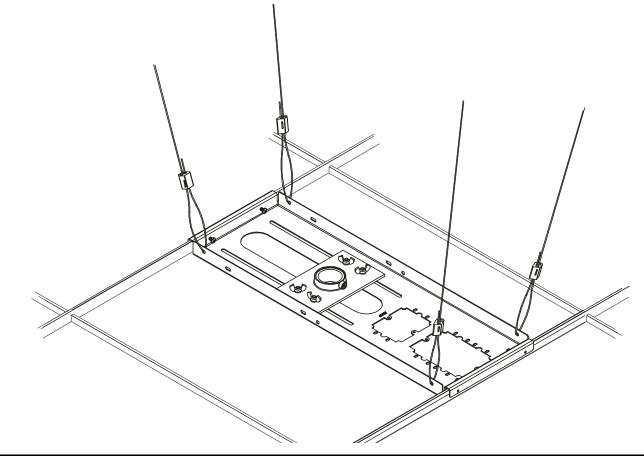
# INSTALLATION INSTRUCTIONS



205 Westwood Ave, Long Branch, NJ 07740 Phone: 866-94 BOARDS (26273) / (732)-222-1511 Fax: (732)-222-7088 | E-mail: sales@touchboards.com



# Lightweight Suspended Ceiling Kit



**CMS440** 

#### DISCLAIMER

Milestone AV Technologies and its affiliated corporations and subsidiaries (collectively "Milestone"), intend to make this manual accurate and complete. However, Milestone makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Milestone makes no representation of warranty, expressed or implied, regarding the information contained herein. Milestone assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Chief® is a registered trademark of Milestone AV Technologies. All rights reserved.

# 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 attached to the CMS440 does not exceed 50 lbs (22 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.



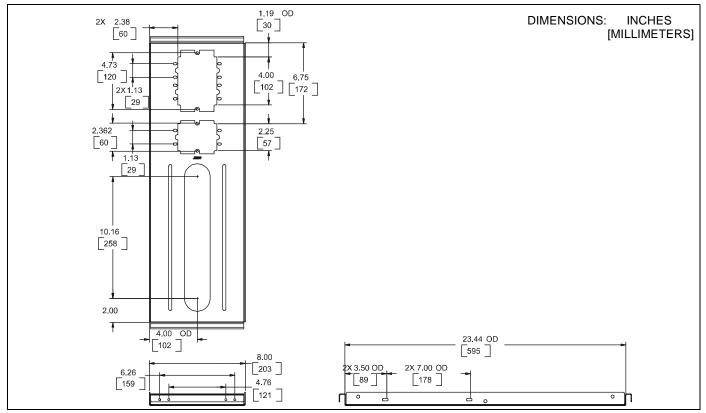
**WARNING:** Do not use this product outdoors.

**IMPORTANT ! :** The CMS440 has been designed to be mounted recessed into a suspended ceiling secured by a WireVice system.

**IMPORTANT !** The CMS440 has been designed to support a single electrical receptacle, a double electrical receptacle or both.

