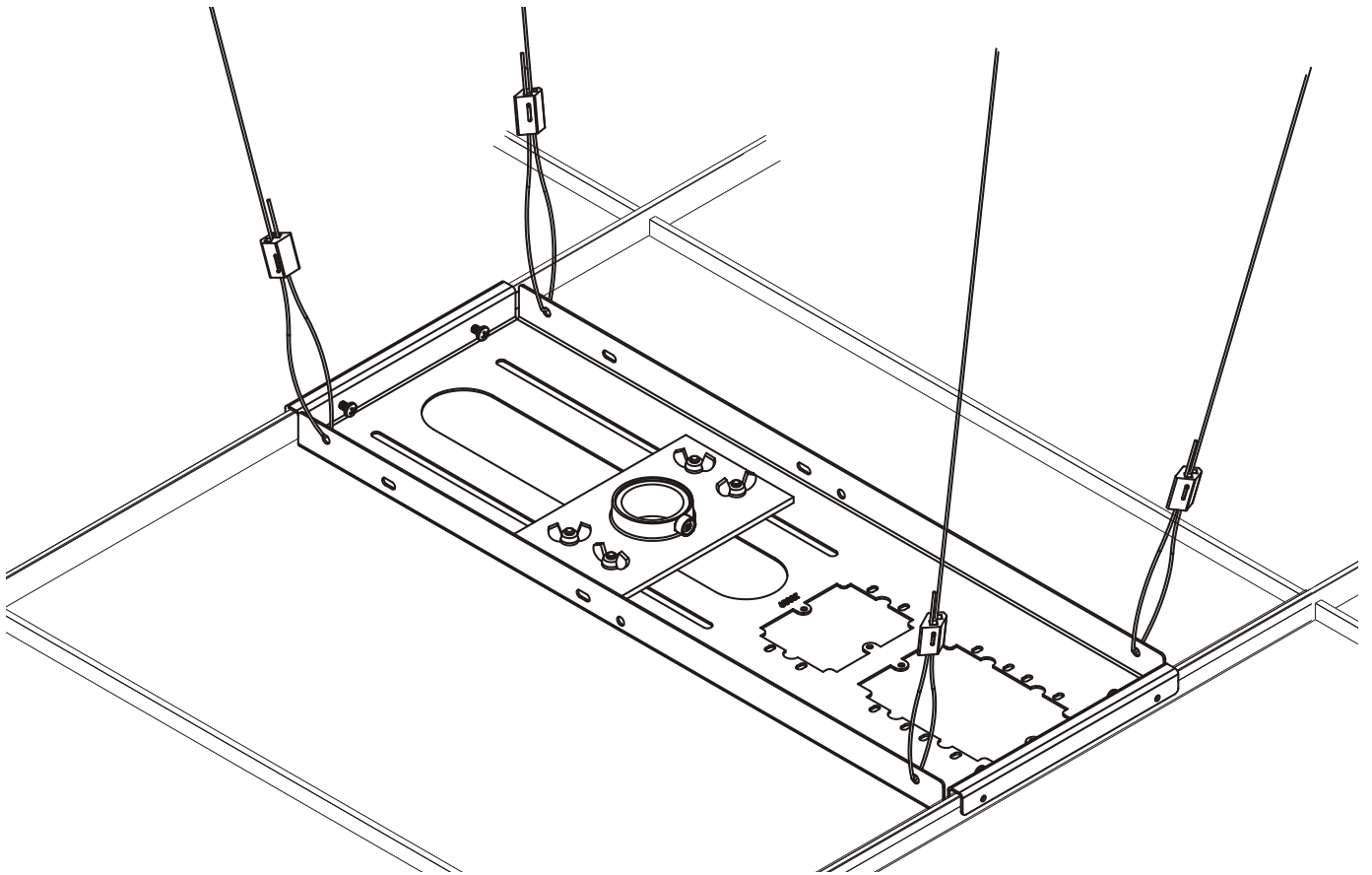


# INSTALLATION INSTRUCTIONS

Instrucciones de instalación  
Installationsanleitung  
Instruções de Instalação

Istruzioni di installazione  
Installatie-instructies  
Instructions d'installation




## Lightweight Suspended Ceiling Kit


Juego de techo ligero suspendido  
Leichtgebauter Hängedecken-Kit  
Kit de instalação de teto suspenso leve  
Kit di sospensione a soffitto leggero  
Licht vrijhangend-plafondkit  
Kit de plafond suspendu léger


## DISCLAIMER


CSAV, Inc., and its affiliated corporations and subsidiaries (collectively, "CSAV"), intend to make this manual accurate and complete. However, CSAV 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. CSAV makes no representation of warranty, expressed or implied, regarding the information contained herein. CSAV assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.


## IMPORTANT WARNINGS AND CAUTIONS!

 **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).


## ¡AVISOS y PRECAUCIONES IMPORTANTES!

 **AVISO:** Un AVISO llama su atención sobre la posibilidad de sufrir lesiones de gravedad o incluso mortales si no sigue las instrucciones.


 **PRECAUCIÓN:** Una nota de PRECAUCIÓN llama su atención sobre la posibilidad de dañar o destruir el equipo si no sigue las instrucciones.


