INSTALLATION INSTRUCTIONS

Universal Interface Suspended Ceiling Projector System

CHIEF®

Our Mounts. **Your Vision.**

SYSAU

DISCLAIMER

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DEFINITIONS

MOUNTING SYSTEM: A MOUNTING SYSTEM is the primary Chief product to which an accessory and/or component is attached.

ACCESSORY: AN ACCESSORY is the secondary Chief product which is attached to a primary Chief product, and may have a component attached or setting on it.

COMPONENT: A COMPONENT is an audiovisual item designed to be attached or resting on an accessory or mounting system such as a video camera, CPU, screen, display, projector, etc.

⚠ **WARNING:** A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

⚠ **CAUTION:** A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

⚠ **IMPORTANT SAFETY INSTRUCTIONS**

⚠ **WARNING:** Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer's responsibility to make sure the mounting system is properly assembled and installed using the instructions provided.

⚠ **WARNING:** Failure to provide adequate structural strength for this mounting system can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this mounting system is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the mounting system.

⚠ **WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the SYSAU does not exceed 35 lbs (15.9 kg).

⚠ **WARNING:** Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

⚠ **WARNING:** Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.
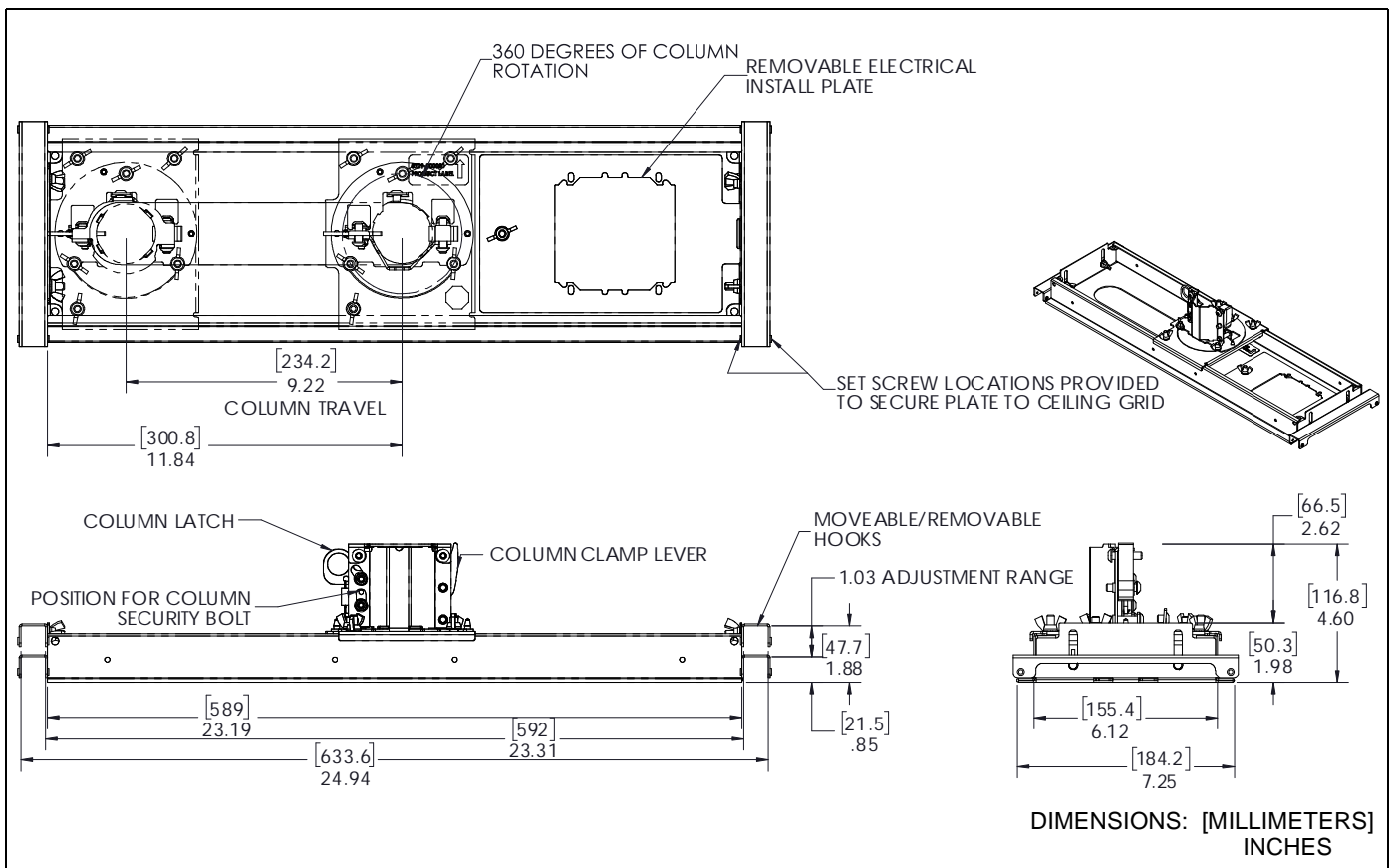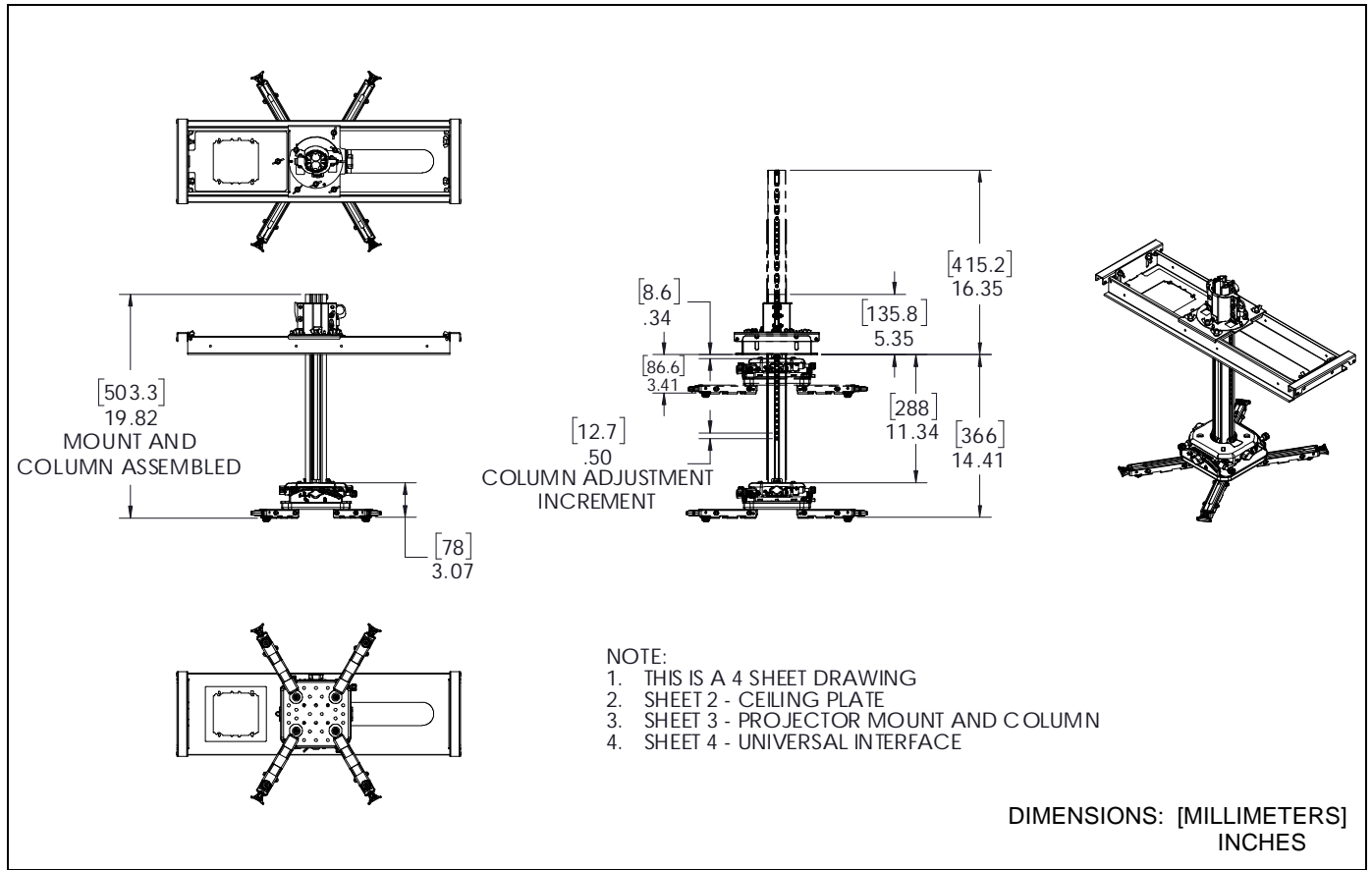
⚠ **WARNING:** Do not use this product outdoors.

IMPORTANT ! : The SYSAU has been designed to be mounted above or flush with a suspended ceiling secured by a WireVice system.