#### --SAVE THESE INSTRUCTIONS--

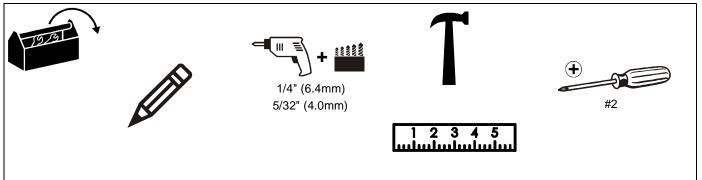
#### DIMENSIONS



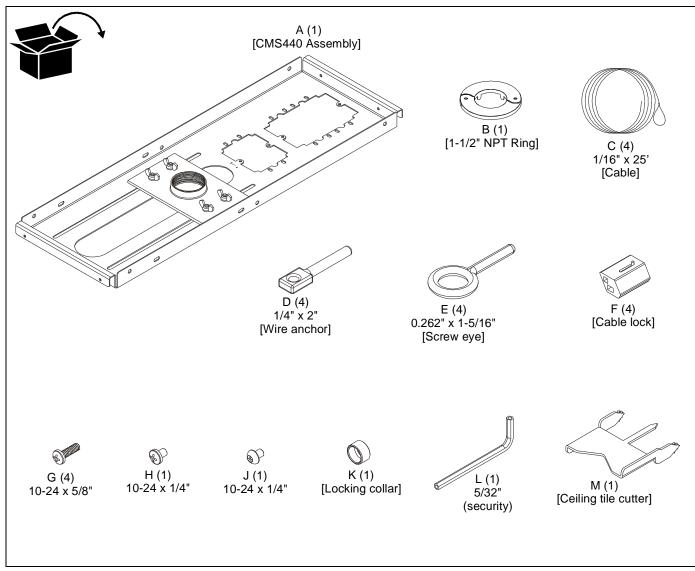
#### LEGEND

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
Ð	Kruiskopschroevendraaier	Afstellen
	Tournevis à pointe cruciforme	Ajuster
	By Hand	Optional
E Contraction of the second se	A mano	Opcional
	Von Hand	Optional
	Com a mão	Opcional
	A mano	Opzionale
	Met de hand	Optie
	À la main	En option
	Target of Projector	Security Wrench
	Punto de enfoque del proyector	Llave de seguridad
	Ziel des Projektors	Sicherheitsschlüssel
	Mira do projector	Chave de segurança
	Punto di projezione	Chiave di sicurezza
$\rightarrow$	Doel van de projector	Veiligheidssleutel
	Cible du projecteur	Clé de sécurité
	Hammer	
	Martillo	
	Martillo Hammer	
T	Martillo Hammer Martelo	
1	Martillo Hammer Martelo Martello	
1	Martillo Hammer Martelo	

#### TOOLS REQUIRED FOR INSTALLATION



PARTS



#### PREPARATION

- **NOTE:** The CMS440 has been designed to be mounted recessed into a suspended ceiling secured by a WireVice system.
- Determine exact location of extension column (not included) on suspended ceiling. Mark location on lower (finished) side of ceiling tile with pencil (See Figure 1).

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).

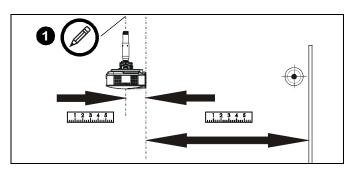


Figure 1

- 2. Remove affected ceiling tile and any adjacent tiles required for access.
- 3. Press center tip of ceiling tile cutter (M) into *finished* side of ceiling tile at marked location. Cut extension column hole through tile using back and forth hand twisting motion.
- 4. Reinstall ceiling tile with extension column hole. Ensure tile is oriented for proper location of hole.
- Install CMS440 assembly (A) on top of ceiling tile so that end brackets engage primary (1-1/2" (38mm) high) rails of ceiling framework. (See Figure 2)

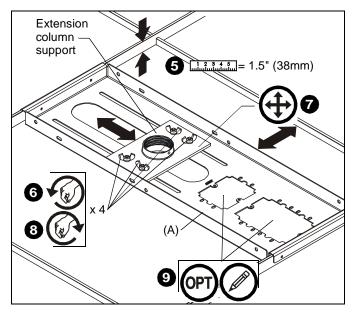
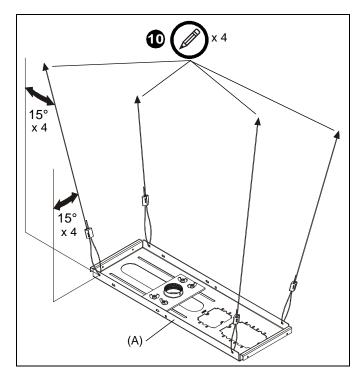


Figure 2

- Loosen four wing nuts in upper side of CMS440 assembly (A). (See Figure 2)
- Position CMS440 assembly (A) and/or extension column support (as required) to center support over ceiling tile hole. (See Figure 2)
- 8. Tighten wing nuts (See Figure 2).
- 9. **OPTIONAL:** Mark location of electrical cutout on ceiling tile with pencil. (See Figure 2)
- Examine ceiling structure (concrete, steel truss, or wood) above CMS440 assembly (A) to identify four support cable anchor locations. Each location should be approximately 15° outboard of support holes in CMS440 assembly (A) (See Figure 3). Mark locations with pencil.



#### Figure 3

- 11. Remove CMS440 assembly (A) and ceiling tile.
- 12. **OPTIONAL:** Cut electrical box opening in ceiling tile at marked location. Install UL Listed Raco 560 or equivalent UL Listed electrical box (not included) to CMS440 (A) following instructions included with electrical box.

#### SUPPORT CABLE INSTALLATION

**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 1.75" (44.5mm) 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!

