mount showing: Install the tile bridge <i>above the ceiling tile</i>. (Requires making a hole in the tile.)</p>	<p>Tile bridge showing: Install the tile bridge <i>flush with the ceiling tile</i>. (Requires cutting and fitting the tile to the tile bridge.)</p>

## Installing the Tile Bridge Above the Ceiling Tile

### To prepare the ceiling tile:

1. Determine exactly where the column should enter the ceiling, and mark the centerpoint on the lower side of the tile (the side visible to people in the room).
2. Remove the ceiling tile if you have not already done so.
3. Press the center tip of the ceiling tile cutter into the ceiling tile at the location you marked, and twist it back and forth to cut a hole through the tile.

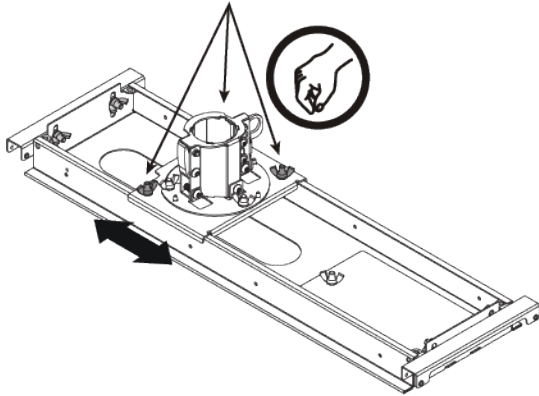


4. Reinstall the ceiling tile, making sure it is oriented the same direction as before.

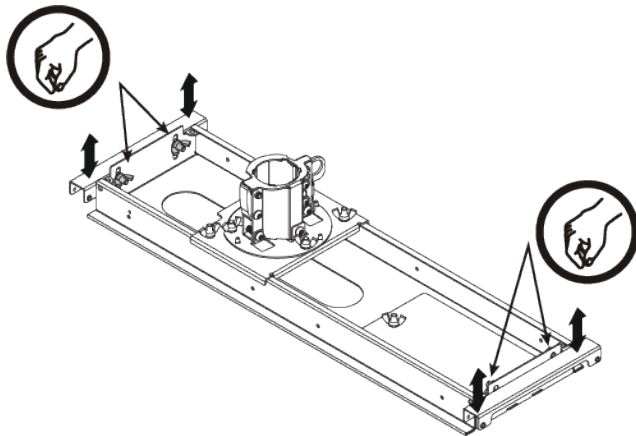


**To place the tile bridge:**

1. Place the tile bridge on top of the ceiling tile so that the end brackets hook over the taller rails of the ceiling framework.
2. Move the tile bridge as needed to align the column slot over the hole in the tile.
3. Loosen the three wing nuts on the upper side of the column support, and slide it to align the column support exactly with the hole in the ceiling.



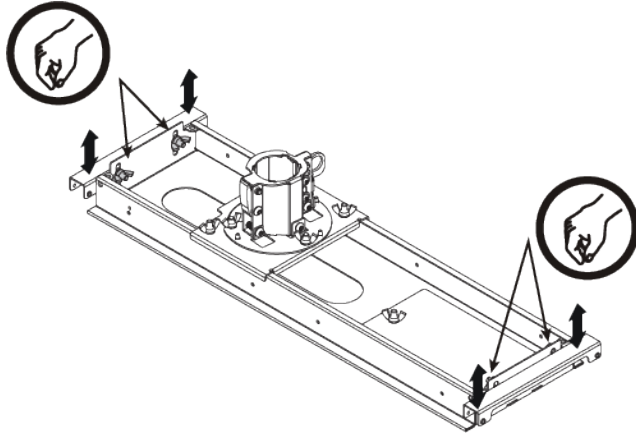
4. Tighten the three wing nuts on the column support to secure it.
5. Loosen the wing nuts securing the end brackets.



