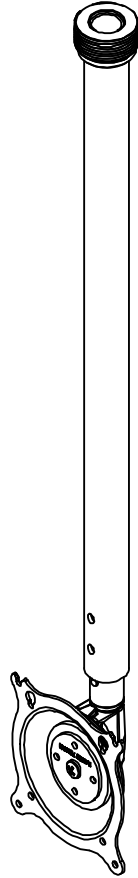


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# INSTALLATION INSTRUCTIONS

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**Ceiling Mount**

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## 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.

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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 between the FHP110 or FHPV up to (and including) the display does not exceed 40 lbs (18.1 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.



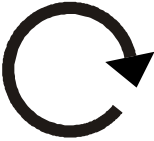





**WARNING:** Do NOT attach to vertical mounting surfaces such as walls or angled ceilings!

**IMPORTANT ! :** The FHP110 and FHPV mounts are designed to be mounted to a 2" x 4" or larger wood framework ceiling.

**NOTE:** The FHPV mount includes an FSA-4101 interface bracket, which provides additional mounting compatibility and is to be used with the UL Listed FHPV mount.

**--SAVE THESE INSTRUCTIONS--**

**LEGEND**

	<table border="1"> <thead> <tr> <th>Tighten Fastener</th> </tr> </thead> <tbody> <tr><td>Apretar elemento de fijación</td></tr> <tr><td>Befestigungsteil festziehen</td></tr> <tr><td>Apertar fixador</td></tr> <tr><td>Serrare il fissaggio</td></tr> <tr><td>Bevestiging vastdraaien</td></tr> <tr><td>Serrez les fixations</td></tr> </tbody> </table>	Tighten Fastener	Apretar elemento de fijación	Befestigungsteil festziehen	Apertar fixador	Serrare il fissaggio	Bevestiging vastdraaien	Serrez les fixations		<table border="1"> <thead> <tr> <th>Hex-Head Wrench</th> </tr> </thead> <tbody> <tr><td>Llave de cabeza hexagonal</td></tr> <tr><td>Sechskantschlüssel</td></tr> <tr><td>Chave de cabeça sextavada</td></tr> <tr><td>Chiave esagonale</td></tr> <tr><td>Zeskantsleutel</td></tr> <tr><td>Clé à tête hexagonale</td></tr> </tbody> </table>	Hex-Head Wrench	Llave de cabeza hexagonal	Sechskantschlüssel	Chave de cabeça sextavada	Chiave esagonale	Zeskantsleutel	Clé à tête hexagonale
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**TOOLS REQUIRED FOR INSTALLATION**

<p>#2</p> <p>3/16" (included) 5/32" (included)</p>	<p><b><u>Hardware required - not included</u></b></p> <ul style="list-style-type: none"> <li>- 3/8" x 3" (minimum length) Grade 2 lag bolts (Qty. 4)</li> <li>- 3/8" Grade 2 washers (Qty. 4)</li> </ul>
--	--

**PARTS**

<p>A (1) [Ceiling plate]</p>	<p>B (1) 5/16-18 x 1/4"</p>	<p>H (1) [Ceiling mount assembly]</p>		
<p>C (1) 1/4-20 x 1 1/2"</p>	<p>D (1) 1/4-20</p>	<p>E (1) 1/4" x 1/2" x .032"</p>		
<p>F (1) 3/16"</p>	<p>G (1) 5/32"</p>	<p>J (2) [19" Cable sheath]</p>		
<p>[hardware bag]</p>				
<p>L (4) M4 x 12mm</p>	<p>M (4) M4 x 30mm</p>	<p>N (4) M4 x 20mm</p>	<p>P (4) .50 x .194 x 3/8"</p>	<p>Q (4) .50 x .194 x 3/4"</p>

## INSTALLATION AND ASSEMBLY



**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 FHP110 or FHPV.

The FHP110 and FHPV ceiling mounts are designed for attachment to a 2" x 4" or larger wood framework ceiling.



**WARNING:** Do NOT attach to vertical mounting surfaces such as walls or angled ceilings!



**WARNING:** IMPROPER INSTALLATION CAN LEAD TO LIFT FALLING CAUSING SEVERE PERSONAL INJURY OR DAMAGE TO EQUIPMENT! It is the installer's responsibility to make certain the structure to which the mount is being attached is capable of supporting five times the weight of the FHP110 or FHPV mount and all attached equipment. Reinforce the structure as required before installing the mount.