 **AVISO:** Si no lee, comprende perfectamente y sigue todas las instrucciones, podría causar graves daños personales y materiales o anular la garantía de fábrica. El instalador es el responsable de asegurarse de que todos los componentes están correctamente montados e instalados siguiendo las instrucciones indicadas.


 **AVISO:** Si no se proporciona la resistencia estructural adecuada para este componente, podrían provocarse graves daños personales o materiales. El instalador es el responsable de asegurarse de que la estructura a la que este componente está sujeta puede soportar cinco veces el peso combinado de todo el equipo. Refuerce la estructura según sea necesario antes de instalar el componente.


 **AVISO:** Si se excede el peso máximo, podrían causarse graves daños personales o materiales. El instalador es responsable de asegurarse de que el peso combinado de todos los componentes montados en el CMS440 no excede 22 kg (50 libras).

## WICHTIGE WARN- und VORSICHTSHINWEISE!

 **WARNUNG:** Ein WARNHINWEIS macht auf mögliche schwere oder tödliche Verletzungen aufmerksam, die bei Nichtbefolgung der Anweisungen eintreten können.

 **VORSICHT:** Ein VORSICHTSHINWEIS macht auf Schäden oder mögliche Zerstörung des Geräts aufmerksam, die bei Nichtbefolgung der Anweisungen eintreten können.

 **WARNUNG:** Falls nicht alle Anweisungen gelesen und gut verstanden werden, kann dies zu schweren Körperverletzungen, Schaden an den Geräten führen und die Werksgarantie nichtig machen! Der Monteur ist dafür verantwortlich, dass alle Komponenten unter Einhaltung der mitgelieferten Anweisungen korrekt zusammengesetzt und eingebaut werden.

 **WARNUNG:** Wenn für diese Komponente keine ausreichende bauliche Tragkraft vorhanden ist, kann dies zu schweren Körperverletzungen oder Schäden an den Geräten führen! Der Installateur ist dafür verantwortlich zu überprüfen, ob die Wand, an der diese Komponente verankert wird, das Fünffache der Gesamtlast aller befestigten Geräte sicher

tragen kann. Andernfalls muss die Wand verstärkt werden, bevor die Komponente angebracht wird.



**WARNUNG:** Wenn das zulässige Gewicht überschritten wird, kann dies zu schweren Körperverletzungen oder Schäden an den Geräten führen! Der Monteur ist dafür verantwortlich, dass das kombinierte Gewicht aller Komponenten, die am Modell CMS440 befestigt sind, nicht mehr als 22 kg beträgt.



### ADVERTÊNCIAS e AVISOS IMPORTANTES!



**ADVERTÊNCIA:** Os alertas de ADVERTÊNCIA avisam-no para a possibilidade de ocorrência de graves lesões ou morte no caso de incumprimento das instruções.



**AVISO:** Os alertas de AVISO avisam-no para a possibilidade de danos ou destruição do equipamento no caso de incumprimento das instruções.



**ADVERTÊNCIA:** Se não ler, compreender completamente e seguir todas as instruções podem ocorrer graves lesões pessoais, danos no equipamento e a garantia de fábrica pode ser anulada! É da responsabilidade do instalador certificar-se de que todos os componentes são correctamente montados e instalados de acordo com as instruções fornecidas.



**ADVERTÊNCIA:** Se não for proporcionado apoio estrutural adequado a este componente podem ocorrer graves lesões pessoais ou danos no equipamento! É da responsabilidade do instalador certificar-se de que a estrutura à qual este componente é ligado pode suportar cinco vezes o peso combinado de todo o equipamento. Reforce a estrutura conforme necessário antes de instalar o componente.



**ADVERTÊNCIA:** Exceder a capacidade de peso pode resultar em graves lesões pessoais ou danos no equipamento! É da responsabilidade do instalador certificar-se de que o peso combinado de todos os componentes ligados ao CMS440 não excede 22 kg.



### AVVERTENZE e PRECAUZIONI IMPORTANTI!



**AVVERTENZA:** Un'AVVERTENZA mette in guardia in merito alla possibilità di gravi infortuni, anche letali, qualora non si osservino le istruzioni.



**ATTENZIONE:** Un'ATTENZIONE indica la possibilità di gravi danni all'attrezzatura qualora non ci si attiene alle istruzioni al riguardo.



**AVVERTENZA:** La mancata comprensione e ottemperanza alle istruzioni fornite può provocare gravi lesioni personali, danni all'apparecchiatura o annullare la garanzia fornita dal produttore. Spetta all'installatore verificare che tutti i componenti siano assemblati correttamente e installati secondo le istruzioni fornite.



**AVVERTENZA:** Una resistenza strutturale inadeguata per questo componente può arrecare gravi infortuni o danneggiare l'apparecchiatura. È responsabilità dell'installatore verificare che la struttura alla quale è fissato il componente sostenga con sicurezza cinque volte il carico combinato di tutta l'apparecchiatura. Rinforzare la struttura secondo necessità prima di installare i componenti.



**AVVERTENZA:** Un peso superiore alla capacità nominale può arrecare gravi infortuni o danneggiare l'apparecchiatura. È responsabilità dell'installatore verificare che il peso totale di tutti i componenti montati sul CMS440 non superi 22 kg (50 lb).