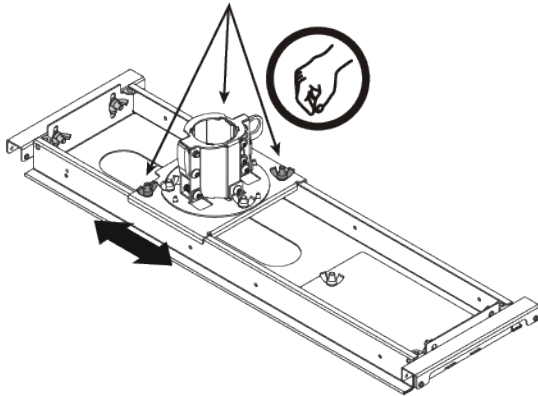
6. Adjust the end brackets as needed, so that the tile bridge sits flat against the ceiling tile while being fully supported by the rails of the ceiling framework, and tighten the wing nuts.

## Installing the Tile Bridge Flush with the Ceiling Tile

1. Remove the ceiling tile.
2. Place the tile bridge so that the end brackets hook over the taller rails of the ceiling framework, and adjust its position as needed.
3. Loosen the wing nuts securing the end brackets.



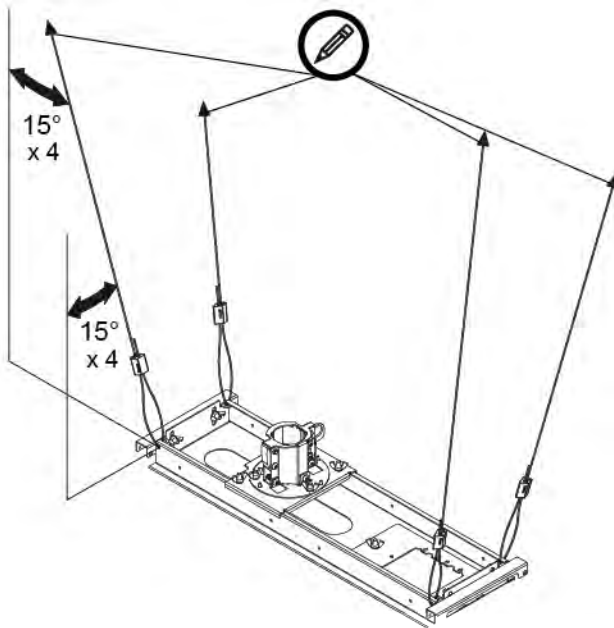
4. Adjust the end brackets as needed, so that the tile bridge sits flush and level with respect to the rails of the ceiling framework, and tighten the wing nuts.
5. Loosen the three wing nuts on the upper side of the column support, and slide it to the desired position.



6. Tighten the three wing nuts on the column support to secure it.
7. Cut and fit pieces of ceiling tile into place along the sides of the tile bridge. Allow 3/8 inch (9 mm) overlap to rest on the support lip of the tile bridge.

## Determining How to Anchor the Support Wires

1. Determine how to anchor the safety wires for the mount:
  - Loop each support wire around an available object
  - Anchor the support wires to solid concrete
  - Anchor the support wires to wood ceiling joists
2. Identify the primary rails (the taller set of rails) of the ceiling framework. The ends of the tile bridge will rest on these rails.
3. Examine the structure above the ceiling tiles to identify four support cable anchor locations. Each anchor must be approximately  $15^\circ$  out from the corners of the tile bridge.
4. Mark the locations of the anchor-points for the support wires.
5. Choose the most suitable way(s) to place the support wires:
  - **Loop support wires around existing objects** – must be able to support at least 35 lbs (16 kg) and hold the cable without slippage.
  - **Anchor support wires to solid concrete** – must be at least 4 inches thick and structurally sound
  - **Anchor support wires to wood ceiling joists** – must be at least 3.5 inches by 1.5 inches
6. Anchor the support wires using the appropriate method.

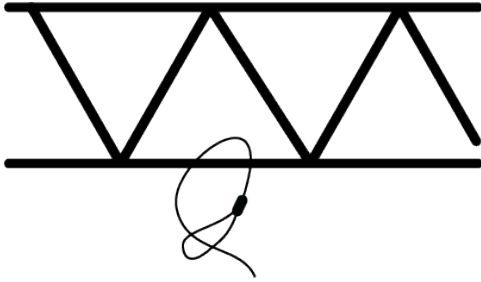


## Anchoring to Existing Objects



Warning: Attach each support wire to an object that can support at least 35 lbs (16 kg) and will not allow the wire to slip. Inadequate support can result in serious injury and equipment damage.

