



# PCM 240 • Installation Guide

## IMPORTANT SAFETY INSTRUCTIONS

**Read all instructions before starting installation.**

When using this accessory, basic precautions should always be followed, including the following:

**WARNING: Risk of Personal Injury.** Maximum setup load for the PCM is 50 lbs (22.7 kg).

### SAVE THESE INSTRUCTIONS

**NOTE:** Refer to local building standards and codes to verify that the installation will meet the regulatory requirements. Observe all local and national building and safety codes, UL requirements, and ADA accessibility guidelines.

**WARNING: Risk of Personal Injury and property damage.** Do not exceed specified weight limits of any component of the installation. Follow the manufacturer's specifications and installation instructions.

The Extron PCM 240 Drop Ceiling Projector Mount is used for hanging PoleVault® System AV products and various projectors.

The PCM is installed above the drop ceiling and secures the adjustable pipe in a pass-through pipe adapter plate. The pipe then supports the mounting of the Extron PMK 550 and UPB 25 projector bracket.

The key components of the PCM 240 are shown in figure 1.

Also included in the kit are:

- 4 turnbuckles, 5 lag eye bolts, 5 concrete anchors, 2 cable clamps,
- 1 safety wire – 15 feet, 2 tie wires – 30 feet, 4 T-frame screws, 4 adhesive pads, escutcheon ring.

### Pre-Installation

Determine the exact location of the installation on the drop ceiling. Consider the following:

- The vertical and horizontal offsets of the projector from the proposed location.
- The projector dimensions relative to the image target.

**NOTE:** See the projector manual for details.

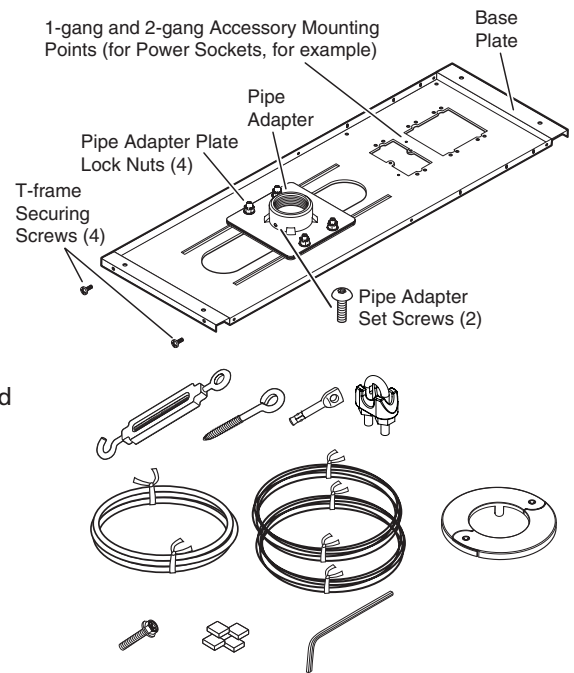
### Installation

#### Step 1 — Mark the Frame and Cut the Ceiling Tile.

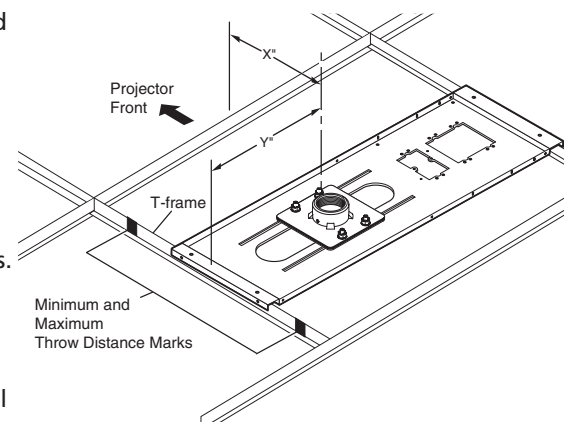
- At the location for the projector, identify the ceiling tile and T-frame where the PCM will be installed.
- Remove the predetermined ceiling tile and mark the maximum and minimum throw distances of the projector on the T-frame (see figure 2).

**TIP:** Mark the screen direction on the back of the tile to help with orientation of the tile when replacing it after cutting.

- Place the PCM base plate over the T-frame, between the two marks. Lightly tighten the T-frame securing screws.
- Mark the location of the PCM base plate on the T-frame to aid in replacing it in the correct location.
- Measure the distances X and Y (see figure 2) from the inner vertical section of the front and left T-frame runners to the center of the Pipe Adapter Plate.



**Figure 1. PCM 240 Parts**

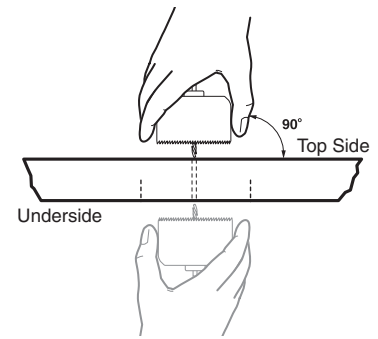


**Figure 2. Minimum and Maximum Throw Distances**

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- f. Using these dimensions, mark and cut a hole (using a 2 inch hole saw) for the projector pipe in the removed ceiling tile (see figure 3).
- g. If required, to prepare the ceiling tile for a power outlet, use the PCM plate to trace and cut out the 2-gang hole in the ceiling tile for a UL approved RACO® junction box.