IMPORTANT ! : The SYSAU has been designed to support a single electrical receptacle, a double electrical receptacle or both.
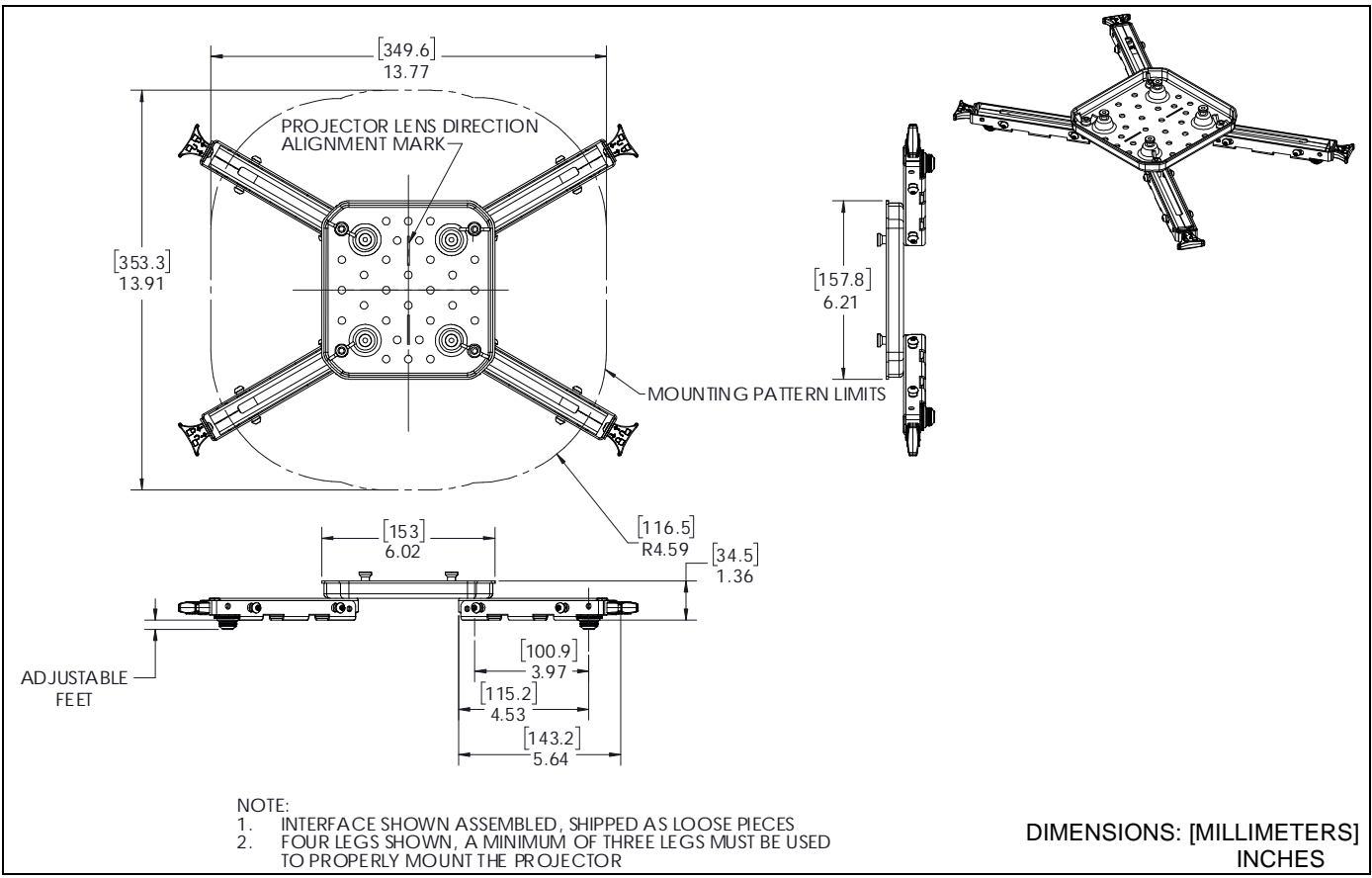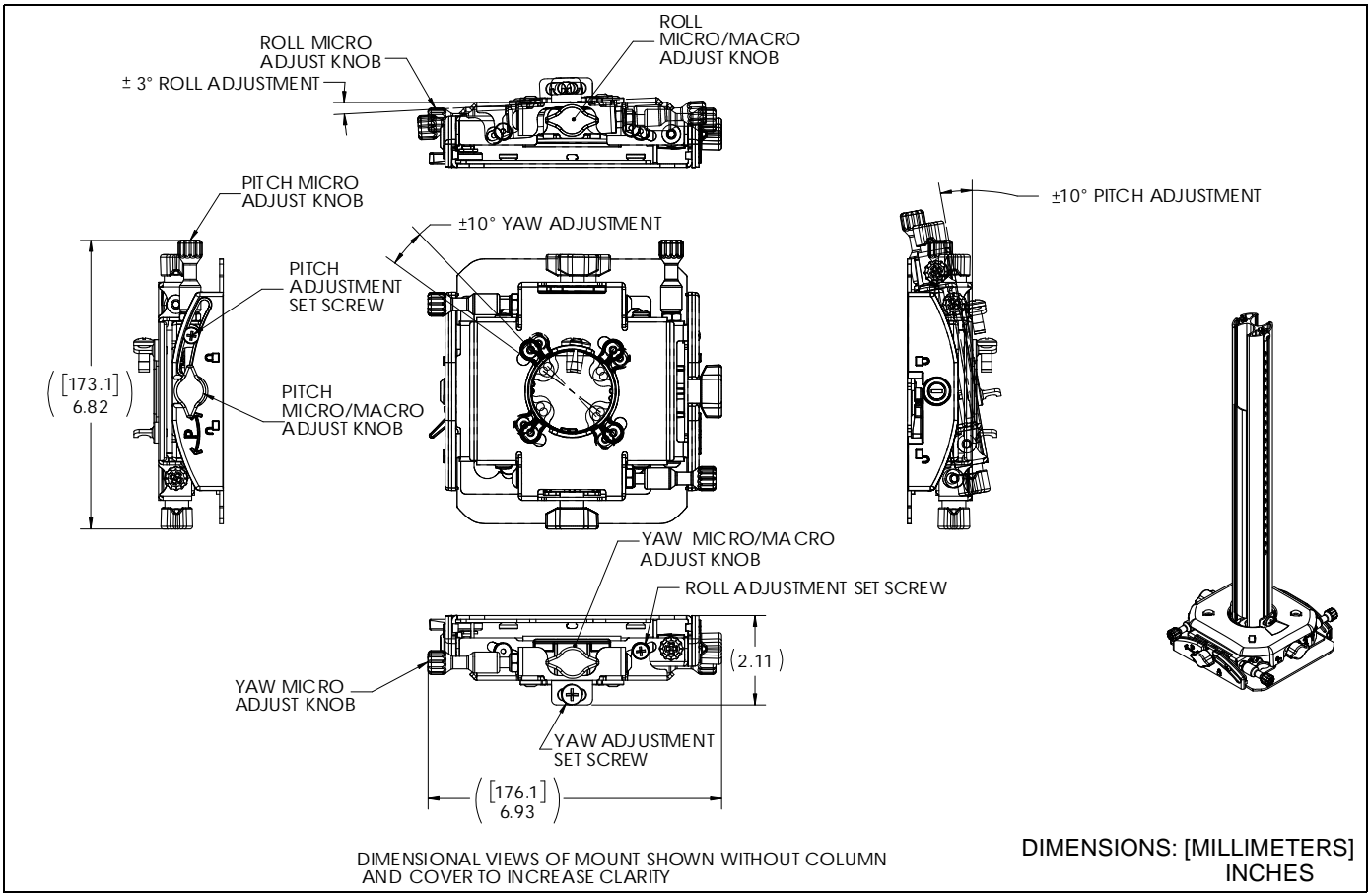
NOTE: It is the installer's responsibility to ensure that the enclosure is bonded to the ground in the switch box, in accordance with the National Electric Code, ANSI/NFPA 70 or Canadian Electrical Code, CSA C22.1.
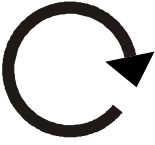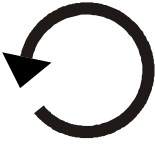
--SAVE THESE INSTRUCTIONS--

DIMENSIONS

[503.3]
19.82
MOUNT AND
COLUMN ASSEMBLED

[78]
3.07

[8.6]
.34

[86.6]
3.41

[12.7]
.50
COLUMN ADJUSTMENT
INCREMENT

[415.2]
16.35

[135.8]
5.35

[288]
11.34

[366]
14.41

NOTE:
1.   THIS IS A 4 SHEET DRAWING
2.   SHEET 2 - CEILING PLATE
3.   SHEET 3 - PROJECTOR MOUNT AND COLUMN
4.   SHEET 4 - UNIVERSAL INTERFACE