1. Identify suitable anchor-points.
2. Pass the looped end of the support wire over, around, or through the supporting object.
3. Pass the other end of the support wire through the loop.

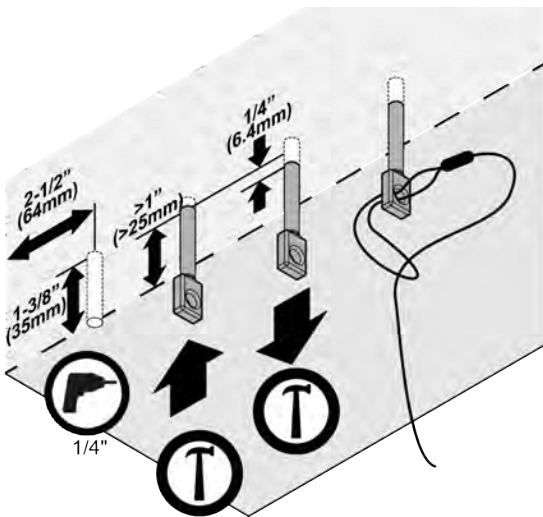


## Anchoring to Concrete



Warning: Install anchors into structurally sound solid concrete at least 4 in. (10 cm) thick. Hollow concrete, mortar, or damaged concrete can fail to hold the anchor, possibly resulting in serious injury and equipment damage.

1. Mark the locations for the four anchors. Ensure that each anchor will be at least 2.5 inches (64 mm) from the nearest edge of the concrete.
2. For each of the four marked anchor locations, drill a 1/4 inch diameter hole to a depth of 1.5 inches (38 mm).
3. Hammer each anchor into place, then use the claw of the hammer to pull the anchor out about 0.25 inch (6 mm).
4. For each anchor, route the looped end of a support wire through the anchor, passing the other end of the wire through the loop as shown.