**NOTE:** The following instructions assume a suitable mounting structure and surface exists prior to installation.

### Installing to a Wood Framework (Joists)

- Using the ceiling plate (A) as a template, mark mounting locations and drill 1/4" pilot holes at marked locations.
- Use 3/8" x 3" (minimum) Grade 2 lag screws (not provided) to secure ceiling plate (A) to the joists or wood framework, using the bolt holes noted. (See Figure 1) for dimension details.

**NOTE:** If using only two bolt holes for mounting, two opposing holes must be used.

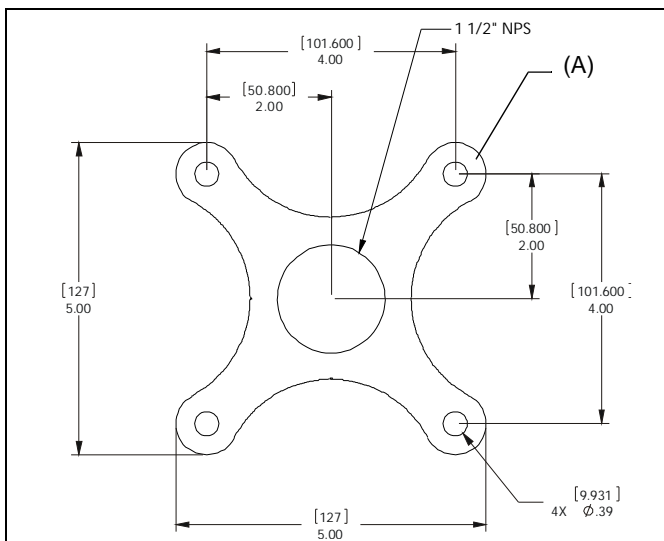


Figure 1

### Installing FHP110 or FHPV Mount Assembly

- Remove outer column with pipe adapter from ceiling mount assembly (H).
- Install outer column with pipe adapter into ceiling plate of threaded collar until tight, with a minimum of four threads engaged. (See Figure 2)
- Install 5/16-18 x 1/4" set screw (B) into hole on ceiling plate (A) to secure outer column. (See Figure 2)

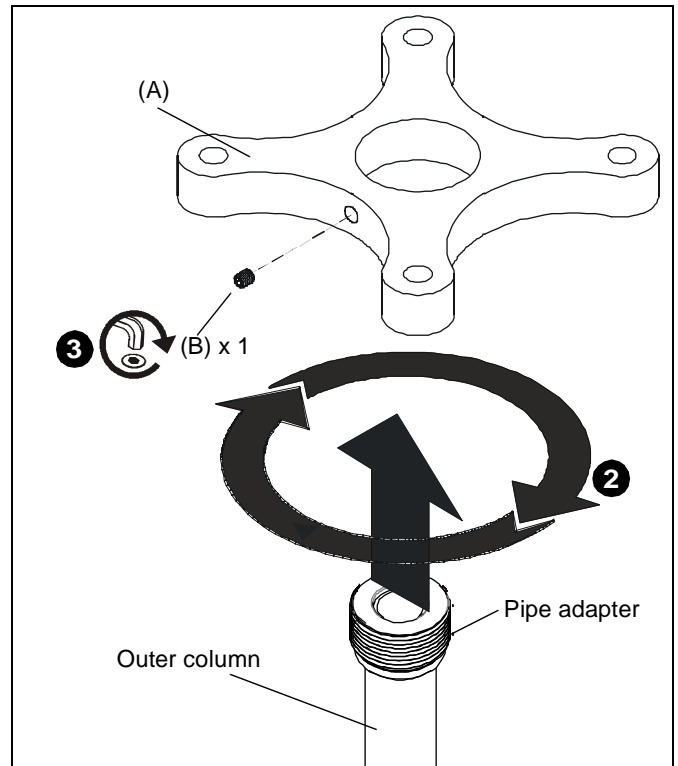


Figure 2

### Installing the Display

The FHP110 or FHPV may be used with displays having a VESA flush or recessed mounting pattern.

#### VESA Compliant Flush Mounting



**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.



**CAUTION:** If monitor uses a screw size other than M4, DO NOT use the M4 screws provided. Using the wrong screws could result in damage to your display.

