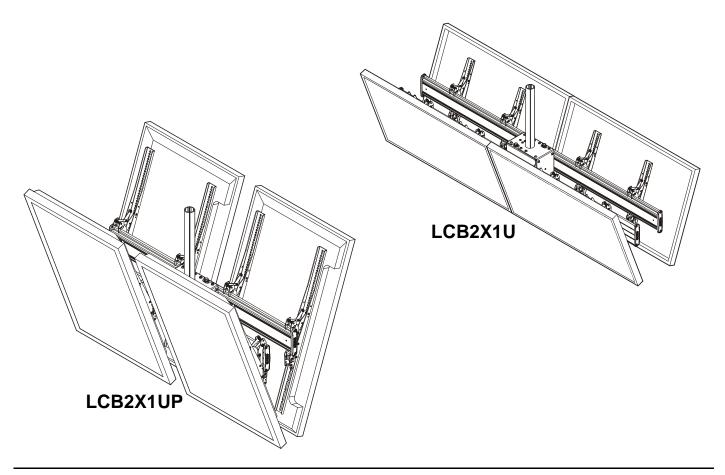
## INSTALLATION INSTRUCTIONS



## **Ceiling-Mounted Back-to-Back Menu Boards**



# LCB2X1U / LCB2X1UP

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# IMPORTANT SAFETY INSTRUCTIONS

**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.

**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 all components are properly assembled and installed using the instructions provided.

**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.

**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 located within the mounting system of the LCB2X1U/LCB2X1UP models does not exceed maximum weights listed in Table 1.

#### Table 1: Weight Capacity

MODEL	Max Weight Allowed for <u>EACH</u> Display	Max Weight Capacity of Mounting System
LCB2X1U	100 lbs (45.4 kg)	400 lbs (181.4 kg)
LCB2X1UP	100 lbs (45.4 kg)	400 lbs (181.4 kg)

**WARNING:** Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.

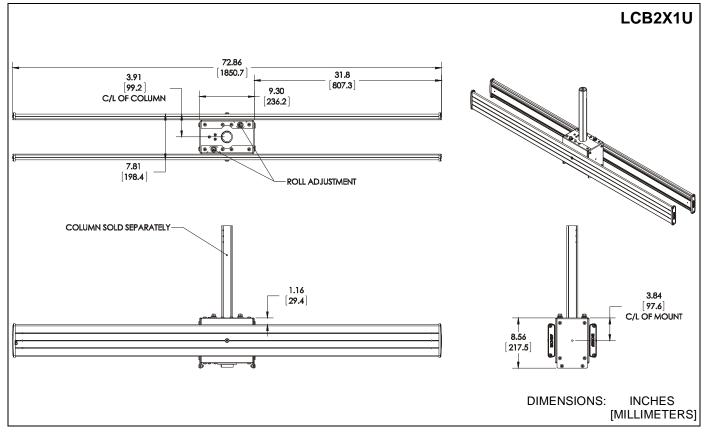
WARNING: Do not use this product outdoors.

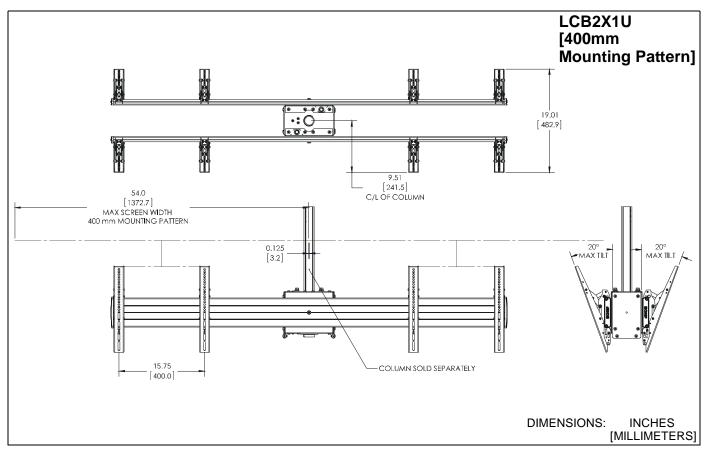
**NOTE:** The LCB2X1U and LCB2X1UP ceiling mounted backto-back menu boards are intended to be used with the UL Listed CPA Ceiling Plates (not included): CPA330, CPA365, CPA395 and UL Listed extension brackets FCAX08, FCAX14 and FCAX20.