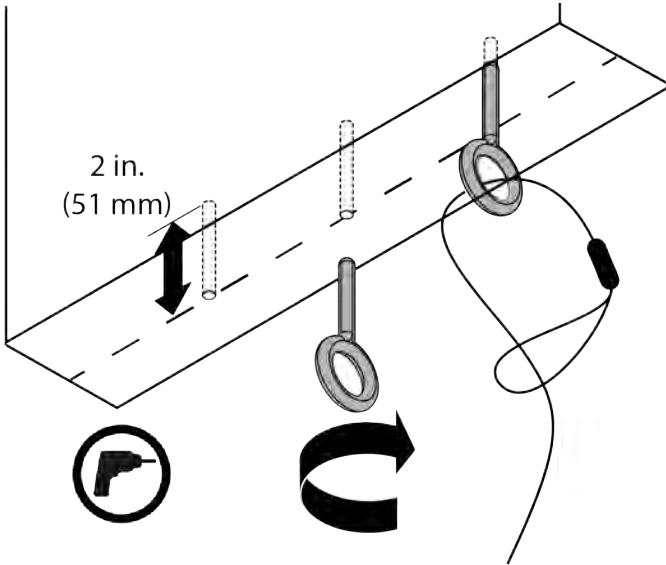


## Anchoring to Wood



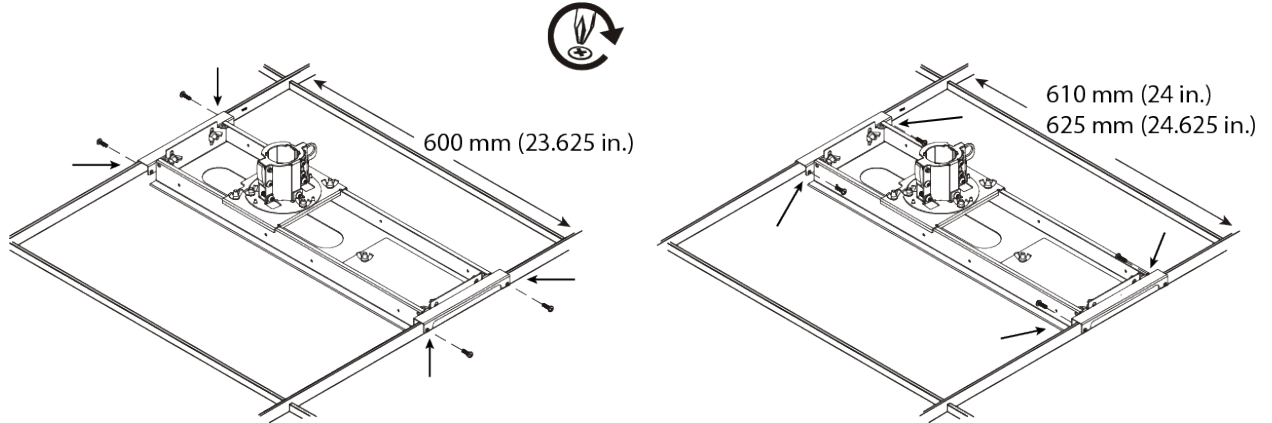
Warning: Install eye bolts into a standard 2x4 (3.5 in x 1.5 in/9 cm x 4 cm) or larger beam, drilling along the centerline of the narrower face. Lumber of smaller dimensions will not provide adequate support, possibly resulting in serious injury and equipment damage.

1. Mark the anchor locations and drill a 5/32" diameter x 2" deep hole for each screw eye.
2. Fully thread each screw eye into place.
3. For each screw eye, route the looped end of a support wire through the eye, passing the other end of the wire through the loop as shown.

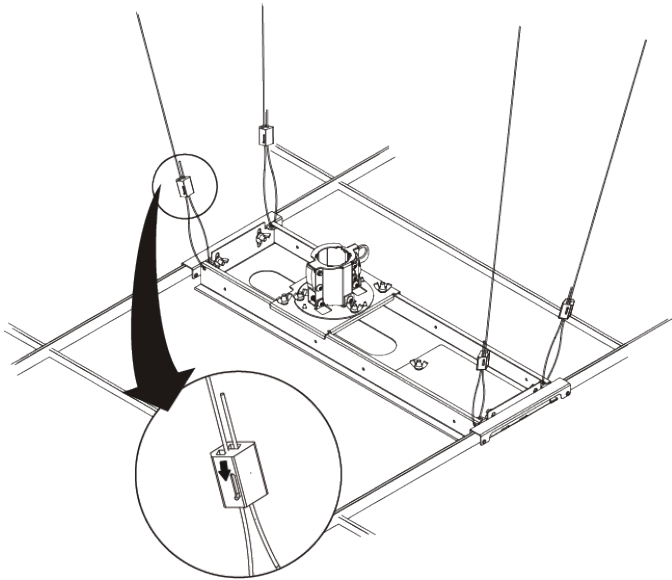


## Securing the Tile Bridge

1. Optional: Use four 10-24 x 5/8 in. screws to secure the tile bridge to the ceiling framework and prevent shifting. For 600mm frameworks, install the screws through the outer face of the adjustable end brackets. For larger frameworks, install the screws through the inner face of the brackets.



2. Slide a cable lock onto each support wire. The wire will only pass through each opening in one direction.
3. Pass the end of each wire through the hole at the nearest corner of the tile bridge, and back through the cable lock.

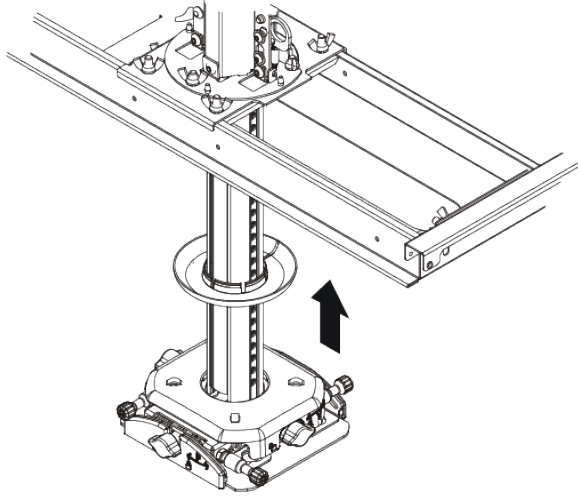


**Caution:** You must adjust the support wires to support the full weight of the tile bridge, so that the mounting system does not place any load on the framework supporting the ceiling tiles. Failure to do so will damage the framework.