- Carefully lay display face down on a covered surface to prevent damage to display.

2. Install two M4 x 12mm Phillips pan head screws (L) into upper mounting holes in display back leaving 3/16" of screw protruding out of display.
3. Align screws in display back with upper mounting holes in Centris cup until screws are seated in lower area of mounting slots. (See Figure 3)
4. Place Centris cup against display back and install two M4 x 12mm Phillips pan head machine screws (L) through lower mounting holes in Centris cup and into lower mounting holes in display back.

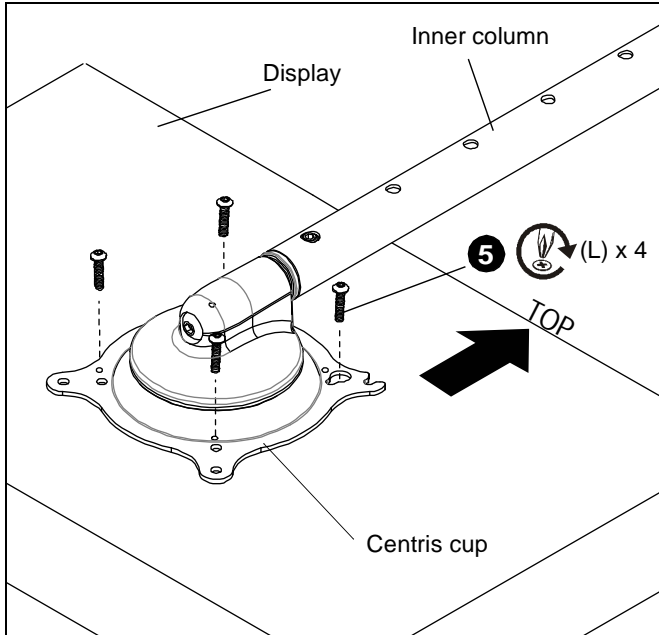


Figure 3

5. Secure display to mount by tightening the four M4 x 12mm Phillips pan head screws (L). (See Figure 3)
6. Install and secure power cables to display, allowing enough slack for easy movement of display. (See **Cable Management** section.)
7. Proceed to **Attaching Assembly Columns**.

**VESA Compliant Recessed Mounting**



**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.

1. Install four .50 x .194 x 3/8" nylon spacers (P) or four .50 x .194 x 3/4" Nylon spacers (Q) as necessary over the mounting holes of your recessed display. (See Figure 4)

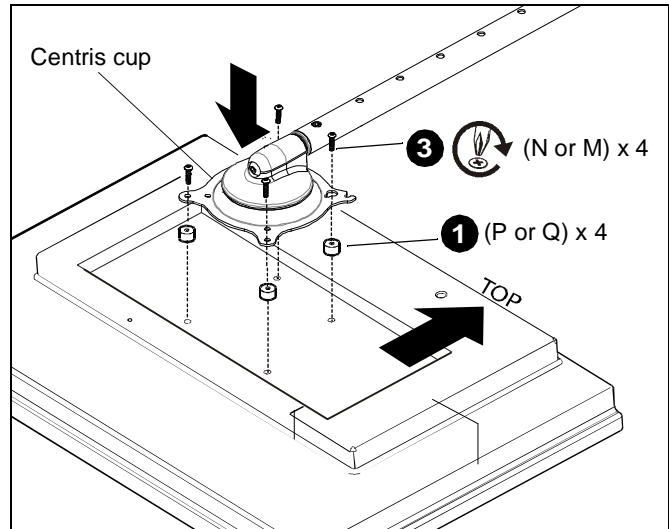


Figure 4

2. Install mount over spacers, aligning hole pattern on display with hole pattern on mount.
3. Secure mount to your display using either:
  - four M4 x 20mm Phillips pan head screws (N) for 1/2" x 3/8" nylon spacer installation, or
  - four M4 x 30mm Phillips pan head screws (M) for the 1/2" x 3/4" nylon spacer installation
4. Install power cables, allowing sufficient slack for easy movement of display. (See **Cable Management** section.)