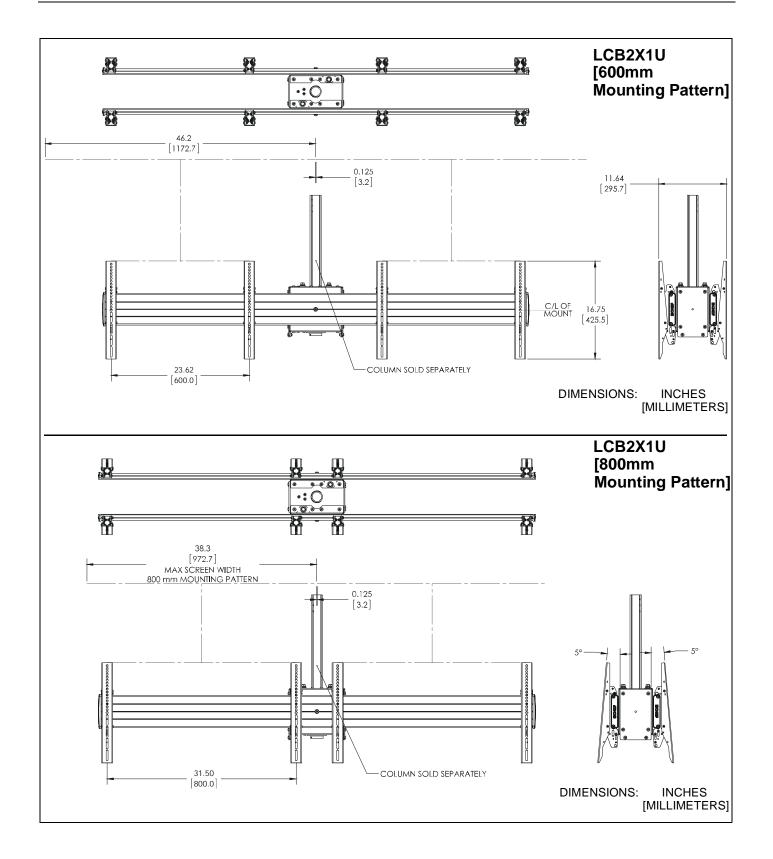
The following UL Listed Chief ceiling plates WITHOUT swaged collars (not included) may also be used: CMA330, CMA345, CMA395.