4. Adjust the cable tension until the tile bridge is supported fully and evenly by all four support cables, without putting any weight on the ceiling tile framework. If you overtighten a support wire, use the release lever on the side of the cable lock.

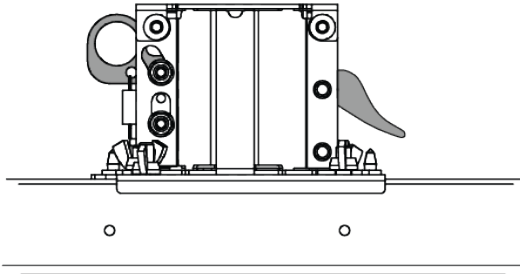
## Installing the Column

1. Slide the trim ring onto the column, with the open side up.
2. Slide the column up into the column support, making sure the ratchet engages.

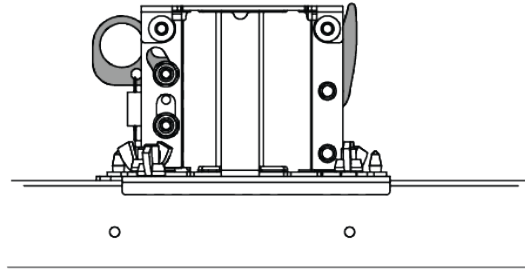


Warning: To ensure stability, at least one hole along the side of the column must be fully visible above the column support.

3. If you need to raise the column, push up on the plate on the end. If you need to lower it, pull up on the release ring while supporting the column from below.



Unlocked



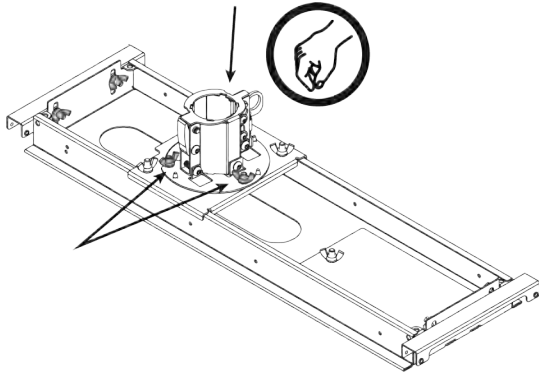
Locked

4. When the column is at the right height, raise the column support's locking lever into the locked position.
5. Optional: Cut and fit pieces of ceiling tile to cover the column slot in the tile bridge.
6. Slide the trim ring into place.

## Adjusting the Column Rotation

This adjustment is not always necessary.

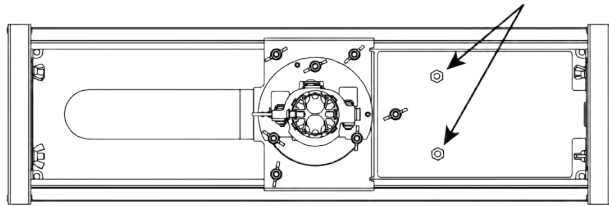
1. Check to see whether the mount plate at the base of the column is oriented properly. The side with the roll adjustment (R) lock should face roughly the direction that the camera will point.
2. If you need to adjust the column, loosen the three wing nuts on the rotation plate.
3. Turn the column as needed, and retighten the wing nuts.



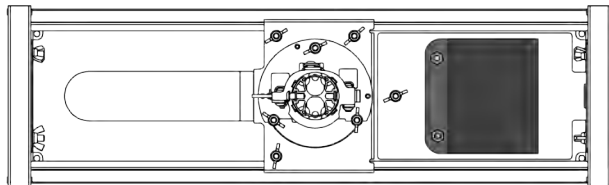
## Installing the Camera Interface

Skip this task if you are not connecting the camera to an interface device such as a OneLINK EZIM.