DIMENSIONS: [MILLIMETERS]
INCHES

360 DEGREES OF COLUMN
ROTATION

REMOVABLE ELECTRICAL
INSTALL PLATE

SET SCREW LOCATIONS PROVIDED
TO SECURE PLATE TO CEILING GRID

[234.2]
9.22
COLUMN TRAVEL

[300.8]
11.84

COLUMN LATCH

COLUMN CLAMP LEVER

POSITION FOR COLUMN
SECURITY BOLT

MOVEABLE/REMOVABLE
HOOKS

1.03 ADJUSTMENT RANGE

[47.7]
1.88

[21.5]
.85

[589]
23.19

[592]
23.31

[633.6]
24.94

[66.5]
2.62

[116.8]
4.60

[50.3]
1.98

[155.4]
6.12

[184.2]
7.25

DIMENSIONS: [MILLIMETERS]
INCHES

DIMENSIONS - continued

ROLL MICRO
ADJUST KNOB

ROLL
MICRO/MACRO
ADJUST KNOB

± 3° ROLL ADJUSTMENT

±10° PITCH ADJUSTMENT

PITCH MICRO
ADJUST KNOB

±10° YAW ADJUSTMENT

PITCH
ADJUSTMENT
SET SCREW

$\left(\begin{bmatrix}173.1\end{bmatrix}\right)$
6.82

PITCH
MICRO/MACRO
ADJUST KNOB

YAW MICRO/MACRO
ADJUST KNOB

ROLL ADJUSTMENT SET SCREW

(2.11)

YAW MICRO
ADJUST KNOB

YAW ADJUSTMENT
SET SCREW

$\left(\begin{bmatrix}176.1\end{bmatrix}\right)$
6.93

DIMENSIONAL VIEWS OF MOUNT SHOWN WITHOUT COLUMN
AND COVER TO INCREASE CLARITY

DIMENSIONS: [MILLIMETERS]
INCHES

[349.6]
13.77

PROJECTOR LENS DIRECTION
ALIGNMENT MARK

[353.3]
13.91

[157.8]
6.21

MOUNTING PATTERN LIMITS

[153]
6.02

[116.5]
R4.59

[34.5]
1.36

[100.9]
3.97

[115.2]
4.53

[143.2]
5.64

ADJUSTABLE
FEET

NOTE:
1.   INTERFACE SHOWN ASSEMBLED, SHIPPED AS LOOSE PIECES
2.   FOUR LEGS SHOWN, A MINIMUM OF THREE LEGS MUST BE USED
       TO PROPERLY MOUNT THE PROJECTOR

DIMENSIONS: [MILLIMETERS]
INCHES

LEGEND

	Tighten Fastener
	Apretar elemento de fijación
	Befestigungsteil festziehen
	Apertar fixador
	Serrare il fissaggio
	Bevestiging vastdraaien
	Serrez les fixations

	Pencil Mark
	Marcar con lápiz
	Stiftmarkierung
	Marcar com lápis
	Segno a matita
	Potloodmerkteken
	Marquage au crayon

	Loosen Fastener
	Aflojar elemento de fijación
	Befestigungsteil lösen
	Desapertar fixador
	Allentare il fissaggio
	Bevestiging losdraaien
	Desserrez les fixations

	Drill Hole
	Perforar
	Bohrloch
	Fazer furo
	Praticare un foro
	Gat boren
	Percez un trou

	Phillips Screwdriver
	Destornillador Phillips
	Kreuzschlitzschraubendreher
	Chave de fendas Phillips
	Cacciavite a stella
	Kruiskopschroevendraaier
	Tournevis à pointe cruciforme

	Adjust
	Ajustar
	Einstellen
	Ajustar
	Regolare
	Afstellen
	Ajuster

	Open-Ended Wrench
	Llave de boca
	Gabelschlüssel
	Chave de bocas
	Chiave a punte aperte
	Steeksleutel
	Clé à fourche

	Remove
	Quitar
	Entfernen
	Remover
	Rimuovere
	Verwijderen
	Retirez

	By Hand
	A mano
	Von Hand
	Com a mão
	A mano
	Met de hand
	À la main

	Optional
	Opcional
	Optional
	Opcional
	Opzionale
	Optie
	En option

	Hex-Head Wrench
	Llave de cabeza hexagonal
	Sechskantschlüssel
	Chave de cabeça sextavada
	Chiave esagonale
	Zeskantsleutel
	Clé à tête hexagonale

	Security Wrench
	Llave de seguridad
	Sicherheitsschlüssel
	Chave de segurança
	Chiave di sicurezza
	Veiligheidssleutel
	Clé de sécurité

TOOLS REQUIRED FOR INSTALLATION

#2

5/32"
(security)
[included]

PARTS

(A) Hardware Bag 9900-002214 [Hardware bag markings match second letter of hardware]

AA (4)
M2.5x10mm

AB (4)
M3x10mm

AC (4)
M4x10mm

AD (4)
M5x14mm

AE (4)
M6x14mm

AF (4)
M4x25mm

AG (4)
M6x25mm

AH (4)
M5x25mm

AI (4)
M3x25mm

AJ (4)
M4

AK (4)
.500x.257x.625"

AL1 (4)
10-24 x 3/8"
(security)

AL2 (1)
5/32" (security)

AM (4)
[Screw adapters]

AN (4)
1/4-20

(B) Hardware Bag 9900-002225 [Hardware bag markings match second letter of hardware]

BA (1)
[Column trim ring]

BB (1)
[Ceiling tile cutter]

BC (4)
.262 x 1-5/16"
[Screw eye]

BD (4)
[Cable lock]

BE (4)
1/4" x 1-1/2"
[Wire anchor]

BF (1)
1/4-20 x 5/8"

BG1 (1)
10-24 x 1/4"
(security)

BG2 (1)
5/32"
(security)

BH (8)
10-24 x 5/8"

BI (4)
1/16" x 25'
[Cable]

P (1)
[Universal interface plate]

Q (4)
[Universal interface leg]

R (1)
[Suspended ceiling plate assembly]

S (1)
[Projector mount and column]

ASSEMBLY AND INSTALLATION

Attach Universal Interface to Projector

⚠️ **WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the SYSAU does not exceed 35 lbs (15.9 kg).

⚠️ **CAUTION:** USING SCREWS OF IMPROPER SIZE MAY DAMAGE PROJECTOR. Properly sized screws will easily and completely thread into projector threaded inserts.

1. Determine proper size screw to fit the threaded inserts in projector. Test Phillips screws (AA-AE) provided until one fits the projector holes.

2. Insert screws through M4 flat washers (AJ), if required, screw adapters (AM) with height-adjustable nuts and into projector threaded inserts. (See Figure 1)

IMPORTANT ! : At least three or, if possible, **four** interface legs **MUST** be used to attach projector to universal interface plate.

NOTE: Only use washers (AJ) if using AA or AB screws to attach screw adapters (AM) to projector.
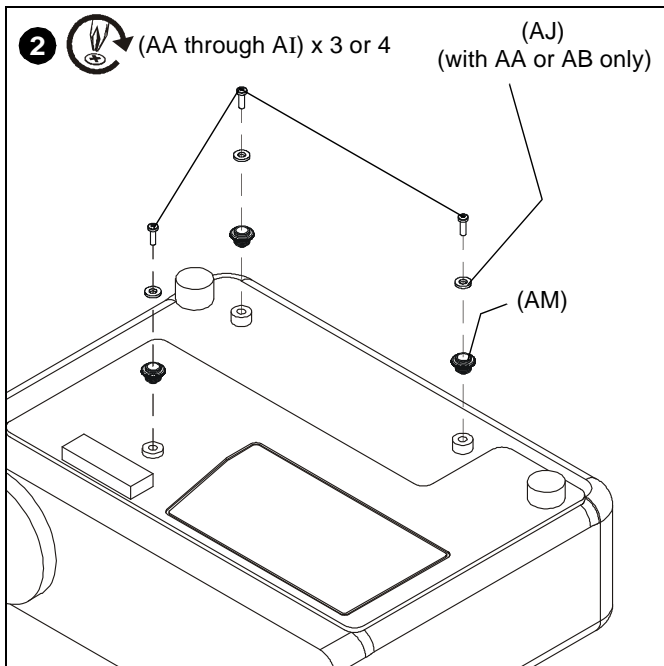
Figure 1

3. Adjust height-adjustable nuts (on screw adapters [AM]) to desired level.   (See Figure 2)

NOTE: Height-adjustable nuts should be adjusted as low as possible while still allowing interface legs (Q) to clear elevated surfaces on the projector. (See Figure 2) Adjust height-adjustable nuts to the same level on all adapter screws to ensure a level mount.