#### --SAVE THESE INSTRUCTIONS--

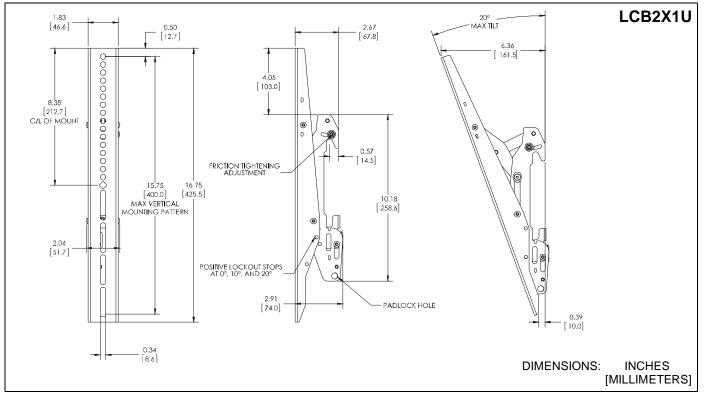
### DIMENSIONS



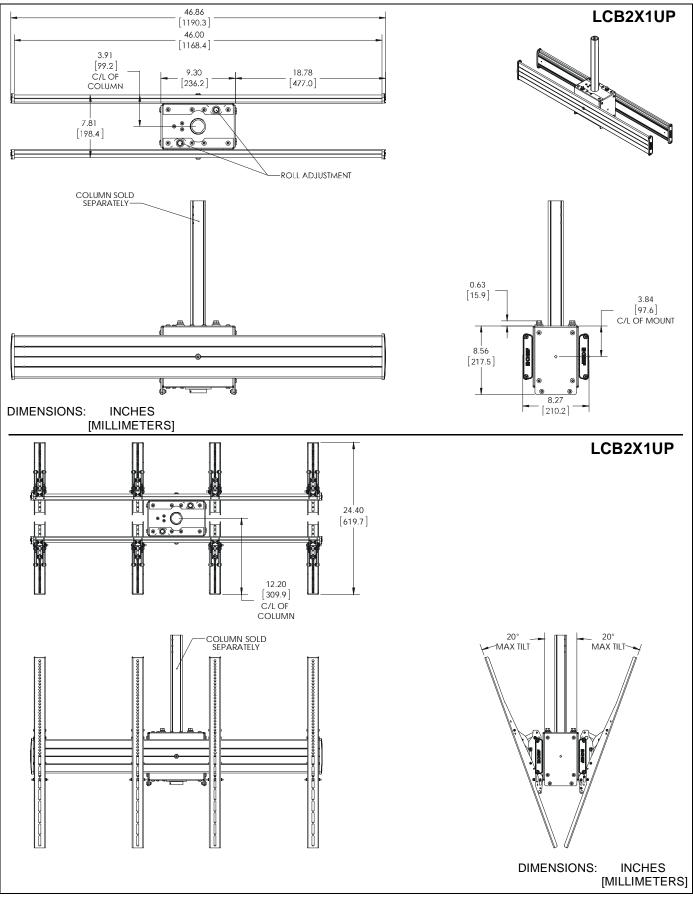




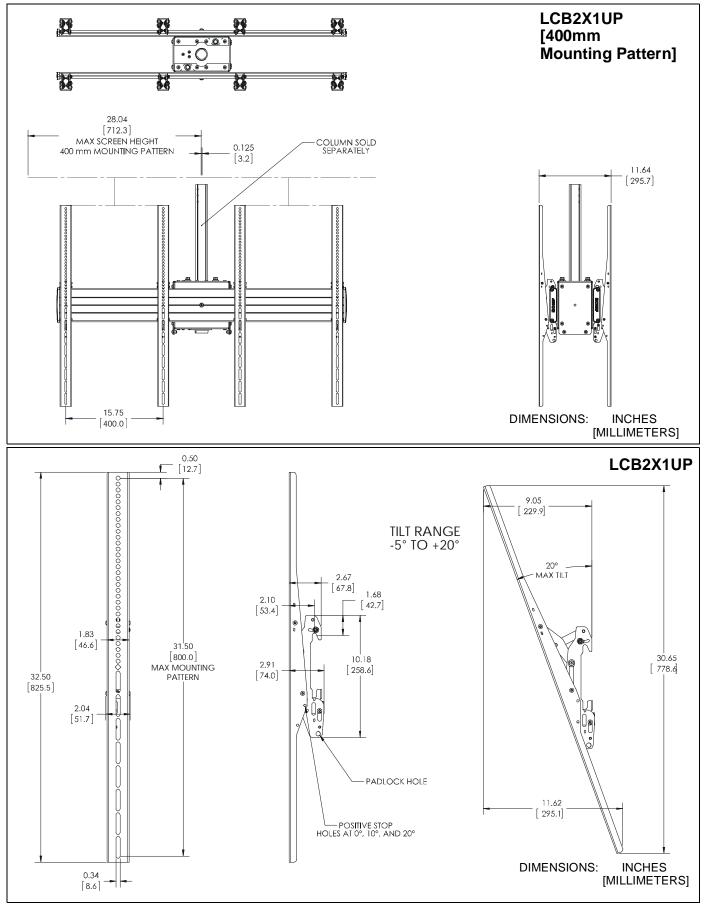
#### **DIMENSIONS** (cont'd)



#### **DIMENSIONS** (cont'd)



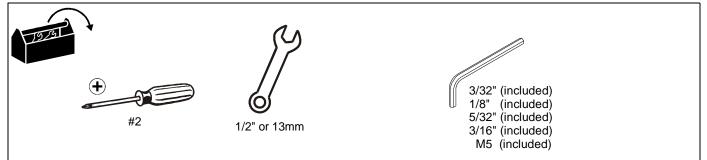
#### **DIMENSIONS** (cont'd)