 Drill 1/4" diameter x 1-3/8" deep hole at each marked cable anchor support location (See Figure 4). Ensure hole is at least 2-1/2" from nearest concrete edge. Remove debris from hole.

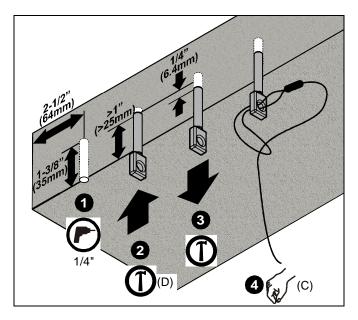


Figure 4

 Tap anchor (D) into each hole to a depth of at least 1" (25mm) (See Figure 4).

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

- Using claw portion of hammer, set each anchor (D) by pulling it out of hole approximately 1/4" (6.4mm). (See Figure 4)
- Insert portion of manufactured *loop* on cable (C) through hole in anchor (D) (See Figure 4). Insert end of cable (C) through loop. Repeat for 3 remaining support locations.

#### **Steel Truss Ceiling Structure**

 Route end of cable (C) over truss at marked cable anchor support location and then through cable loop. (See Figure 5) Repeat for 3 remaining support locations.

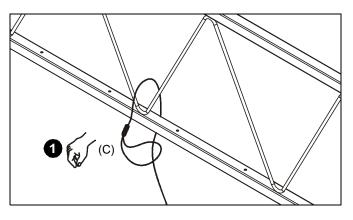


Figure 5

#### Wood Ceiling Structure

**WARNING:** Anchors must be installed into wood with a minimum thickness of 1-1/2" (38.1 mm) or greater.

1. Drill 5/32" diameter x 2" deep hole at each marked cable anchor support location (See Figure 6). Remove debris from hole.

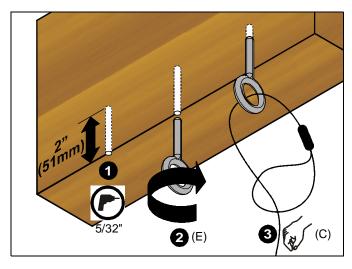
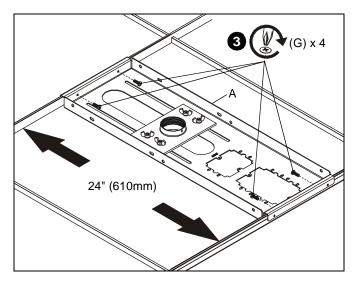


Figure 6

- 2. Fully thread eye lag (E) into each hole (See Figure 6).
- 3. Route end of cable (C) through eye lag (E) and then through cable loop (See Figure 6). Repeat for 3 remaining support locations.

#### TRAY INSTALLATION

- 1. Reinstall ceiling tile with extension column hole. Ensure tile is oriented for proper location of hole.
- 2. Reinstall CMS440 assembly (A) on top of ceiling tile so that extension column support is centered over hole in tile.
- 3. Position CMS440 assembly (A) with four screws (G) as required:
  - For 24" (610mm) Framework: Install screws through end bracket *inside* holes (See Figure 7).
  - For 600mm (23-5/8") Framework: Install screws through end bracket outside holes (See Figure 8).





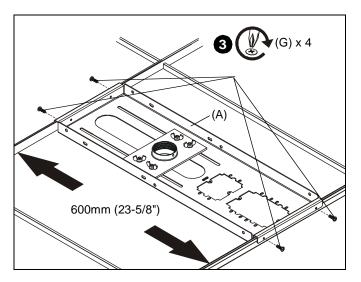


Figure 8

### 

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

- 4. Thread each cable (C) completely through cable lock (F), corresponding hole in corner of CMS440 assembly (A), and completely through opposite side of cable lock (F) (See Figure 9). Adjust cable tension until CMS440 assembly (A) is supported *entirely* and *evenly* by all four support cables, but not so tight as to distort ceiling tile framework.
- **NOTE:** Cable lock (F) will allow cable to enter from only one direction per side, indicated by arrows on lock. Depress spring loaded pins on cable lock (F) to release cable tension.