IMPORTANT ! : The longer screws (AF through AI) and spacers (AK) may be used if there is interference between interface legs and any part of the projector, and if more height is required to clear elevated surfaces of the projector.
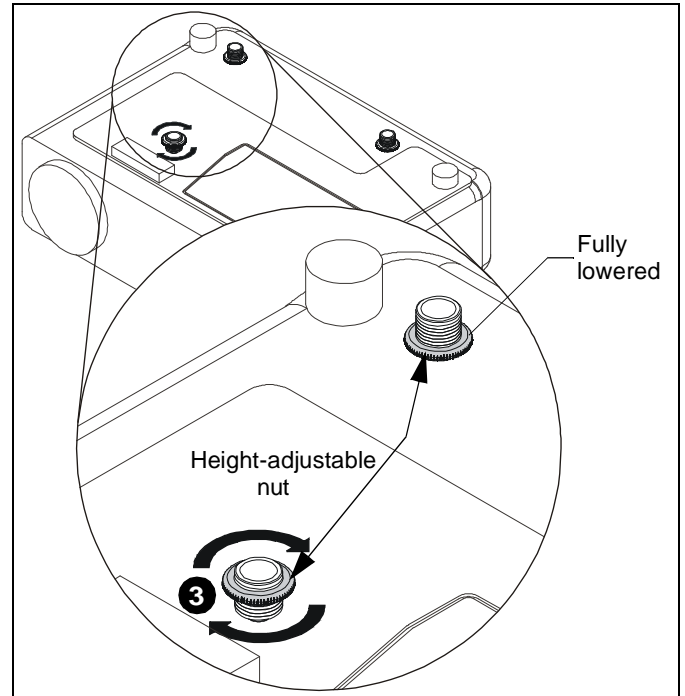

Figure 2

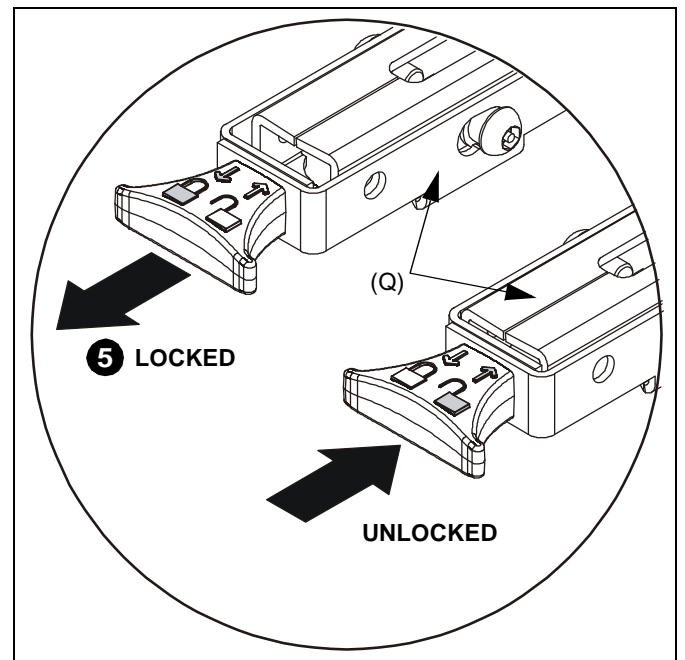**NOTE:** Make sure interface legs (Q) are in the **UNLOCKED** position. (See Figure 3)

Figure 3

4. Place interface legs (Q) over screw adapters (AM). (See Figure 4)
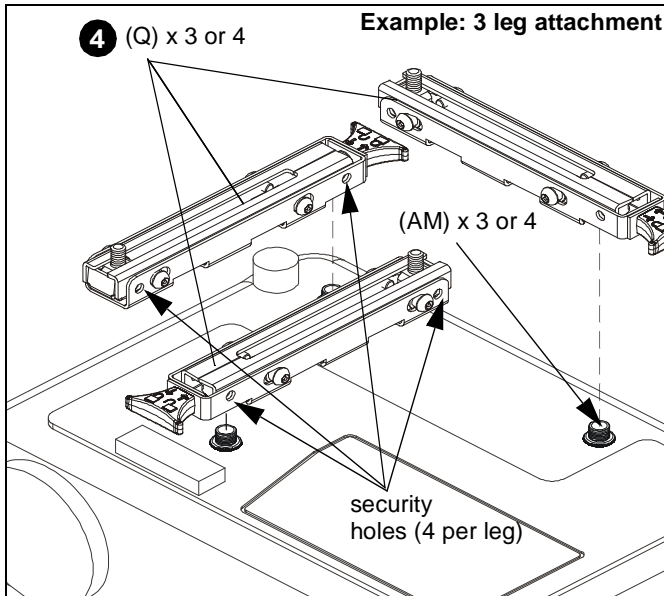

Figure 4

5. Ensure that interface leg is firmly seated over screw adapter, and pull out end of interface leg to lock in place over screw adapter. (See Figure 3)

6. Repeat Step 5 for remaining legs.

7. If projector security is required, fasten one 10-24 x 3/8" security button head screw (AL1) through one of the four security holes in EACH leg using the 5/32" security hex key (AL2). (See Figure 4)
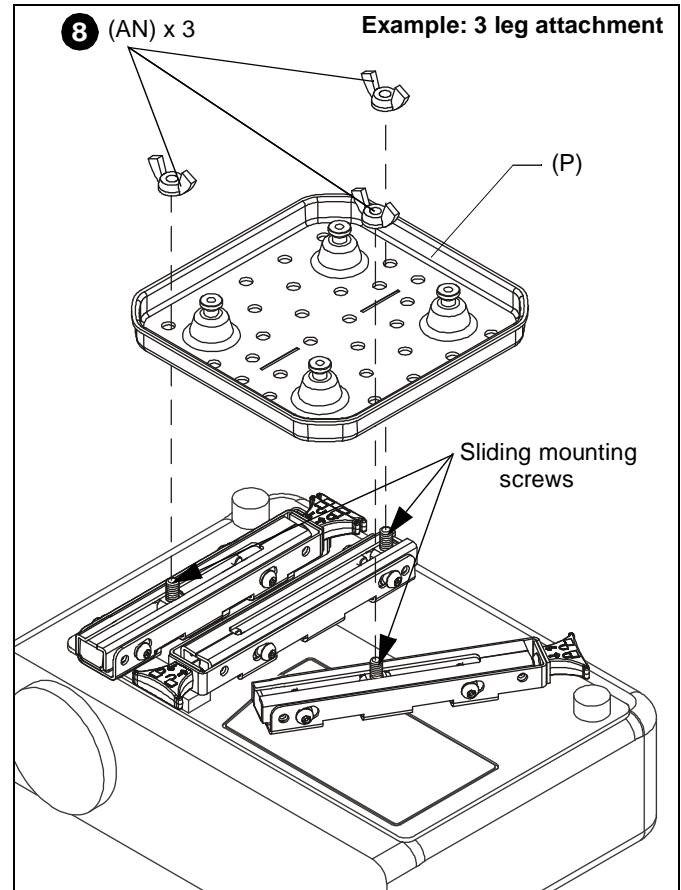
⚠ **WARNING:** BE SURE THAT UNIVERSAL INTERFACE LEGS ARE LOCKED OVER SCREW ADAPTERS. Projector may fall from the mount causing serious injury or death if legs are not securely locked over screw adapters!

8. Maneuver interface legs (Q) and slide mounting screws in top of interface legs so that mounting screws are properly located to mount universal interface plate (P) over projector's center of gravity via attachment to interface legs. (See Figure 5)

9. Secure interface plate to interface legs by installing 1/4-20" wing nuts (AN) to screws on interface legs. (See Figure 5)

NOTE: The following example is one possible scenario based on one example projector hole pattern. Specific connection points vary dependent on projector hole pattern. Multiple scenarios may be used for each specific hole pattern as long as the weight of the projector is centered and balanced after mounting.

IMPORTANT ! : At least three or, if possible, **four** interface legs **MUST** be used to attach projector to universal interface plate.

Figure 5

INSTALLING THE SUSPENDED CEILING PLATE

NOTE: The SYSAU has been designed to be mounted above or flush with a suspended ceiling secured by a WireVice system. The method used may be determined by the existing ceiling system.

1. Remove outlet plate from suspended ceiling plate assembly (R) if electrical outlet will be installed (See Figure 6), and install UL Listed Raco 256, 232 or equivalent UL Listed electrical box (not included) to SYSAU outlet plate following instructions included with electrical box.
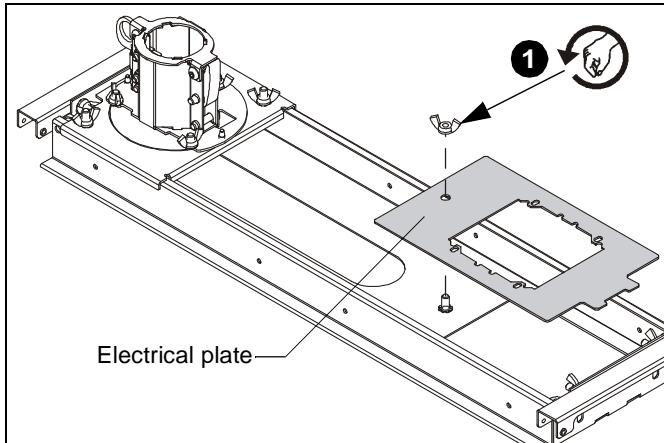

Electrical plate

Figure 6

2. Determine exact location of column.   Mark location on lower (finished) side of ceiling tile. (See Figure 7)

   • **Flush with Suspended Ceiling**

     Mark location on ceiling tile framework.