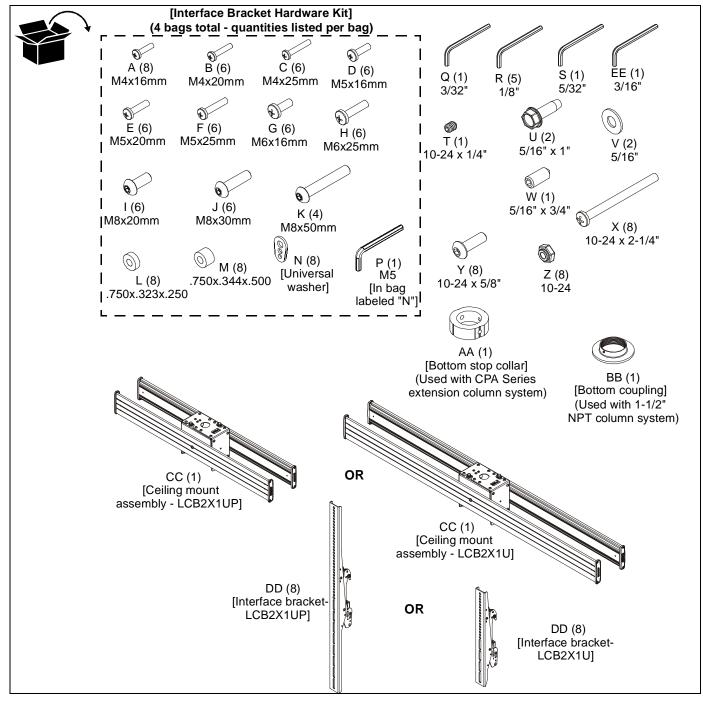
#### LEGEND

	Tighten Fastener	Pencil Mark
	Apretar elemento de fijación	Marcar con lápiz
	Befestigungsteil festziehen	Stiftmarkierung
	Apertar fixador	Marcar com lápis
	Serrare il fissaggio	Segno a matita
	Bevestiging vastdraaien	Potloodmerkteken
	Serrez les fixations	Marquage au crayon
	Loosen Fastener	Drill Hole
	Aflojar elemento de fijación	Perforar
	Befestigungsteil lösen	Bohrloch
	Desapertar fixador	Fazer furo
	Allentare il fissaggio	Praticare un foro
	Bevestiging losdraaien	Gat boren
	Desserrez les fixations	Percez un trou
	Phillips Screwdriver	Adjust
	Destornillador Phillips	Ajustar
	Kreuzschlitzschraubendreher	Einstellen
V V	Chave de fendas Phillips Cacciavite a stella	Ajustar Regolare
(F)		
	Kruiskopschroevendraaier	Afstellen
	Tournevis à pointe cruciforme	Ajuster
	Open-Ended Wrench	Remove
1	Llave de boca	Quitar
6/	Gabelschlüssel	Entfernen
P	Chave de bocas	Remover
	Chiave a punte aperte	Rimuovere
	Steeksleutel	Verwijderen
0		
	Steeksleutel	Verwijderen
	Steeksleutel Clé à fourche	Verwijderen Retirez
	Steeksleutel       Clé à fourche       By Hand	Verwijderen Retirez Optional
	Steeksleutel Clé à fourche By Hand A mano	Verwijderen Retirez Optional Opcional
	Steeksleutel       Clé à fourche       By Hand       A mano       Von Hand	Verwijderen Retirez Optional Opcional Optional
	Steeksleutel         Clé à fourche         By Hand         A mano         Von Hand         Com a mão	Verwijderen Retirez Optional Opcional Opcional Opcional
	Steeksleutel         Clé à fourche         By Hand         A mano         Von Hand         Com a mão         A mano	Verwijderen Retirez Optional Opcional Opcional Opcional Opzionale
	Steeksleutel   Clé à fourche   By Hand   A mano   Von Hand   Com a mão   A mano   Met de hand	Verwijderen Retirez Optional Opcional Opcional Opcional Opcional Opcional Opcional Opcional
	Steeksleutel         Clé à fourche         By Hand         A mano         Von Hand         Com a mão         A mano         Met de hand         À la main	Verwijderen Retirez Optional Opcional Opcional Opcional Opzionale Optie En option
	Steeksleutel   Clé à fourche   By Hand   A mano   Von Hand   Com a mão   A mano   Met de hand   À la main   Hex-Head Wrench	Verwijderen Retirez Optional Opcional Opcional Opcional Opcional Optie En option Security Wrench
	Steeksleutel   Clé à fourche   By Hand   A mano   Von Hand   Com a mão   A mano   Met de hand   À la main     Hex-Head Wrench   Llave de cabeza hexagonal	Verwijderen Retirez Optional Opcional Opcional Opcional Opcional Opzionale Optie En option Security Wrench Llave de seguridad
	Steeksleutel         Clé à fourche         By Hand         A mano         Von Hand         Com a mão         A mano         Met de hand         À la main         Hex-Head Wrench         Llave de cabeza hexagonal         Sechskantschlüssel	Verwijderen         Retirez         Optional         Opcional         Opcional         Opcional         Optional         Optional         Optional         Optional         Optional         Optio         En option         Sicherheitsschlüssel
	Steeksleutel   Clé à fourche   By Hand   A mano   Von Hand   Com a mão   A mano   Met de hand   À la main   Hex-Head Wrench   Llave de cabeza hexagonal   Sechskantschlüssel   Chave de cabeça sextavada	Verwijderen         Retirez         Optional         Opcional         Optional         Opcional         Opcional         Opcional         Opcional         Opcional         Opcional         Optie         En option         Security Wrench         Llave de seguridad         Sicherheitsschlüssel         Chave de segurança