1. Remove the hex nuts on the interface plate's two mounting screws.



2. Place the camera interface over the mounting screws.
3. Secure the camera interface using the hex nuts.

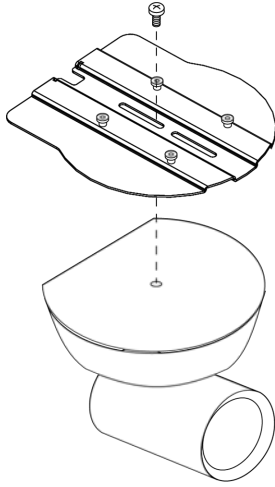




## Attaching the Camera

### To attach the camera to the camera mounting plate:

1. While supporting the camera so there is no weight on its head or mounting arm, place the camera mount plate against the camera's base.
2. Align the threaded mounting hole in the camera's base with one of the slots in the camera mount plate, and attach the plate to the camera using the mounting screw supplied with the camera.

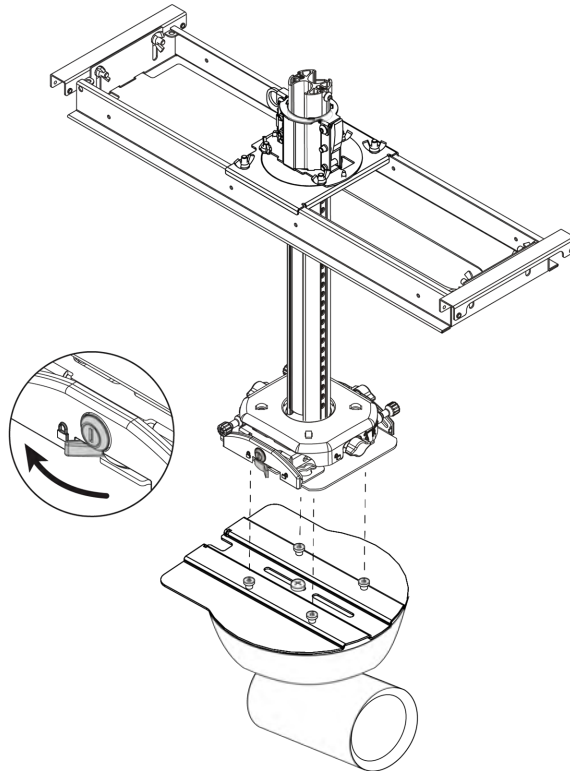


**To attach the camera mounting plate to the column:**

1. Slide the posts on the camera mounting plate into the keyhole slots on the base of the column.



Warning: Support the camera until the posts engage the keyhole slots and the locking plate is fully engaged and locked into place. Releasing the camera before it is fully locked could allow it to fall, possibly resulting in injury as well as equipment damage.



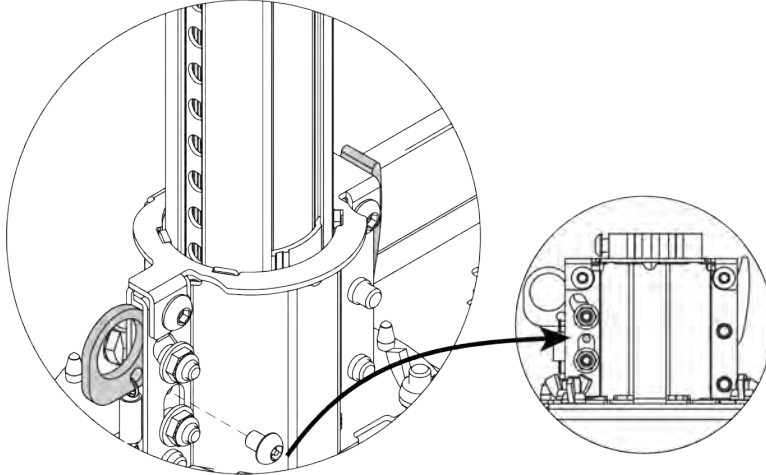
2. Move the locking lever on the base of the column to the locked position.
3. Optional: Use the keylock to secure the locking lever. The key is provided with the mounting system.

