

PCM 340 Installation Notes

The Extron PCM 340 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.

CAUTION Maximum load for the PCM is 50 lbs (22.7 kg).

The key components of the PCM 340 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 ft., 2 tie wire – 30 ft., 4 T-frame screws, 2 set screws,
- 1 location screw, 4 adhesive pads, 11 hole plugs, 1 escutcheon ring,
- (1) 25 inch slotted projector pipe with 1 snap-in trim piece.

Installation

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.

1. Install the projector to verify the location.

- a. At the predetermined location for the projector, identify the ceiling tile and T-frame where the PCM will be installed.
- b. Remove the ceiling tile, and mark the projector's maximum and minimum throw distances on the T-frame (see figure 2).

NOTE Refer to the projector manufacturer's manual for details.

- c. Place the PCM base plate over the T-frame, between the two marks. Lightly tighten the T-frame securing screws (which can be inserted on the inside or outside of the PCM).
- d. Back out the Pipe Adapter set screws on the adapter plate. Slide the slotted pipe into the adapter, aligning the holes in the pipe with those in the adapter (see figure 3). Tighten the pipe location screw and the set screws to secure the pipe.
- e. Install the UPB 25 projector bracket and the projector onto the end of the pipe. Refer to the UPB 25 User Manual for details.

2. Verify the image location.

- a. Turn on the projector, loosen the wing nuts and slide the base plate and projector left and right, viewing the image to verify the proper location for a centered image.

TIP Remember to use the vertical and horizontal offsets when aligning the projector. Adjust pipe height if needed. Refer to the projector manual for details.

- b. When image location is verified, lock down the wing nuts.

3. Cut the ceiling tile.

- a. Mark the location of the PCM base plate on the T-frame, before removing it, to aid in replacing it in the correct location.

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

NOTE With assistance, carefully remove the UPB 25 with the projector still attached from the slotted pipe. Remove the slotted pipe.