#### **TOOLS REQUIRED FOR INSTALLATION**



#### PARTS



### INSTALLATION

**IMPORTANT ! :** Refer to **Dimensions** section to find specific LCB2X1U/LCB2X1UP dimensions <u>**BEFORE**</u> proceeding with installation.

- **NOTE:** The following procedure assumes that a UL Listed CPA or CMA ceiling plate (not included) and an extension column (not included) has been properly installed following instructions provided with ceiling plate and extension column.
- NOTE: Proceed to Attaching Mount to 1-1/2" NPT Column section or Attaching Mount to CPA Extension Column section, as appropriate.

#### Attaching Mount to 1-1/2" NPT Column

**CAUTION:** WATCH FOR PINCH POINTS! Do not place fingers between movable parts.

- 1. Check inside of mount housing for screws encroaching in extension column area.
- Loosen two 5/16 x 3-1/2" button head cap screws on end of housing until they no longer extend into the extension column area inside housing, but do NOT remove the screws completely. (See Figure 1)

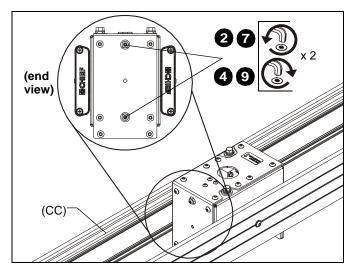
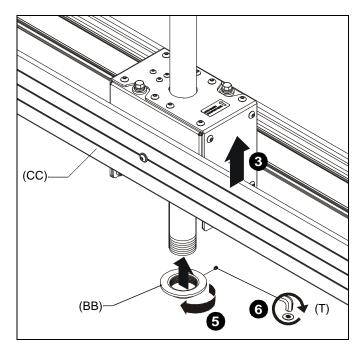


Figure 1

- 3. Slide ceiling mount (CC) up from below onto installed column (not included). (See Figure 2)
- 4. Tighten two button head screws loosened in Step 2. (See Figure 1)
- 5. Thread bottom coupling (BB) onto installed column until tight, with a minimum of four threads engaged. (See Figure 2)
- 6. Install and tighten one 10-24 x 1/4" set screw (T) into bottom coupling (BB). (See Figure 2)