   • **Install on Top of Existing Ceiling Tile**

     Mark location on lower (finished) side of ceiling tile.
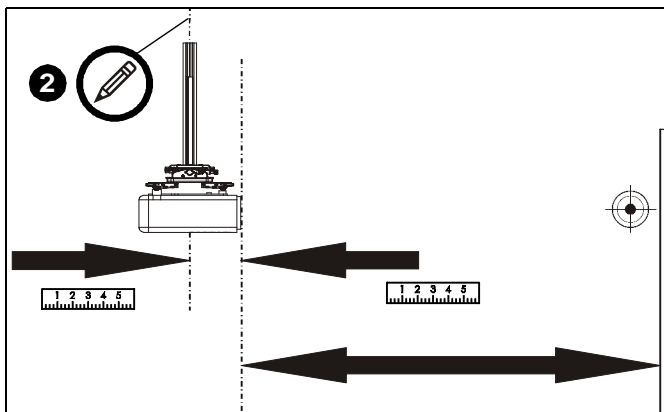
Figure 7

Be sure to consider the following items when determining column location:

   • Dimensional offset of display/projector relative to column (due to mount and/or interface).
   • For Projectors: Any recommended dimensions of projector relative to target. (See installation instructions included with the projector.)

3. Remove affected ceiling tile and any adjacent tiles required for access.

4. **Installing on Top of Existing Ceiling Tile only:** Press center tip of ceiling tile cutter (BB) into *finished* side of ceiling tile at marked location. Cut extension column hole through tile using back and forth motion.

5. **Installing on Top of Existing Ceiling Tile only:** Reinstall ceiling tile with extension column hole. Ensure tile is oriented for proper location of hole.

6. **Installing on Top of Existing Ceiling Tile only:** Install suspended ceiling plate assembly (R) on top of ceiling tile so that end brackets engage primary (1-1/2" (38mm) high) rails of ceiling framework. (See Figure 8)
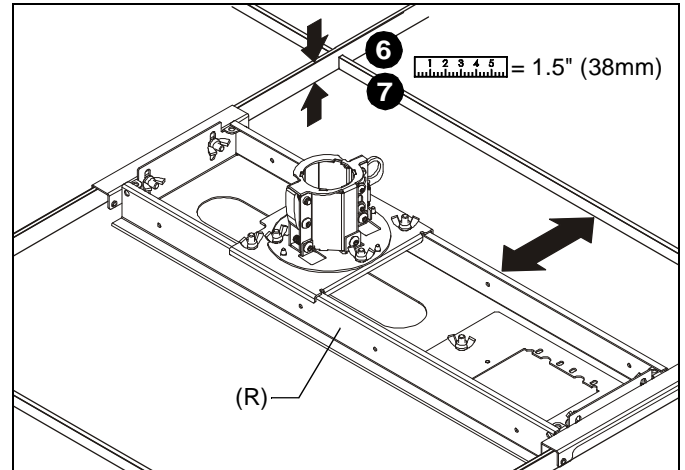

= 1.5" (38mm)

(R)

Figure 8

7. **Flush with Suspended Ceiling only:** Install suspended ceiling plate assembly (R) on top of ceiling framework rails so that end brackets engage primary (1-1/2" (38mm) high) rails of ceiling framework. (See Figure 8)

8. Loosen two wing nuts at each end of ceiling plate assembly. (See Figure 9)

9. Raise or lower adjustable bracket, as necessary, at each end of the ceiling plate assembly.

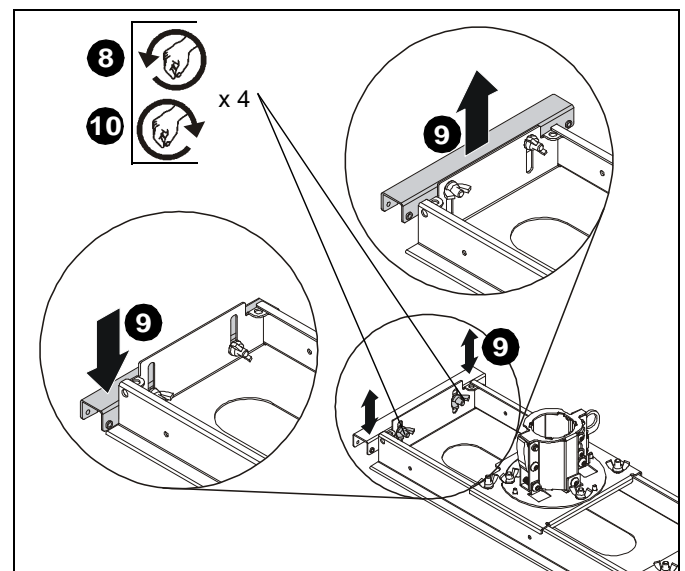10. Tighten wing nuts on adjustable bracket at each end of the ceiling plate assembly. (See Figure 9)

x 4

Figure 9

11. Loosen three wing nuts in upper side of ceiling plate assembly (R) to adjust the lateral shift of the column support. (See Figure 10)

12. Position column support (as required) to center support over ceiling tile hole. (See Figure 10)

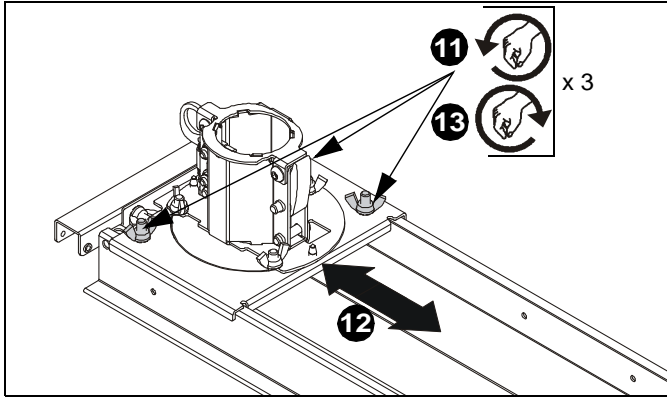13. Tighten wing nuts to prevent further movement of column support. (See Figure 10)

Figure 10

14. **OPTIONAL -- Installing on Top of Existing Ceiling Tile only:** Mark location of electrical cutout on ceiling tile with pencil.

15. Examine ceiling structure (concrete or wood) above ceiling plate assembly (R) to identify four support cable anchor locations. Each location should be approximately 15° outboard of support holes in ceiling plate assembly (R). (See Figure 11)

16. Mark locations with pencil.
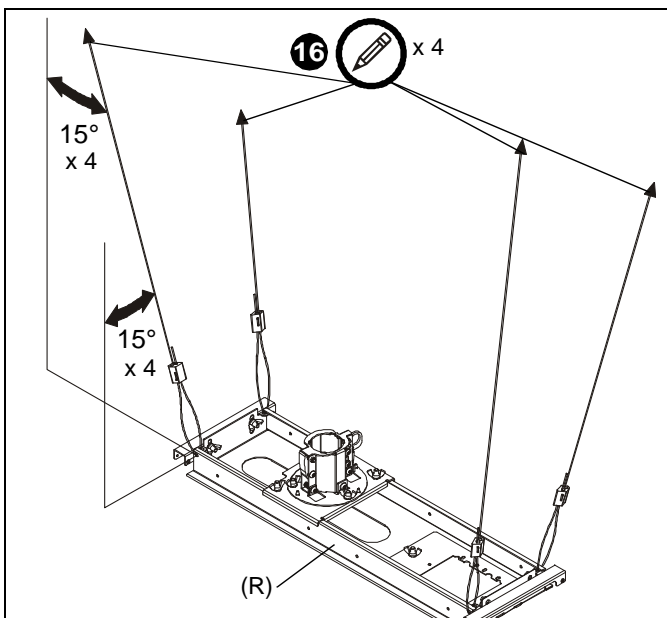
Figure 11

17. Remove ceiling plate assembly (R) and ceiling tile.

OPTIONAL: Cut electrical box opening in ceiling tile at marked location.

Installing Support Cable

⚠️ **WARNING:** Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

Solid Concrete Ceiling Structure

⚠️ **WARNING:** Anchors must be installed into structurally sound solid concrete with a minimum thickness of 4" (101.6mm) or greater. Installation into hollow concrete block, mortar, or concrete that exhibits cracking, spalling, or other defects may result in failure of anchor and serious personal injury or damage to equipment!