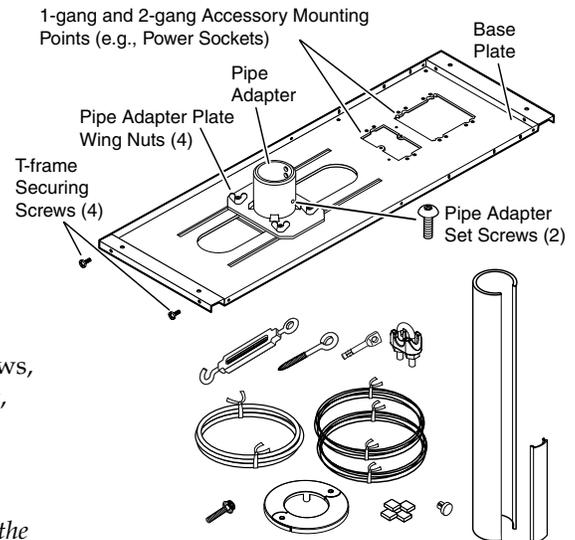


Figure 1 — PCM 340 parts

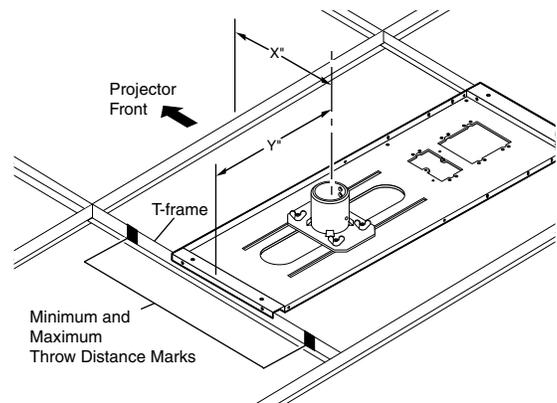


Figure 2 — Minimum and maximum throw distances

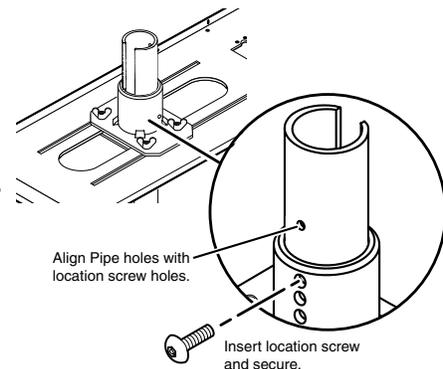


Figure 3 — Insert pipe into adapter

PCM 340 Installation Note, cont'd

- b. 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.
- c. Using these dimensions, **mark and cut a hole** (using a 2 inch hole saw) for the projector pipe in the ceiling tile (see figure 4).
- d. If required, to prepare the ceiling tile for a power outlet, use the PCM plate and trace and cut out the 2-gang hole in the ceiling tile for a UL approved Racco junction box.

If this is not required, proceed to step 5.

TIP Install any optional power outlets in the 2-gang opening on the mounting plate, towards the outside edge of the mount, so they do not interfere with the PMK 550 when installed.

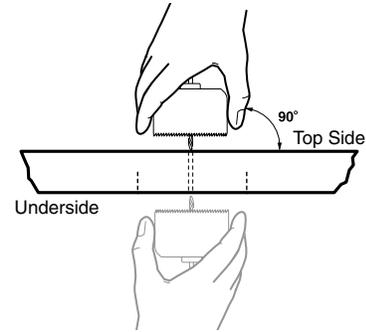


Figure 4 — Mark and start cutting on underside. Finish on top side.

4. Install the electrical box.

The following method is recommended for integrating a 4S Racco electrical box (not supplied) on the PCM base plate (e.g., a Racco 231, 2 1/8" deep, 4"x4" electrical box and a Racco 778, 1/2" raised, 4"x4" plaster ring or similar).

Install the Racco 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 (see figure 5). 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 For safety, complete **all wiring** of the electrical boxes and accessories **after** the plate is fully installed and secure.

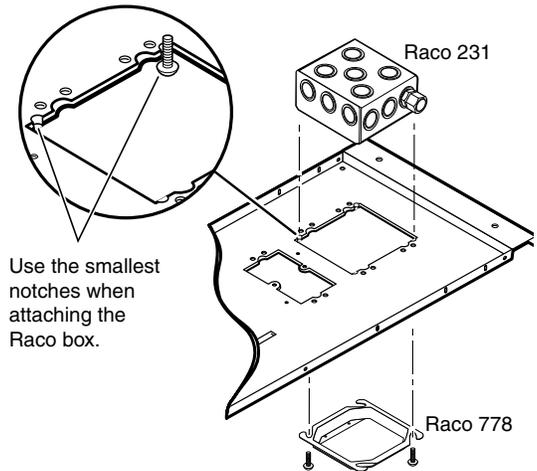


Figure 5 — Install Racco box and plaster ring

5. Secure the PCM base plate to the ceiling.

- a. **Replace the cut ceiling tile**, checking the orientation and aligning the hole(s) with the PCM's adapter plate.
- b. **Replace the PCM base plate** over the ceiling tile
- c. **Push the slotted pipe up through the hole into the adapter plate** and **tighten the location and set screws** to secure the pipe in place.
- d. **Attach the four turnbuckles** to the mounting plate, one at each corner.

CAUTION 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.

NOTE For safest installation, insert the turnbuckle from the outside so that it hooks inwards.

- e. **Mark and drill holes in the structural ceiling** at 10 degrees out from vertical. Drill a fifth hole centered above the PCM for the safety cable (see figure 6).
- f. **Install appropriate anchors or lag eye bolts** for the structural ceiling into each drilled hole.
- g. **Loop the safety cable** through the anchor or lag eye bolt, attach it to the plate center holes (see figure 6) and secure it with the cable clamps.