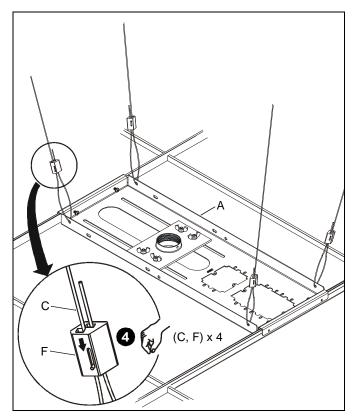
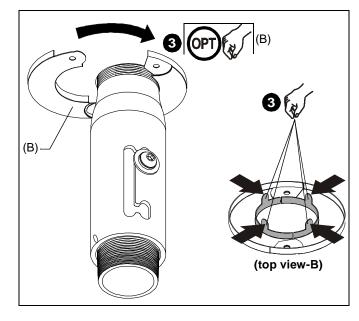


Figure 9

#### **EXTENSION COLUMN INSTALLATION**

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 CMS440 up to (and including) the display/projector, does not exceed 50 lbs (22 kg).

- Install 1-1/2" NPT or NPSM following ANSI/ASME B1.20.1 (Schedule 40, 0.154" minumum thickness aluminum -ASTM B221) threaded extension column (not included) into extension column support until tight, with a minimum of four threads engaged.
- **NOTE:** If installation instructions are not available, contact Chief Manufacturing for assistance.
- 2. Secure extension column by *one* of the following methods (See Figure 10):
  - Install one 10-24 x 1/4" Phillips pan head screw (H) into extension column support, tightening firmly against column.
  - **OPTIONAL:** Install one 10-24 x 1/4" button head security screw (J) through locking collar (K) into extension column support, tightening firmly against column.
- NOTE: Locking collar (K) is designed to spin, even when screw (J) is tight.



#### Figure 11

4. Reinstall remaining ceiling tiles as required.

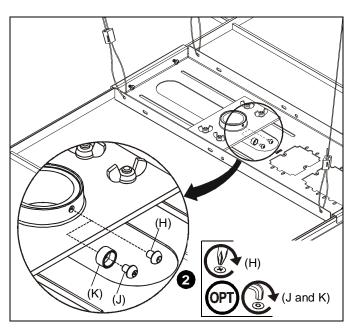


Figure 10

 Install NPT ring (B) on extension column below ceiling tile (See Figure 11). If necessary, bend four tabs inward to secure ring to column.

## milestone AV Technologies

#### MANUFACTURERS DECLARATION OF CONFORMITY

For

<b>Product identification:</b>					
Model/type	: CMS440				
Category (description)	: Mounting devices, Stands and other Accessories, to be used with entertainment electronics				
Brand	: Chief				
Manufacturer:	Milestone AV Technologies				
	6436 City West Parkway				
	Eden Prairie, MN 55344				
EU Representative:	Milestone AV Technologies				
	Fellennoord 130 5611				
	ZB Einhoveng				
	The Netherlands				
	31 (0)20 5708923				
Concerning					
	EMC Safety				

Concerning			
	EMC	Safety	
A sample of the product has been tested by:	TUV 0123	Milestone Inc.	
Test report reference	NC707785		
	WC700711, WC603563		
Applied standards	EN50022B, EN55014-1, EN61000-4	EN 60065/A12 :2011	

#### Means of conformity

We declare under our sole responsibility that this product is in conformity with Directive 93/68/EEC (Marking), 98/37/EC (Machinery) 2001/95/EC (Safety) 89/336/EEC (EMC) and/or complies to the essential requirements and all other relevant provisions of the based on test results using (non)harmonized standards in accordance with the Directives mentioned

Т



205 Westwood Ave, Long Branch, NJ 07740 Phone: 866-94 BOARDS (26273) / (732)-222-1511 Fax: (732)-222-7088 | E-mail: sales@touchboards.com



Our Mounts. Your Vision.

Chief Manufacturing, a products division of Milestone AV Technologies

8800-002282 Rev00 ©2013 Milestone AV Technologies, a Duchossois Group Company www.chiefmfg.com 01/13 USA/International

Europe

Asia Pacific

- A 6436 City West Parkway, Eden Prairie, MN 55344
  P 800.582.6480 / 952.225.6000
- **F** 877.894.6918 / 952.894.6918
- A Franklinstraat 14, 6003 DK Weert, Netherlands
- **P** +31 (0) 495 580 852
- **F** +31 (0) 495 580 845
- A Office No. 1 on 12/F, Shatin Galleria 18-24 Shan Mei Street Fotan, Shatin, Hong Kong
- **P** 852 2145 4099
- **F** 852 2145 4477