### BELANGRIJKE AANWIJZINGEN en WAARSCHUWINGEN!



**WAARSCHUWING:** Een WAARSCHUWING vestigt uw aandacht op de mogelijkheid van ernstig of dodelijk letsel als u de instructies niet opvolgt.



**VOORZICHTIG:** De aanwijzing VOORZICHTIG vestigt uw aandacht op de mogelijkheid van beschadiging of onherstelbare beschadiging van de apparatuur als u de betreffende instructies niet opvolgt.



**WAARSCHUWING:** Door niet alle instructies te lezen, volledig te begrijpen en op te volgen, riskeert u ernstig persoonlijk letsel, beschadiging van de apparatuur en het vervallen van de fabrieksgarantie. Degene die het product installeert is ervoor verantwoordelijk dat alle onderdelen aan de hand van de meegeleverde handleiding op de juiste wijze worden samengebouwd en gemonteerd.



**WAARSCHUWING:** Als u voor deze component onvoldoende constructiesterke beschikbaar stelt, riskeert u ernstig persoonlijk letsel of beschadiging van de apparatuur! Degene die de structuur monteert waaraan deze component is bevestigd, is ervoor verantwoordelijk dat deze minimaal vijf

maal het gezamenlijke gewicht van alle apparatuur kan dragen. Zonodig dient u de structuur vóór de montage van de component te versterken.



**WAARSCHUWING:** Overschrijding van het draagvermogen kan de oorzaak zijn van ernstig persoonlijk letsel en beschadiging van de apparatuur! Degene die het product installeert is ervoor verantwoordelijk dat het totale gewicht van alle componenten die aan de CMS440 worden bevestigd een gewicht van 22 kg niet overschrijdt.



## IMPORTANT AVERTISSEMENTS et PRÉCAUTIONS!



**AVERTISSEMENT:** Un AVERTISSEMENT vous met en garde contre les possibilités de blessures graves ou de danger de mort si vous ne suivez pas les instructions.



**PRÉCAUTION:** Une PRÉCAUTION vous met en garde contre les possibilités d'endommagements et de destruction de l'équipement si vous ne suivez pas les instructions correspondantes.



**AVERTISSEMENT:** Le manque de la lecture, de la compréhension et du respect total de toutes les instructions, peut entraîner des blessures corporelles graves, endommager l'équipement ou annuler la garantie d'usine. Il incombe à l'installateur de s'assurer que tous les composants sont correctement assemblés et installés à l'aide des instructions fournies.