1. Drill 1/4" diameter x 1-1/2" deep hole at each marked cable anchor support location (See Figure 12). Ensure hole is at least 2-1/2" from nearest concrete edge. Remove debris from hole.
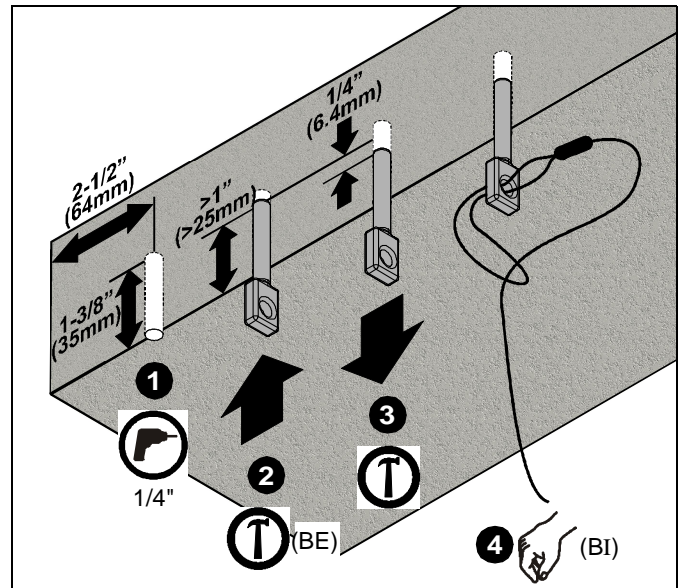

Figure 12

2. Tap anchor (BE) into each hole until the anchor head is seated in the hole. (See Figure 12)

⚠️ **WARNING:** Failure to properly set anchor may result in failure of anchor and serious personal injury or damage to equipment!

3. Using claw portion of hammer, set each anchor (BE) by pulling it out of hole approximately 1/4" (6.4mm). (See Figure 12)

4. Insert portion of manufactured *loop* on cable (BI) through hole in anchor (BE). Insert end of cable (BI) through loop. Repeat for 3 remaining support locations. (See Figure 12)

Wood Ceiling Structure

⚠ **WARNING:** Anchors must be installed into wood that measures at least 3-1/2" x 1-1/2" (88.9mm x 38.1mm), and the anchor must install in the center of the narrower (1-1/2" [38.1mm]) face.

1. Drill 5/32" diameter x 2" deep hole at each marked cable anchor support location (See Figure 13). Remove debris from hole.
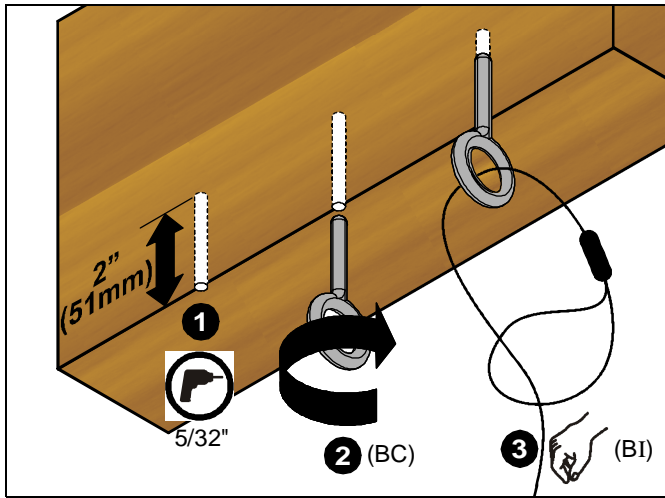

Figure 13

2. Fully thread eye lag (BC) into each hole (See Figure 13).

3. Route end of cable (BI) through eye lag (BC) and then through cable loop (See Figure 13). Repeat for 3 remaining support locations.

Completing Ceiling Plate Assembly Installation

1. **Installing on Top of Existing Ceiling Tile only:** Reinstall ceiling tile with extension column hole. Ensure tile is oriented for proper location of hole.

2. **Installing on Top of Existing Ceiling Tile only:** Reinstall ceiling plate assembly (R) on top of ceiling tile so that extension column support is centered over hole in tile.

3. Position ceiling plate assembly (R) with four screws (BH) as required:

   • **For 625mm (24-5/8 in.) Framework:** Install screws through end bracket *inside* holes. (See Figure 14)
   • **For 610mm (24 in.) Framework:** Install screws through end bracket *inside* holes. (See Figure 14)
   • **For 600mm (23-5/8 in.) Framework:** Install screws through end bracket *outside* holes. (See Figure 15)

OPTIONAL: An additional four screws (BH) may be used (if desired) to further secure the ceiling plate assembly in place and prevent any movement. (See Figure 14) and (See Figure 15)
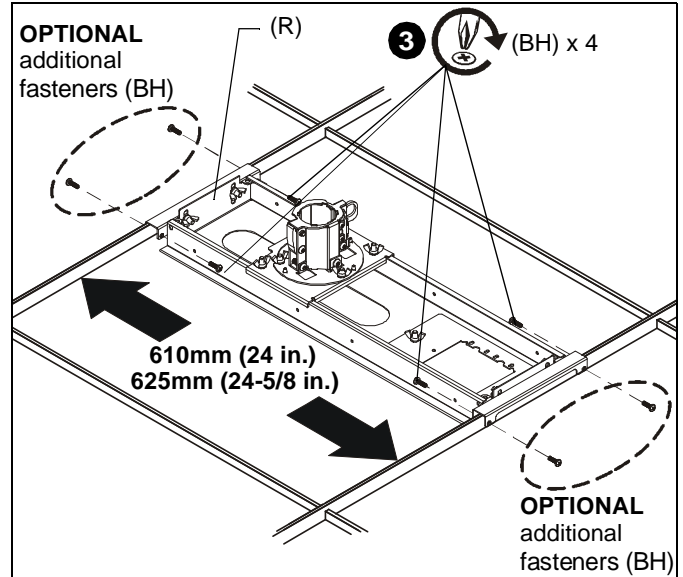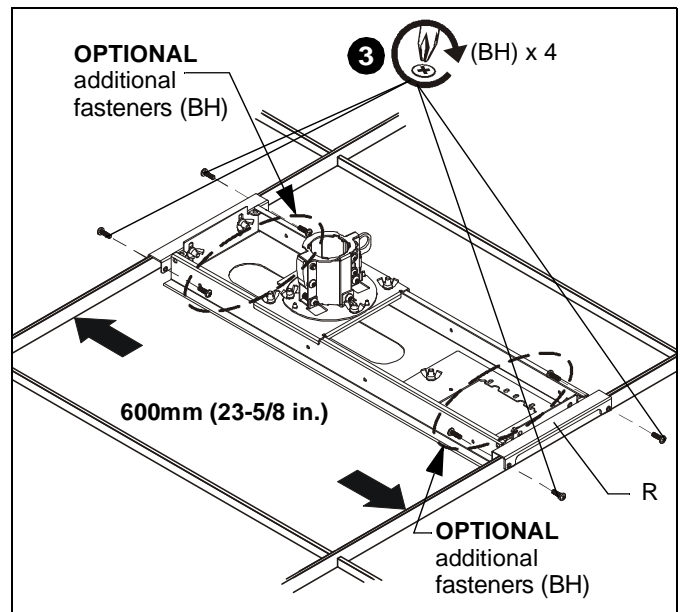

Figure 14

Figure 15

⚠️ **CAUTION:** Failure to properly tension cables (BI) may result in damage to ceiling tile framework!

4. Thread each cable (BI) completely through cable lock (BD), corresponding hole in corner of ceiling plate assembly (R), and completely through opposite side of cable lock (BD). (See Figure 16)

5. Adjust cable tension until ceiling plate assembly (R) is supported *entirely* and *evenly* by all four support cables, but not so tight as to distort ceiling tile framework.

NOTE: Cable lock (BD) will allow cable to enter from only one direction per side, indicated by arrows on lock. Depress spring loaded pins on cable lock (BD) to release cable tension.
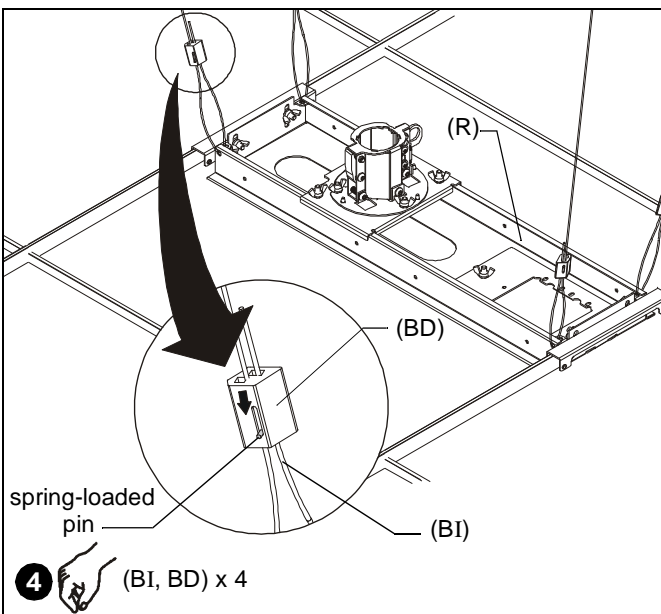
Figure 16

Installing Projector Mount and Column

⚠️ **WARNING:** Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the SYSAU up to (and including) the display/projector, does not exceed 35 lbs (15.9 kg).

NOTE: The column may be shortened if there are space limitations above the ceiling plate.

1. **OPTIONAL:** Use a band saw or similar sawing device to remove the desired length of column.

IMPORTANT ! : At least one full hole (on side of column) must be visible above the upper clamping system. (See Figure 18)

NOTE: Be sure to line up the projector mount so that it faces the screen. The projector mount lock will appear on the left side of the assembly. (See Figure 17)

2. Install projector mount and column (S) from underneath and up through suspended ceiling plate assembly (R). (See Figure 17)

3. Move projector mount and column upward to desired position. The mount and column will lock into place as soon the column's upward motion is stopped.