## Attaching Assembly Columns



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

1. Slide inner column with attached display up from below into installed outer column. (See Figure 5)
2. Secure inner column into outer column at desired height using 1/4-20 x 1-1/2" socket head cap screw (C), 1/4" x 1/2" x .032" nylon washer (E) and 1/4-20 locknut (D). (See Figure 5)

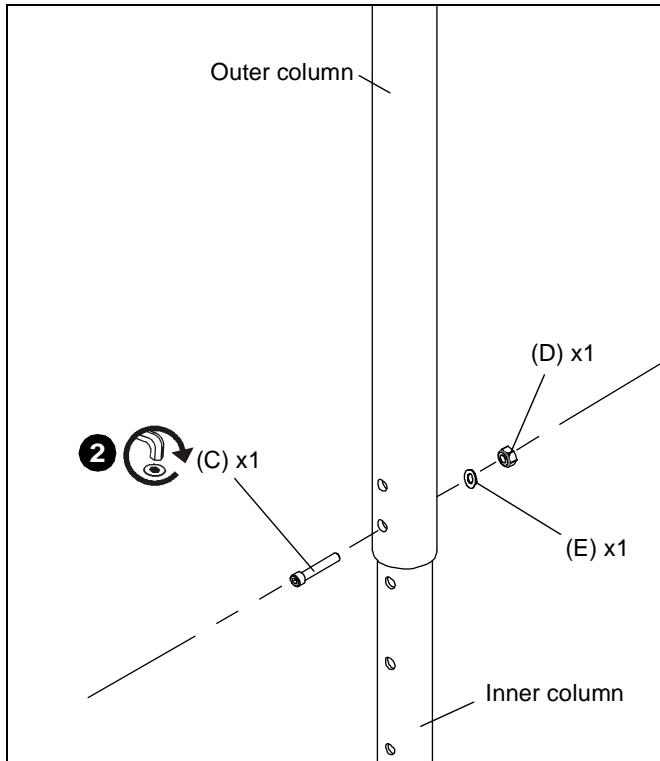


Figure 5

## Cable Management

1. Ensure cables are unobstructed and do not run through a pinch point.
2. Route power cables against column, allowing sufficient slack for extension and avoiding pinch points.
3. Install cable sheath (J) over cables.
4. Measure distance of remaining exposed cables and, using a saw or appropriate tool, cut lower cable sheath to length.
5. Install bottom cable sheath over remaining exposed cables.

## Adjustments



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

To adjust display Roll, Pitch, and YAW tension:

1. Disconnect all wires and cable from the display.
2. Remove two *Lower* screws securing display to Centris cup.
3. Loosen two *Upper* screws securing display.
4. Lift display upward and away from mount.
5. Using a Phillips screwdriver turn the tension adjustment screw clockwise to increase tension, or counter-clockwise to decrease tension. (See Figure 6)
6. Re-install display.

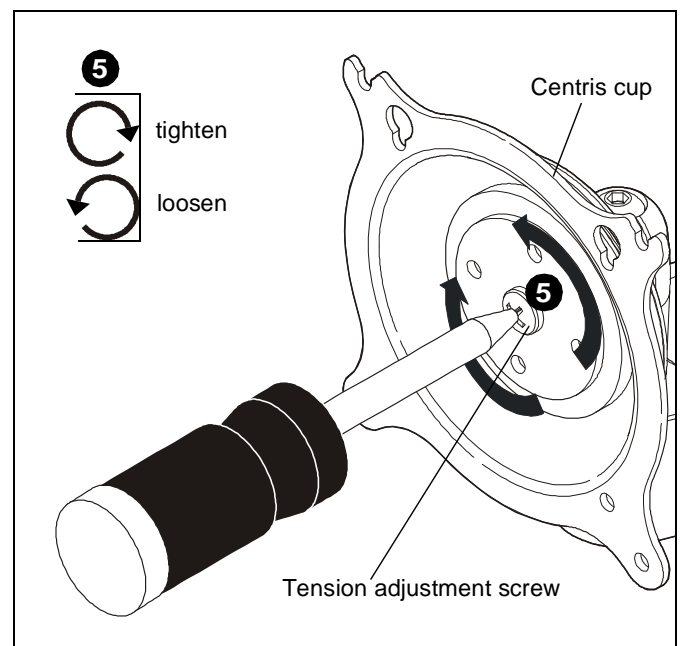


Figure 6



Our Mounts. **Your Vision.**

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