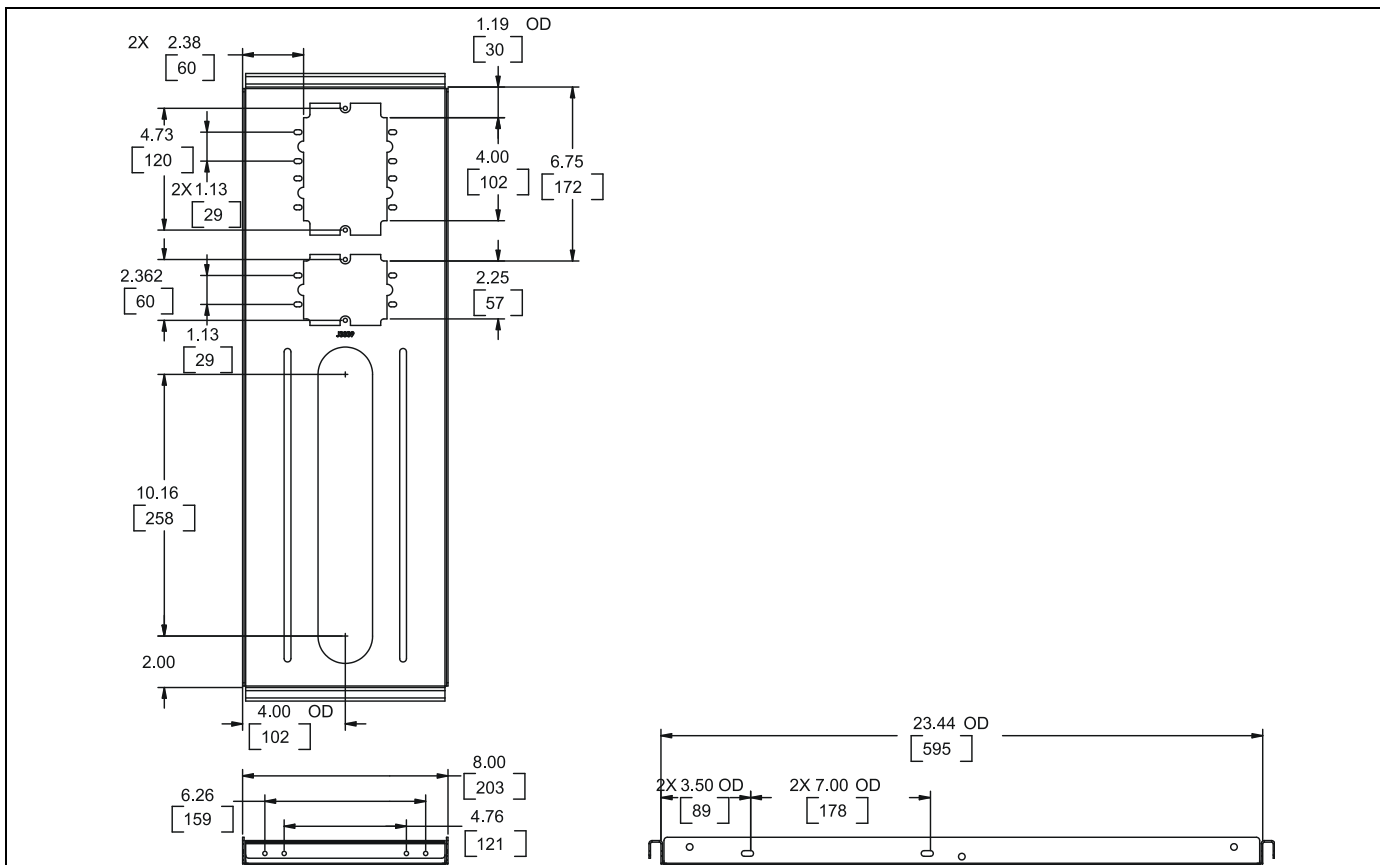


**AVERTISSEMENT:** L'absence de l'apport d'une résistance structurelle appropriée pour ce composant peut entraîner des blessures corporelles graves ou endommager l'équipement. Il incombe à l'installateur de s'assurer que la structure à laquelle le composant est attaché peut soutenir cinq fois le poids combiné de tout l'équipement. Renforcer la structure selon les besoins avant l'installation du composant.



**AVERTISSEMENT:** Dépassez la capacité pondérale peut entraîner des blessures corporelles graves ou endommager l'équipement. Il incombe à l'installateur de s'assurer que le poids combiné de tous les composants attachés à CMS440 n'est pas supérieur à 22 kg (50 lb).

## DIMENSIONS



**LEGEND**

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

	<b>Pencil Mark</b>
	Marcar con lápiz
	Stiftmarkierung
	Marcar com lápis
	Segno a matita
	Potloodmerkten
Marquage au crayon	

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

	<b>Drill Hole</b>
	Perforar
	Bohrloch
	Fazer furo
	Praticare un foro
	Gat boren
Percez un trou	

	<b>Phillips Screwdriver</b>
	Destornillador Phillips
	Kreuzschlitzschraubendreher
	Chave de fendas Phillips
	Cacciavite a stella
	Kruiskopschroevendraaier
Tournevis à pointe cruciforme	

	<b>Adjust</b>
	Ajustar
	Einstellen
	Ajustar
	Regolare
	Afstellen
Ajuster	

	<b>By Hand</b>
	A mano
	Von Hand
	Com a mão
	A mano
	Met de hand
À la main	

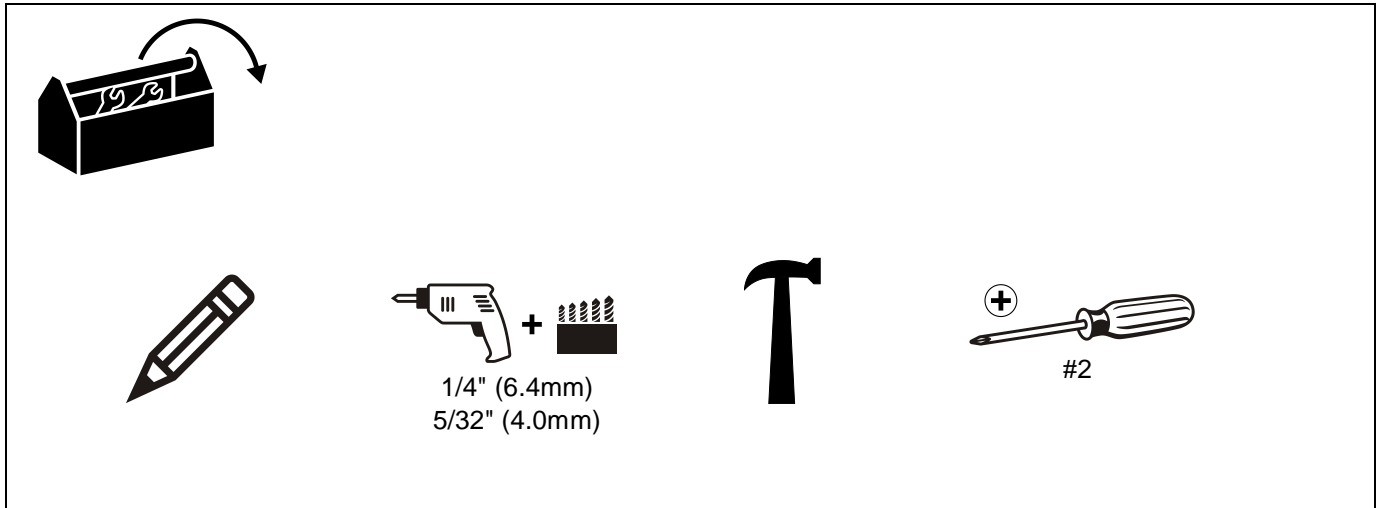
	<b>Optional</b>
	Opcional
	Optional
	Opcional
	Opzionale
	Optie
En option	

	<b>Target of Projector</b>
	Punto de enfoque del proyector
	Ziel des Projektors
	Mira do projector
	Punto di proiezione
	Doel van de projector
Cible du projecteur	