## Connecting the Camera

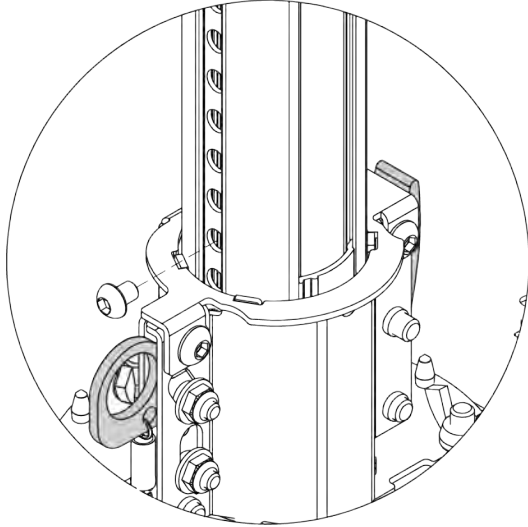
1. If you are using a camera interface mounted in the tile bridge, connect its cables according to its documentation.
2. Route the camera's cable(s) through the cable channel in the column. If you are not using a camera interface mounted in the tile bridge, you may find it convenient to slide the cable cover out until the cables are in place.
3. Connect the cable(s) to the camera.
4. Guide the camera cable(s) into the notch at the back of the camera mounting plate and gently draw any excess length back up the column.
5. Slide the cable cover back into place if necessary.

## Last Steps

1. Referring to the documentation for the camera and (if used) the camera interface, verify that the camera powers on and functions properly.
2. Install a 10-24 x 1/4 in. screw in the column mount to immobilize the column release ring.



3. Install a 1/4-20 x 5/8 in. screw in the column, above the column mount, to prevent upward motion.



4. Reinstall any ceiling tiles that you removed for access.

## Warranty Information

See Vaddio Warranty, Service and Return Policies posted on [support.vaddio.com](http://support.vaddio.com) for complete details.

**Hardware\* warranty:** Two (2) year limited warranty on all parts and labor for Vaddio manufactured products. Vaddio warrants its manufactured products against defects in materials and workmanship for a period of two years from the day of purchase, to the original purchaser, if Vaddio receives notice of such defects during the warranty. Vaddio, at its option, will repair or replace products that prove to be defective. Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.

**Exclusions:** The above warranty shall not apply to defects resulting from improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, mishandling, operation outside the normal environmental specifications for the product, use of the incorrect power supply, modified power supply or improper site operation and maintenance. OEM and special order products manufactured by other companies are excluded and are covered by the manufacturer's warranty.

**Vaddio Customer Service:** Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test then repair the product or products. The cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned for testing as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

**Vaddio Technical Support:** Vaddio technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Vaddio Technical Support can be contacted by email at [support@vaddio.com](mailto:support@vaddio.com) or by phone at one of the phone numbers listed on [support.vaddio.com](http://support.vaddio.com).

**Return Material Authorization (RMA) number:** Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide the technician with a return phone number, e-mail address, shipping address, product serial numbers and original purchase order number. Describe the reason for repairs or returns as well as the date of purchase. See the General RMA Terms and Procedures section for more information. RMAs are valid for 30 days and will be issued to Vaddio dealers only. End users must return products through Vaddio dealers. Include the assigned RMA number in all correspondence with Vaddio. Write the assigned RMA number clearly on the shipping label of the box when returning the product. All products returned for credit are subject to a restocking charge without exception. Special order product are not returnable.

**Voided warranty:** The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, use of incorrect power supply, use of a modified power supply or unauthorized repair.

**Shipping and handling:** Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit. Vaddio will pay for outbound shipping, transportation, and insurance charges for all items under warranty but will not assume responsibility for loss and/or damage by the outbound freight carrier. If the return shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

**Products not under warranty:** Payment arrangements are required before outbound shipment for all out of warranty products.

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