INSTALLATION INSTRUCTIONS



Ceiling-Mounted Menu Boards



LCM2X1U / LCM2X1UP

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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.



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 located within the mounting system of the LCM2X1U/LCM2X1UP 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
LCM2X1U	125 lbs (56.7 kg)	250 lbs (113.4 kg)
LCM2X1UP	125 lbs (56.7 kg)	250 lbs (113.4 kg)



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

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

WARNING: Do not use this product outdoors.

NOTE: The LCM2X1U and LCM2X1UP ceiling mounted 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)



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
	Chave de fendas Phillips	Ajustar
V	Cacciavite a stella	Regolare
(F)		Afstellen
	Kruiskopschroevendraaier	
	Tournevis à pointe cruciforme	Ajuster
0	Open-Ended Wrench	Remove
	Llave de boca	Quitar
	Gabelschlüssel	Entfernen
	Chave de bocas	Remover
	Chiave a punte aperte	Rimuovere
	Steeksleutel	Verwijderen
	Clé à fourche	Retirez
E.	By Hand	Optional
	A mano	Opcional
	Von Hand	Optional
	Com a mão	Opcional
	A mano	Opzionale
	Met de hand	Optie
	À la main	En option
	Hex-Head Wrench	Security Wrench
	Llave de cabeza hexagonal	Llave de seguridad
	Sechskantschlüssel	Sicherheitsschlüssel
	Chave de cabeça sextavada	Chave de segurança
	Chiave de cabeça sextavada Chiave esagonale	Chiave de segurança
	Zeskantsleutel	Veiligheidssleutel
	Clé à tête hexagonale	Clé de sécurité

TOOLS REQUIRED FOR INSTALLATION



PARTS



INSTALLATION

IMPORTANT ! : Refer to **Dimensions** section to find specific LCM2X1U/LCM2X1UP dimensions **BEFORE** 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 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 moveable parts.

1. Insert two 5/16 x 3/4" set screws (W) into back of ceiling mount (CC). (See Figure 1)





- 2. Slide ceiling mount (CC) up from below onto installed column (not included). (See Figure 2)
- 3. Tighten two 5/16" set screws installed in Step 1 against column.
- 4. Thread bottom coupling (BB) onto installed column until tight, with a minimum of four threads engaged. (See Figure 2)
- 5. Install and tighten one 10-24 x 1/4" set screw (T) into bottom coupling (BB). (See Figure 2)



Figure 2

- Loosen two installed set screws (W), and slide ceiling mount down extension column until it rests on the bottom coupling (B). (See Figure 3)
- 7. Retighten two 5/16" set screws (W) against column. (See Figure 3)



Figure 3

Attaching Mount to CPA Extension Column



1. Insert two 5/16 x 3/4" set screws (W) into back of ceiling mount (CC). (See Figure 4)



Figure 4

- 2. Slide ceiling mount (CC) up from below onto installed column (not included). (See Figure 5)
- 3. Tighten two 5/16" set screws installed in Step 1 against column.
- 4. 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 5)
- 6. Install and tighten 5/16" x 3/4" set screw (W) into bottom stop collar (AA). (See Figure 5)
- 7. Loosen two installed set screws (W), and slide ceiling mount down extension column until it rests on the bottom stop collar (AA).
- 8. Retighten two 5/16" set screws (W) against column. (See Figure 6)





Attaching Interface Brackets to Display

1. Lower the latch mechanism on each interface bracket (EE). (See Figure 7)





Figure 5

- 2. Align the center of the interface bracket (EE) with center of screen. (See Figure 8)
- **NOTE:** The diamond-shape hole in the bracket corresponds to the center of the mount.



Figure 8

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, nesting spacers (if necessary) and universal washers from the hardware bag (A-N) and attach brackets (EE) to back of screen. (See Figure 8)

IMPORTANT ! : The M8 screws do **NOT** require a washer. Use the universal washer (N) only with M4, M5 and M6 screws.

NOTE: The nesting spacers (M) may be used separately, or put two together in different configurations to create different size spacers. (See Figure 9)



Figure 9

Attaching Display 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 of the ceiling mount.

- 1. Ensure that the latch mechanisms on interface brackets (EE) are already lowered. (See Figure 7)
- While supporting both sides of display, lower display onto one side of ceiling mount, hooking top of interface brackets onto front of ceiling mount. (See Figure 10)
- 3. Raise the latch mechanism on both interface brackets to lock bracket in place. (See Figure 10)



Figure 10

- 4. Fasten bracket against ceiling mount extrusion using one 10-24 x 5/8" button head cap screw (Y). (See Figure 11)
- 5. Repeat for other interface bracket.



Figure 11

- While supporting both sides of second display, lower second display onto other end of ceiling mount, hooking top of interface brackets onto front of ceiling mount. (See Figure 10)
- 7. Repeat Steps 3 through 5 for second display.

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 in the direction necessary for the desired roll. (See Figure 12)
- Roll adjustment bolt



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 13)
- 4. Adjust tilt as required. (See Figure 13)
- 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 13)
- 6. Tighten button head tilt adjustment bolt as necessary.



Figure 13

Figure 12

OPTIONAL: Security

1. **OPTIONAL**: Add padlock (not included) to each interface bracket to lock display to ceiling mount. (See Figure 14)



Figure 14

2. Install back cover (DD) into four holes on back of ceiling mount. (See Figure 15)



Figure 15



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