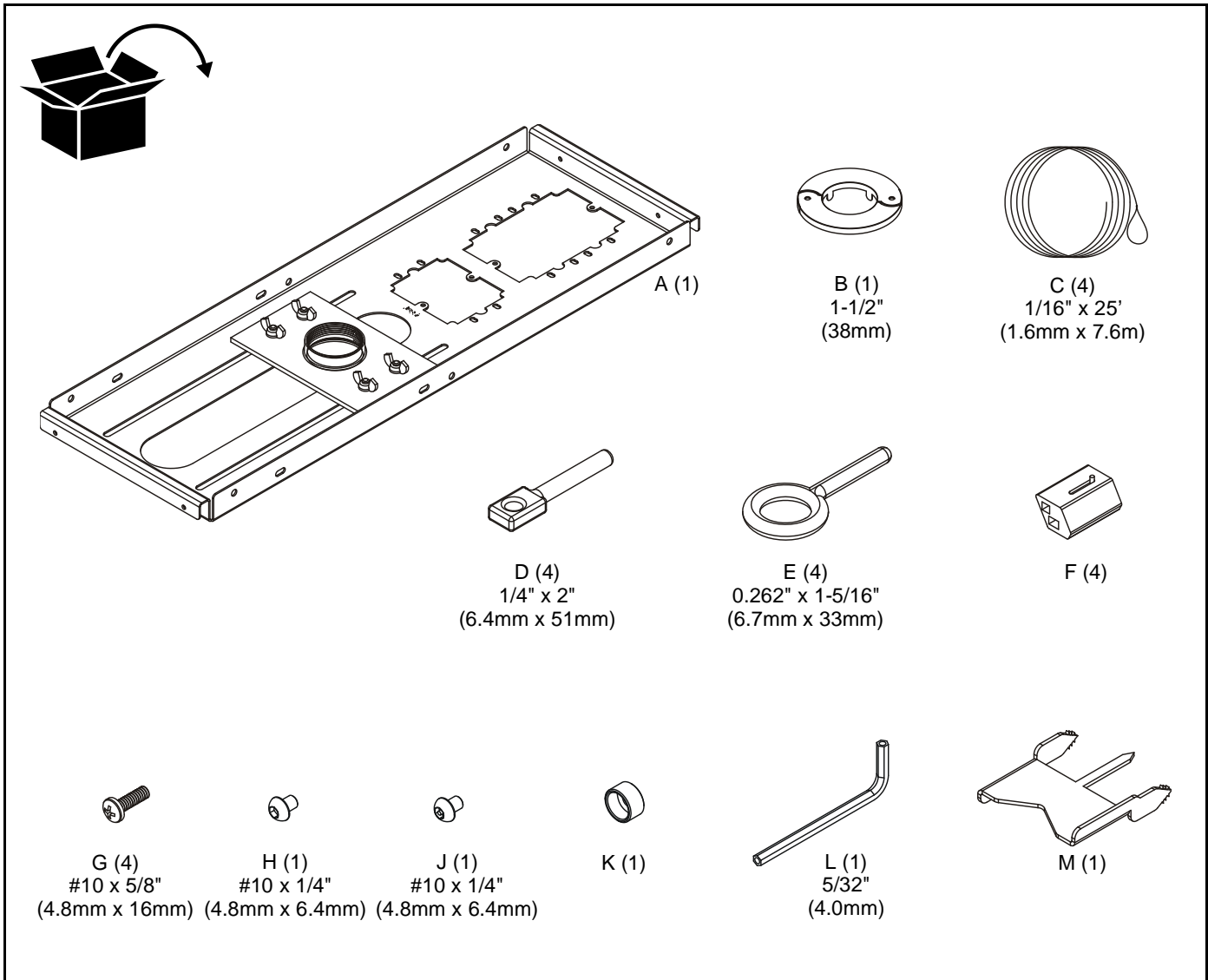
	<b>Security Wrench</b>
	Llave de seguridad
	Sicherheitsschlüssel
	Chave de segurança
	Chiave di sicurezza
	Veiligheidssleutel
Clé de sécurité	

	<b>Hammer</b>
	Martillo
	Hammer
	Martelo
	Martello
	Hamer
Marteau	

**TOOLS REQUIRED FOR INSTALLATION**



**PARTS**

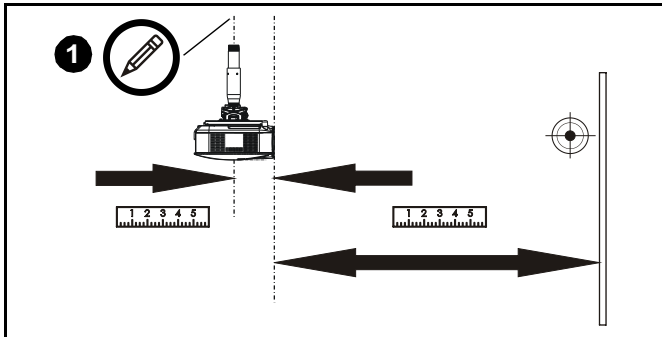


**PREPARATION**

1. Determine exact location of extension column (accessory not included) on suspended ceiling. Mark location on lower (finished) side of ceiling tile with pencil (See Figure 1).