4. If necessary, pull up on the release ring found on the suspended ceiling plate assembly (R) in order to move the column downward. (See Figure 18)
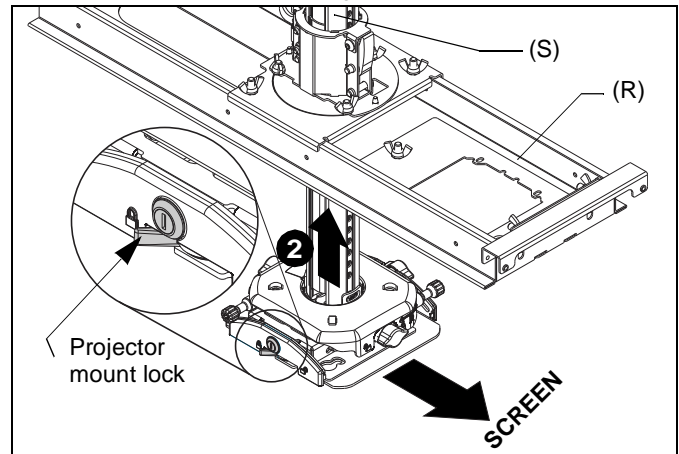

Figure 17

5. Push lock lever up to stabilize motion of the projector mount. (See Figure 18)
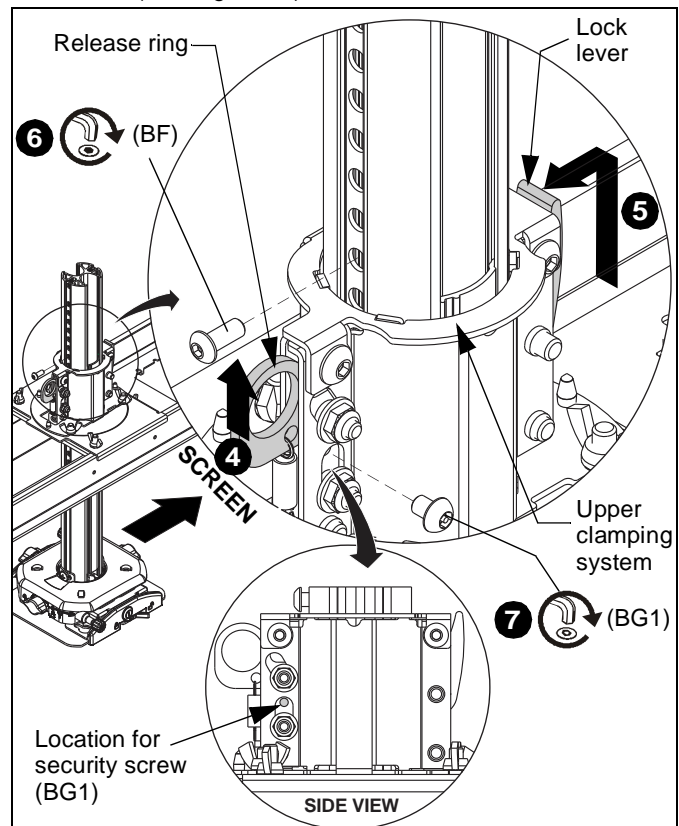

Figure 18

6. Install one 1/4-20 x 5/8" button head screw (BF) into extension column in first opening above column collar, tightening firmly against column. (See Figure 18)

7. Install one 10-24 x 1/4" security button head screw (BG1) into column mechanism on suspended ceiling plate assembly to prevent movement of the release ring and further movement of the column. (See Figure 18)

8. **Flush with Suspended Ceiling only:** Re-install ceiling tile to fit along side(s) of SYSAU. (See Figure 19)
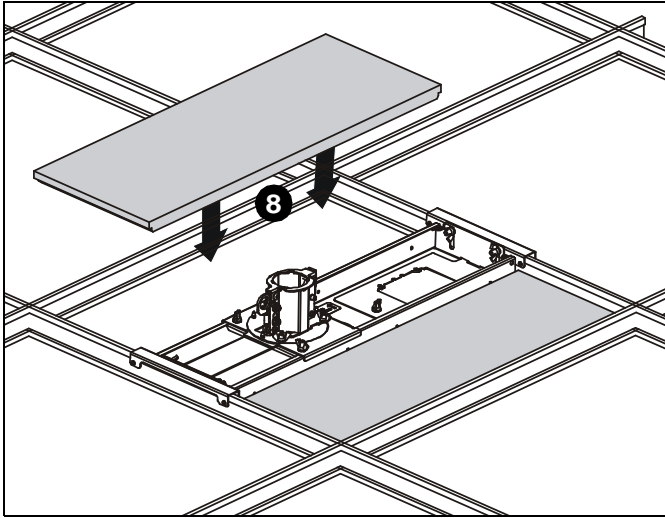

Figure 19

9. **OPTIONAL:** Install column trim ring (BA) on extension column below or flush with ceiling tile. (See Figure 20)
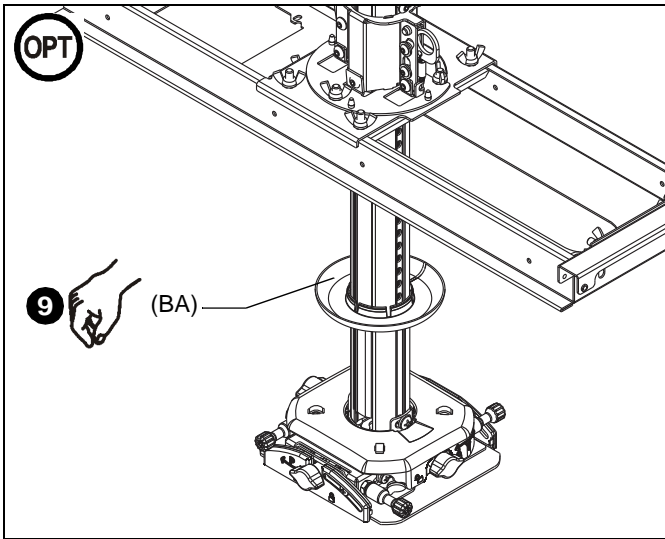

Figure 20

Installing Projector

⚠️ **WARNING:** IMPROPER INSTALLATION CAN LEAD TO PROJECTOR FALLING RESULTING IN SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT. Make certain mounting slots in projector mount base slide under thumb screws and that screws are seated in the back of slots.

1. Orient projector with interface bracket so that the projector mount lock appears on the left side of the assembly (when viewed from screen). (See Figure 21)

2. Lift projector so that thumb nuts on attached interface bracket are aligned with mounting slots in projector mount base.

3. Slide projector with interface bracket into mounting slots in mount base until thumb nuts are seated in the narrow portion of mounting slots against the opposite side of mounting slots. (See Figure 21)
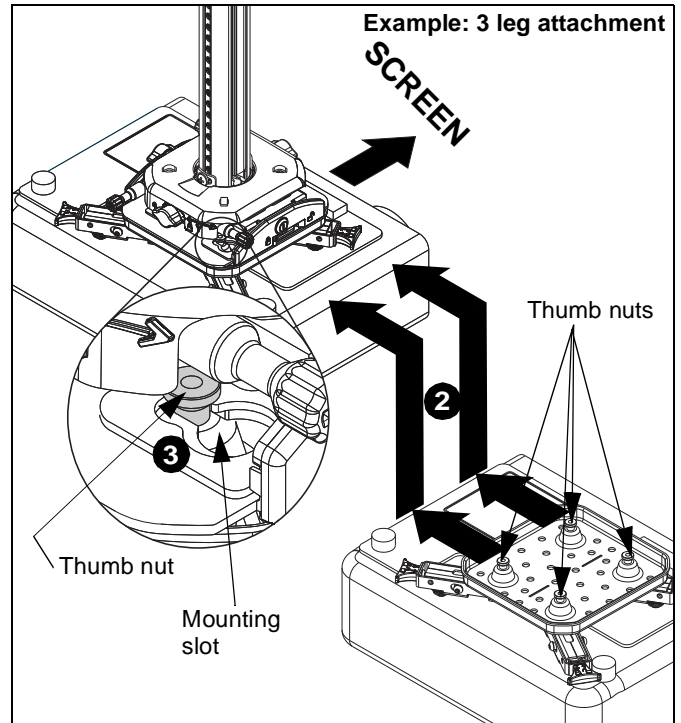

Figure 21

4. Move locking lever to "Locked" position. (See Figure 22)

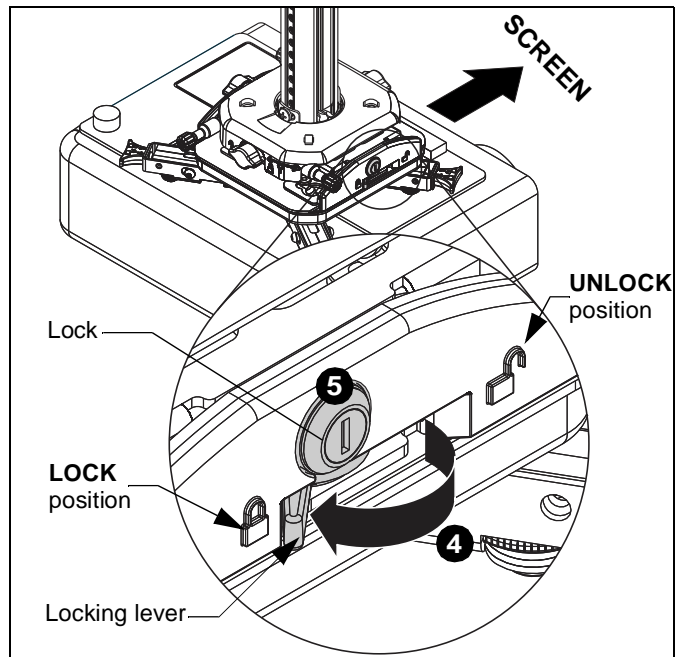5. Insert key into lock and turn to secure projector to projector mount.