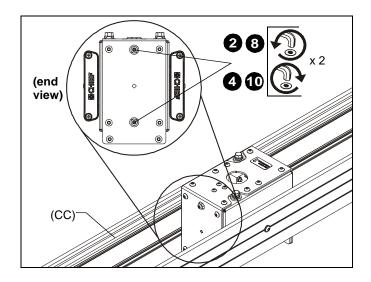
#### Figure 2

- Loosen two button head screws tightened in Step 4, and slide ceiling mount down extension column until it rests on the bottom coupling (B). (See Figure 1)
- 8. Rotate mount to desired position.
- 9. Re tighten two button head screws against column. (See Figure 1)

#### Attaching Mount to CPA Extension Column

**CAUTION:** WATCH FOR PINCH POINTS! Do not place fingers between moveable parts.

- 1. Check inside of mount housing for screws encroaching in extension column area.
- Loosen two 5/16 x 3-1/2" button head cap screws on end of housing until they no longer extend into the extension column area inside housing, but do NOT remove the screws completely. (See Figure 3)



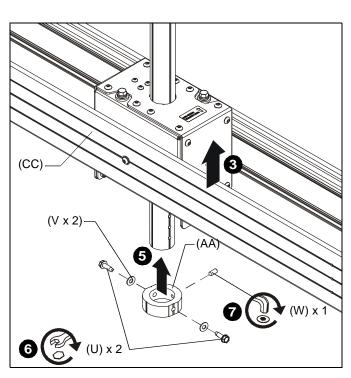


Figure 4

#### Attaching Interface Brackets to Display

1. Lower the latch mechanism on all interface brackets (DD). (See Figure 5)

Figure 3

- 3. Slide ceiling mount (CC) up from below onto installed column (not included). (See Figure 4)
- 4. Tighten two button head screws loosened in Step 2. (See Figure 3)
- 5. Slide bottom stop collar (AA) onto installed column, lining up holes in collar with holes in column.
- Install two 5/16" x 1" self-tapping screws (U) through two 5/16" flat washers (V), bottom stop collar (AA), and into installed column. (See Figure 4)
- 7. Install and tighten 5/16" x 3/4" set screw (W) into bottom stop collar (AA). (See Figure 4)
- 8. Loosen two button head screws tightened in Step 4, and slide ceiling mount down extension column until it rests on the bottom stop collar (AA). (See Figure 4)
- 9. Rotate mount to desired position.
- 10. Re tighten two button head screws against column. (See Figure 3)

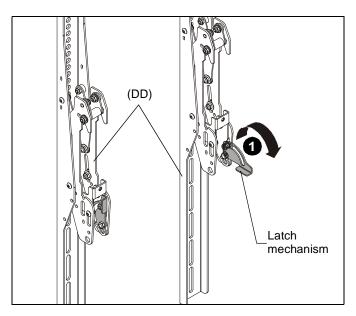


Figure 5

- Align the center of the interface bracket (DD) with center of display. (See Figure 6)
- **NOTE:** The diamond-shape hole in the bracket corresponds to the center of the mount.

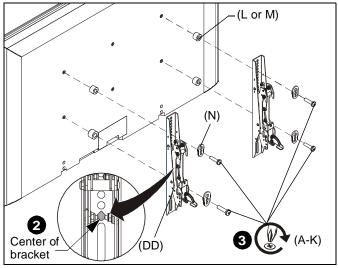


Figure 6

WARNING: IMPROPER INSTALLATION CAN LEAD TO DISPLAY FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! Using screws of improper size may damage your display. Properly sized screws will easily and completely thread into display mounting holes. If spacers are required, be sure to use longer screws of the same diameter.

 Select correct screws, spacers (if necessary) and universal washers from the hardware bag (A-N) and attach brackets (DD) to back of displays. (See Figure 6)

#### **Attaching Displays to Ceiling Mount**

WARNING: IMPROPER INSTALLATION CAN LEAD TO DISPLAY FALLING CAUSING SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT! The displays MUST be located equal distance from the column on each end and side of the ceiling mount.