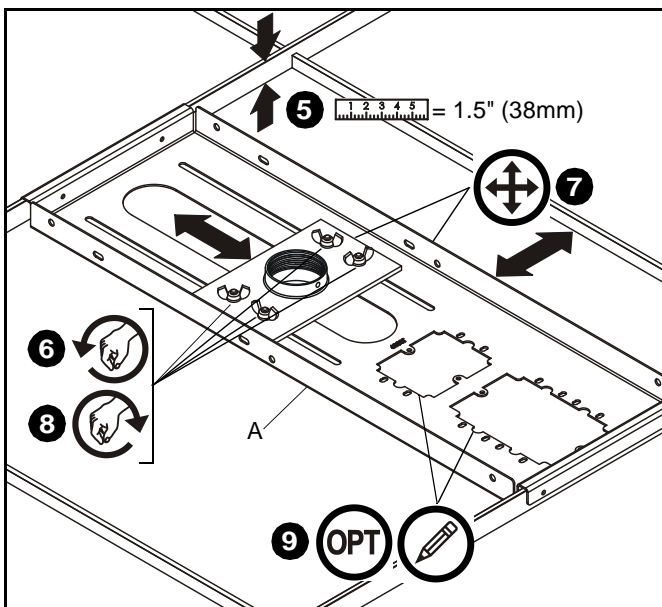
Be sure to consider the following items when determining column location:

- 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).



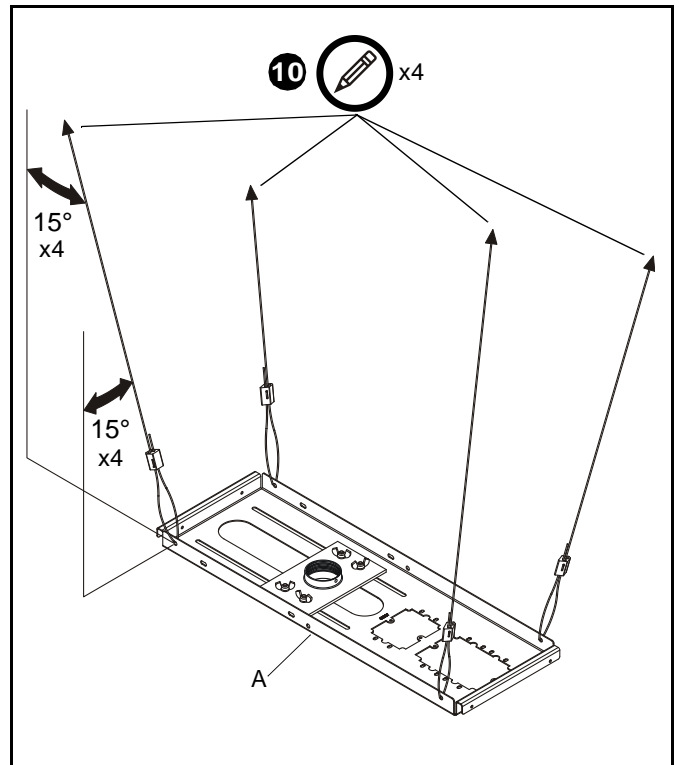
**Figure 1**

2. Remove affected ceiling tile and any adjacent tiles required for access.
3. Press center tip of tool (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.
5. Install tray (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**

6. Loosen four extension column support wing nuts in upper side of tray (A) (See Figure 2).
7. Position tray (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).
10. Examine ceiling structure (concrete, steel truss, or wood) above tray (A) to identify four support cable anchor locations. Each location should be approximately 15° outboard of support holes in tray (A) (See Figure 3). Mark locations with pencil.



**Figure 3**

11. Remove tray (A) and ceiling tile.
12. OPTIONAL: Cut electrical box opening in ceiling tile at marked location. Install box to tray (A).

**NOTE:** Electrical box, attach hardware, and cutting tool not included.

## 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. 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" (6.4mm) diameter x 1-3/8" (35mm) deep hole at each marked cable anchor support location (See Figure 4). Ensure hole is at least 2-1/2" (64mm) from nearest concrete edge. Remove debris from hole.

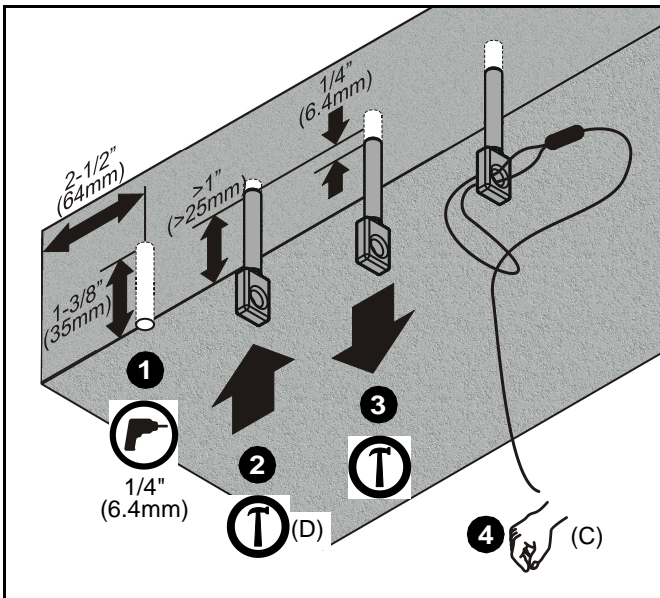


Figure 4

2. 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!