If this is not required, proceed to step 3.



**Figure 3.** Mark and start cutting on underside. Finish on top side.

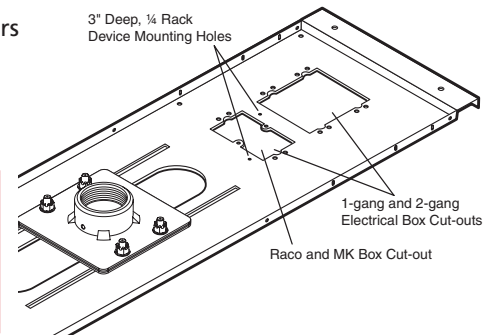
### Step 2 — Install the Electrical Box.

The following method is recommended for integrating a RACO electrical box (not supplied) on the PCM base plate. A RACO box (#8471), an MK box, or standard UL electrical boxes can be inserted. Mounting holes for Extron 3 inch deep, ¼ rack wide devices are also included.

Install the RACO box on the PCM plate as follows:

- a. Attach the box to the plate, using the smallest notches in opposite corners of the cut-out. Do not tighten the screws fully at this time.
- b. On the room side of the tile, slide the plaster ring under the screws.
- c. Fully tighten the screws

**WARNING:** Risk of Personal Injury. For safety, complete all wiring of the electrical boxes and accessories after the plate is installed and secure. All electrical installation should be done by a qualified electrician.



**Figure 4.** RACO and MK Box Installation Points.

### Step 3 — Secure the PCM Base Plate to the Ceiling.

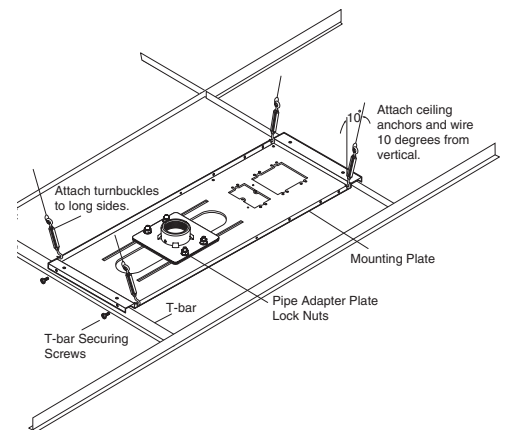
#### Tie wire installation

- a. Replace the cut ceiling tile, checking the orientation.
- b. Replace the PCM base plate over the ceiling tile and align the hole with the PCM adapter plate.
- c. Attach the four turnbuckles to the mounting plate, one at each corner.

**ATTENTION:** Risk of Personal Injury and property damage.

- DO NOT rest or lean on the mounting plate or suspended ceiling when attaching the turnbuckles and tie wire, or when drilling into the ceiling.
- For safest installation, insert the turnbuckle from the outside so that it hooks inwards.

- d. Mark and drill four holes, approximately 1¼ inch (32 mm) deep into the ceiling joists, using a 1/4 inch (6.4 mm) diameter drill bit. Do this at 10 degrees out from vertical. Drill a fifth hole centered above the PCM for the safety cable (see figure 5). Minimum suitable joist size should be 2 inches by 4 inches.
- e. Install appropriate anchors or lag eye bolts for the structural ceiling into each drilled hole.



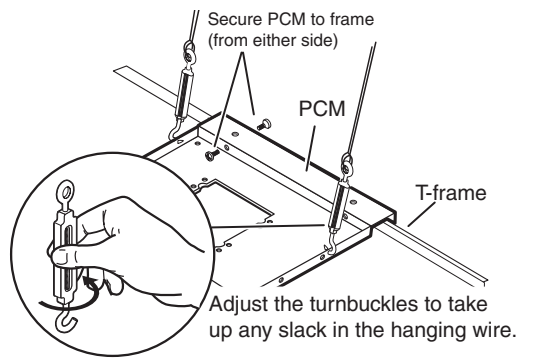
**Figure 5.** Attach Tie Wire and Safety Cable.

- f. Loop the safety cable through the center anchor or lag eye bolt, attach it to the plate center holes (figure 6) and secure it with the cable clamps.
- g. Cut appropriate lengths of the supplied tie wire. Loop the wire through the anchors or lag eye bolts and the turnbuckles, then twist the wire around itself at least five times.
- h. Tighten the turnbuckles by hand (see figure 6), and level the plate so that it just rests on the grid.