**IMPORTANT !** : Install displays by placing the first display on the mount, and then adding the second display on the other side of the mount at the opposite end of the mount. Repeat for remaining displays. (See Figure 7)

- Ensure that the latch mechanisms on interface brackets (DD) are already lowered. (See Figure 5)
- While supporting both sides of display, lower display onto one side of ceiling mount, hooking top of interface brackets onto rail of ceiling mount. (See Figure 8)
- 3. Raise the latch mechanism on both interface brackets to lock display in place. (See Figure 8)

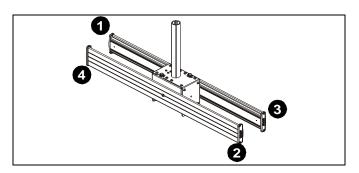
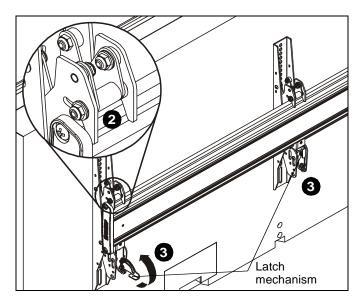


Figure 7



#### Figure 8

- Fasten bracket against ceiling mount extrusion using one 10-24 x 5/8" button head cap screw (Y). (See Figure 9)
- 5. Repeat for other interface bracket.

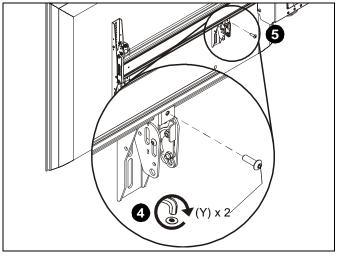


Figure 9

6. Repeat Steps 1 through 5 for remaining displays.

#### Adjustments

**CAUTION:** Watch for pinch points! Do not place fingers between moveable parts.

#### Roll

The ceiling mounts allow up to 3° roll each direction.

- 1. Turn the roll adjustment bolt(s) in the direction necessary for the desired roll. (See Figure 10)
- **NOTE:** Each roll adjustment bolt controls the roll on its side of the mount.
- 2. Stop adjusting when the desired setting is reached.

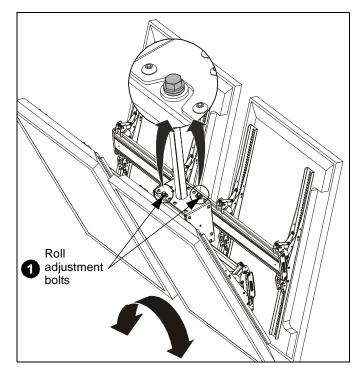


Figure 10

#### Tilt

The interface brackets allow -5° to 20° tilt, and can be locked at 0°, 10° and 20° tilt.

- 3. If necessary, loosen button head tilt friction bolt (located on side of interface bracket). (See Figure 11)
- 4. Adjust tilt as required. (See Figure 11)
- The tilt may be locked at 0°, 10° and 20° using one 10-24 x 2-1/4" Phillips head screw (X) and one 10-24 lock nut (Z) per interface bracket. (See Figure 11)
- 6. Tighten button head tilt friction bolt as necessary. (See Figure 11)

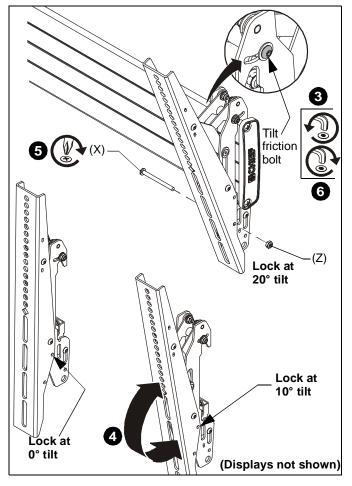


Figure 11

#### **OPTIONAL: Security**

1. **OPTIONAL**: Add padlock (not included) to each interface bracket to lock display to ceiling mount. (See Figure 12)

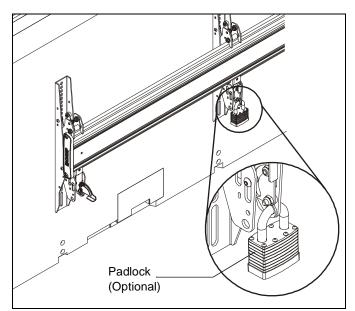


Figure 12



Chief, a products division of Milestone AV Technologies

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