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

1. 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.

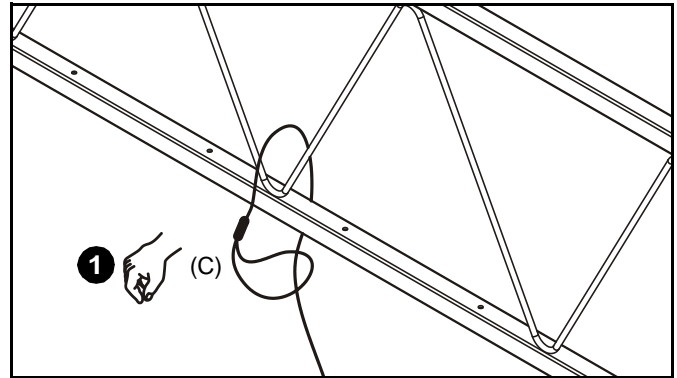


Figure 5

### Wood Ceiling Structure

1. Drill 5/32" (4.0mm) diameter x 2" (51mm) deep hole at each marked cable anchor support location (See Figure 6). Remove debris from hole.

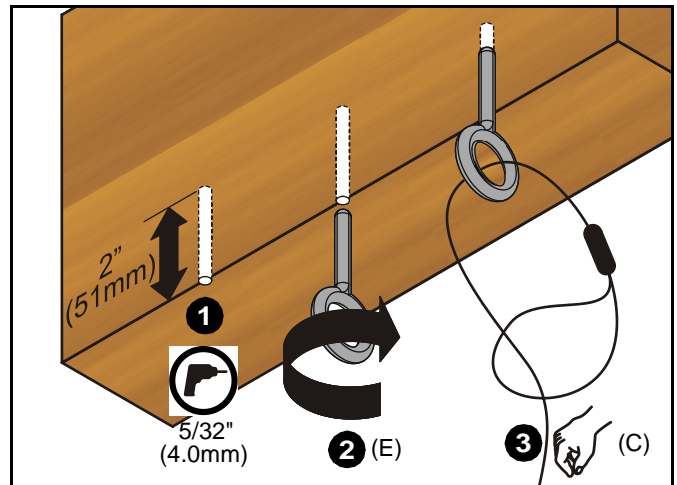


Figure 6

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 tray (A) on top of ceiling tile so that extension column support is centered over hole in tile.
3. Position tray (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).

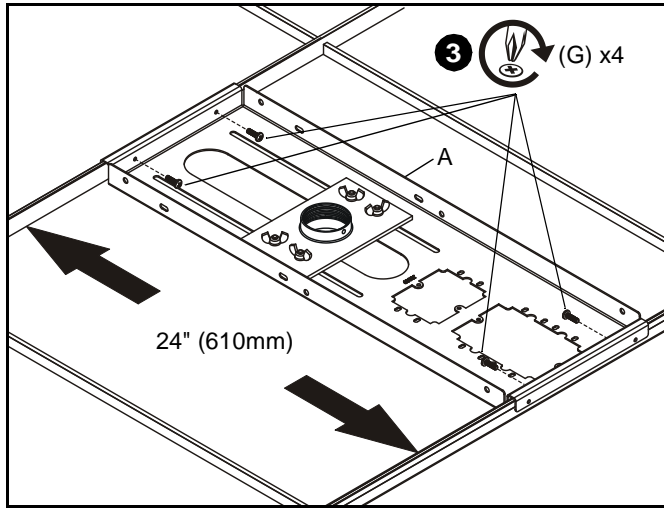


Figure 7

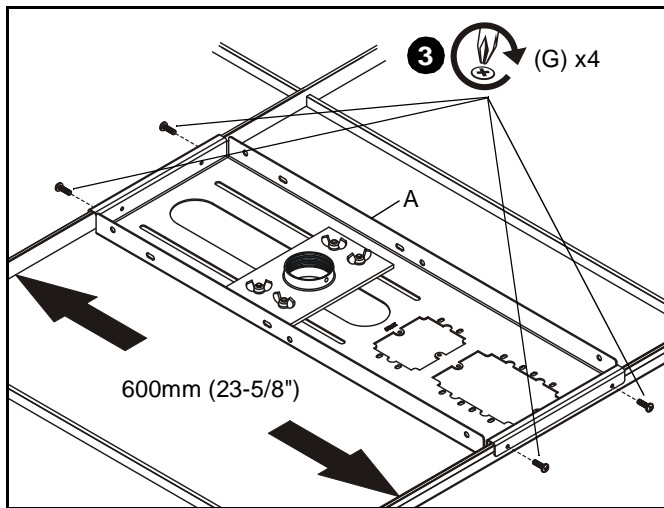


Figure 8



**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 tray (A), and completely through opposite side of cable lock (F) (See Figure 9). Adjust cable tension until tray (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.