**ATTENTION: Potential Damage to Property.**

- The four hanging wires should be taut, taking the full weight of the completed installation.
- Overtightening the turnbuckles could cause the T-bar assembly to be lifted, making the suspended ceiling bowed and unsafe.

- j. Tighten the four T-frame securing screws on the PCM.



**Figure 6. Adjust the Turnbuckles.**

### Step 4 — Final Installation.

The PCM 240 comes with a threaded pipe adapter installed in the adapter plate. This allows for an Extron PMP projector mounting pole to be fitted.

To fit the mounting pole, do the following:

- a. Back out the set screws on the pipe adapter/adapter plate assembly.
- b. Screw the pole into the adapter. A minimum of three full turns is required to safely secure the pole in place
- c. Secure the pole in place by tightening down the set screw on the pipe adapter/adapter plate assembly. Cabling for the projector can be accessed through the cut-out in the PMP pole.
- d. Other optional accessories can also be installed at this point. These include the Extron PMK 350, a low profile, two product mounting kit, and the UPB 25, a Universal Projector Mounting Bracket suitable for most projectors weighing up to 25 pounds.
- e. Complete any further device installation according to the relevant device manual.

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## Specifications

### General

Maximum load capacity.....	50 lbs (22.7 kg)
Material .....	Steel plate, Tie wire: steel, 14 AWG, 70,000 psi tensile strength
Dimensions	
Base plate .....	25.8" L x 8.0" W x 1.2" D (65.5 cm L x 20.3 cm W x 2.9 cm D)
Product weight.....	5.6 lbs (2.5 kg)
Shipping weight.....	9 lbs (5 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety .....	CE; c-UL, UL for use with UL Listed mount and projector; OSHPD anchorage pre-approval
Warranty .....	3 years parts and labor

**NOTE:** Specifications are subject to change without notice.

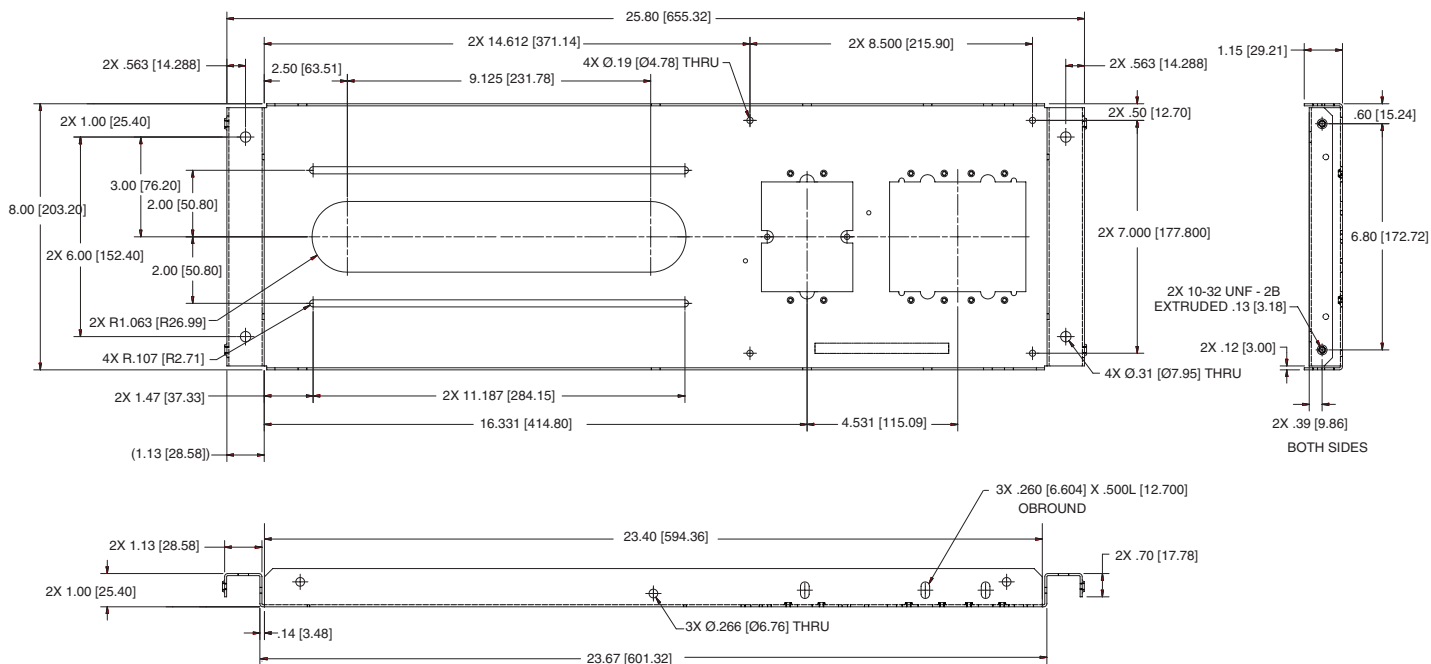


Figure 7. PCM 240 Dimensions

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