Figure 22

13

Adjustments

NOTE: Be sure to use the correct adjustment feature (**Yaw**, **Roll** or **Pitch**) when adjusting the projector mount. (See Figure 23)

NOTE: The fine adjustment knobs can also be turned using a Phillips number 2 screwdriver or a 1/2" twelve point socket.

YAW Adjustment

1. Turn the YAW adjustment locking knob **(Y)** counterclockwise (to the left) to **UNLOCK** (disengage) the drive.

2. Adjust the YAW freely to the desired macro position, as required.

3. Turn the YAW adjustment locking knob **(Y)** clockwise (to the right) to **LOCK** (engage) the drive.

4. Turn YAW micro-adjustment knob right or left until image is properly aligned on target. (See Figure 23)

ROLL Adjustment

5. Turn the ROLL adjustment locking knob **(R)** counterclockwise (to the left) to **UNLOCK** (disengage) the drive.

6. Adjust the ROLL freely to the desired macro position, as required.

7. Turn the ROLL adjustment locking knob **(R)** clockwise (to the right) to **LOCK** (engage) the drive.

8. Turn ROLL micro-adjustment knob right or left until image is properly aligned on target. (See Figure 23)

PITCH Adjustment

9. Turn the PITCH adjustment locking knob **(P)** counterclockwise (to the left) to **UNLOCK** (disengage) the drive.

10. Adjust the PITCH freely to the desired macro position, as required.

11. Turn the PITCH adjustment locking knob **(P)** clockwise (to the right) to **LOCK** (engage) the drive.

12. Turn PITCH micro-adjustment knob right or left until image is properly aligned on target. (See Figure 23)

IMPORTANT ! : After adjustment, set screws may be tightened to secure Yaw, Roll and Pitch adjustments. (See Figure 23)
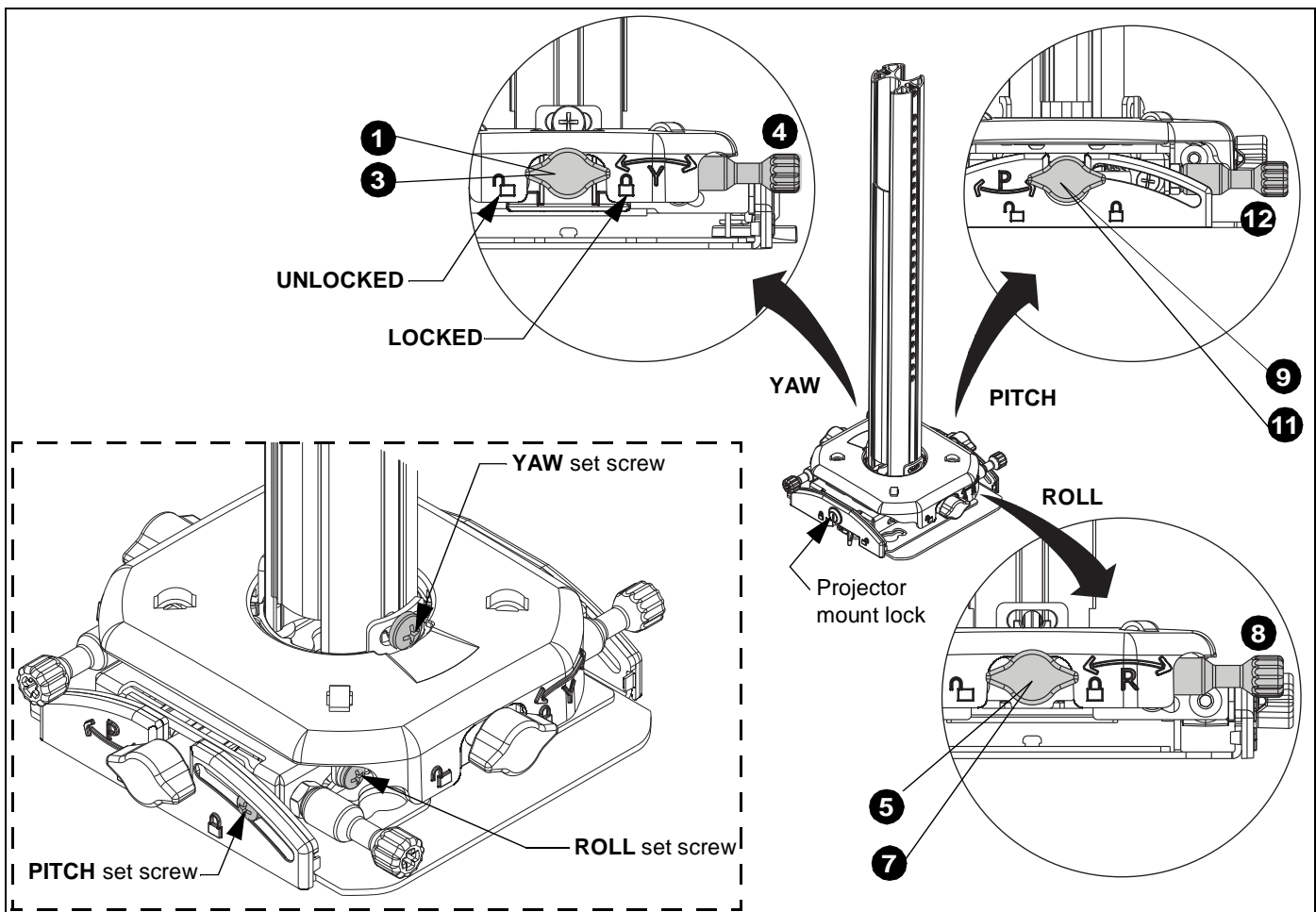

Figure 23

Cable Management

1. Open the cable management cover on the column by opening the side with double raised edge. (See Figure 24)

NOTE: The cable management cover may also be slid out of place along the column length.

2. Place cables behind cover and close cover.

3. Cables may be secured using zip-ties (not included) through cable management points on projector mount. (See Figure 24)
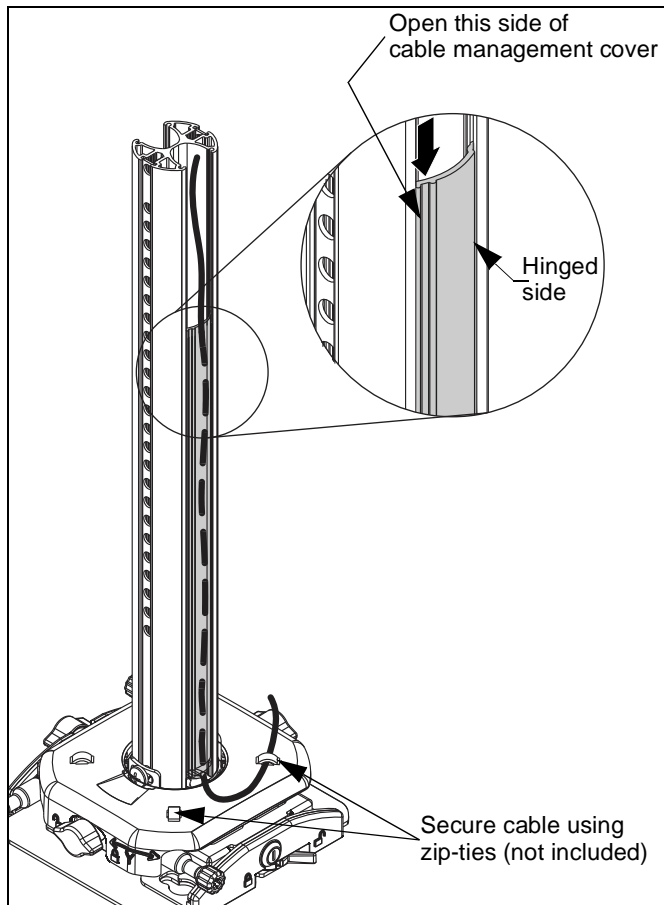

Open this side of
cable management cover

Hinged
side

Secure cable using
zip-ties (not included)

Figure 24

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