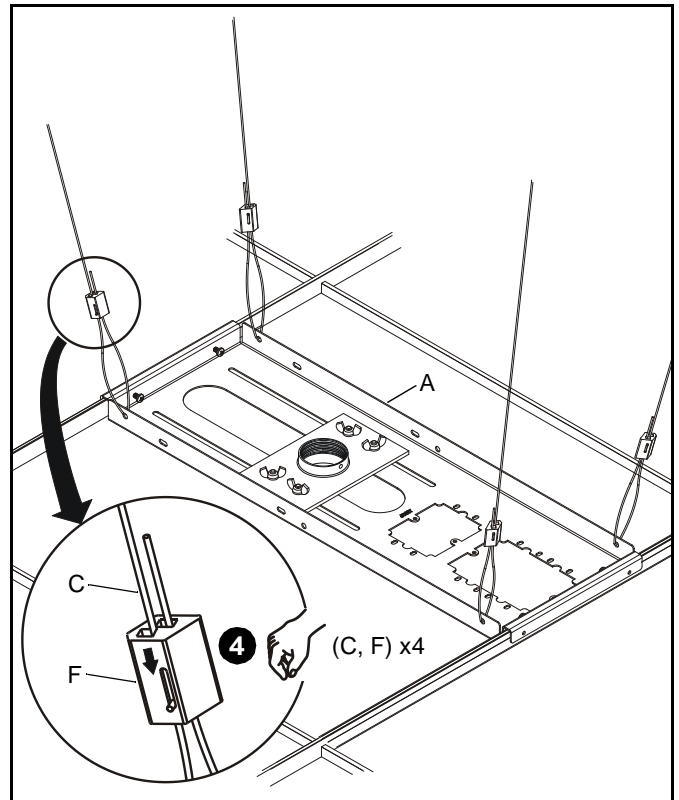


Figure 9

## 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).

1. Install the extension column (accessory not included) to the extension column support. See installation instructions included with the accessory.

**NOTE:** If installation instructions are not available, contact Chief Manufacturing for assistance.

2. Using hex key (L), secure extension column by *one* of the following methods (See Figure 10):
  - Install screw (H) into extension column support, tightening firmly against column.
  - **OPTIONAL:** Install 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.

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

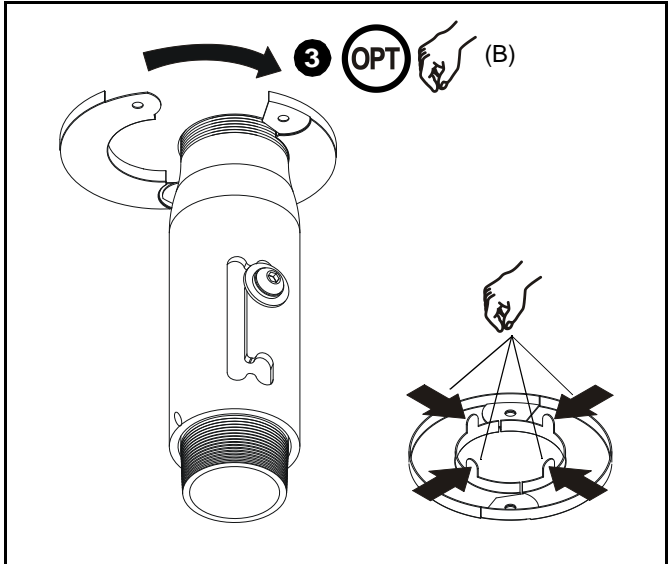


Figure 11

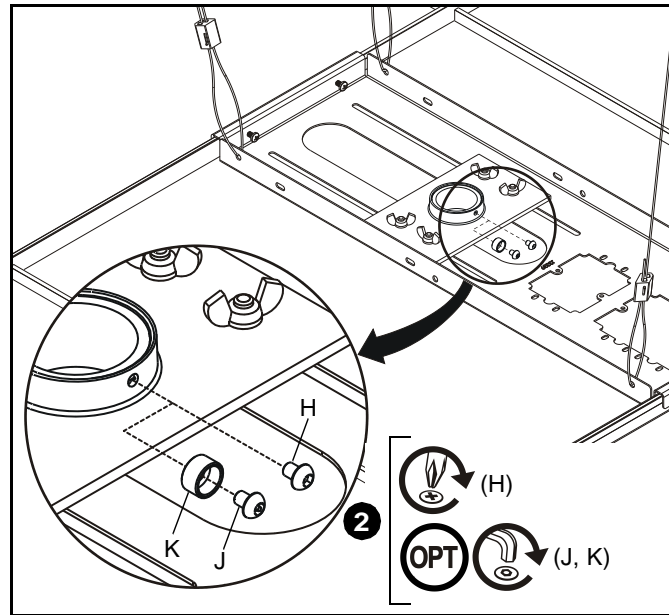


Figure 10

4. Reinstall remaining ceiling tiles as required.



**MANUFACTURERS  
DECLARATION OF CONFORMITY**

For

**Product identification:**

Model/type : CMS440  
 Category (description) : Mounting devices, Stands and other Accessories, to be used with entertainment electronics  
 Brand : Chief

**Manufacturer:** CSAV Inc.  
 8401 Eagle Creek Parkway  
 Savage, MN 55378

**EU Representative:** CSAV Inc.  
 Fellennoord 130 5611  
 ZB Eindhoven  
 The Netherlands  
 31 (0)40 2668620

Concerning				
	EMC	Safety		
A sample of the product has been tested by:	Not Applicable	CSAV Inc.		
Test report reference	.			
Applied standards		EN 60065 :2002		

**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) 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



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04/07

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