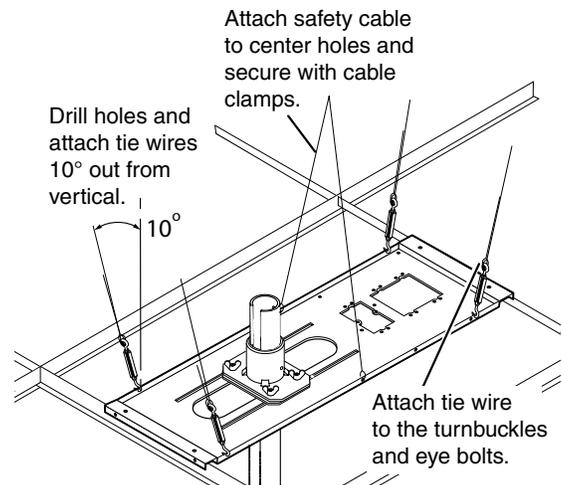


Figure 6 — Attach tie wire and safety cable

h. 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.

i. Tighten the turnbuckles by hand (see figure 7), and level the plate so that it just rests on the grid.

CAUTION *The four hanging wires should be taut, taking the full weight of the completed installation.*

CAUTION *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.

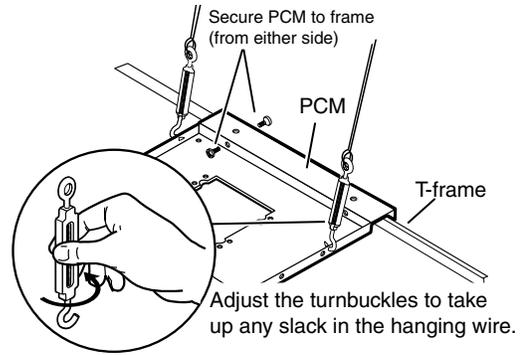
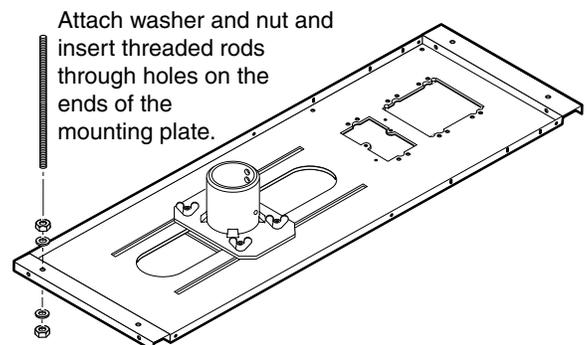


Figure 7 — Adjust turnbuckles

Threaded rod installation

For this method, threaded rods (not supplied) are used instead of wire to secure the plate to the ceiling:

- a. **Insert the rods** through the holes at the ends of the plate.
- b. **Secure the rods** with washers and nuts. The rods take the full weight of the completed installation.
- c. **Adjust the length** to keep the plate level.



Attach washer and nut and secure.

Figure 8 — Threaded rod installation

6. Final installation.

- a. **Install the projector assembly** and lock it into place.
- b. Tuck the signal cables into the slotted pipe and firmly snap the trim piece into place (see figure 9).

NOTE *The trim piece can be cut to the desired length.*

- c. Open the escutcheon ring and, with the tabs uppermost, **fit the ring around the slotted pipe** (see figure 10), then close it. Slide the ring up until it is snug against the ceiling tile.
- d. Insert the hole plugs into the remaining open holes in the visible part of the pipe.
- e. Complete any further device installation according to the manufacturer's manuals.

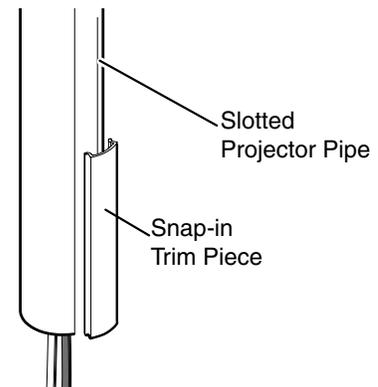


Figure 9 — Snap in trim piece

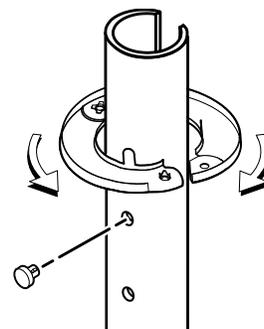


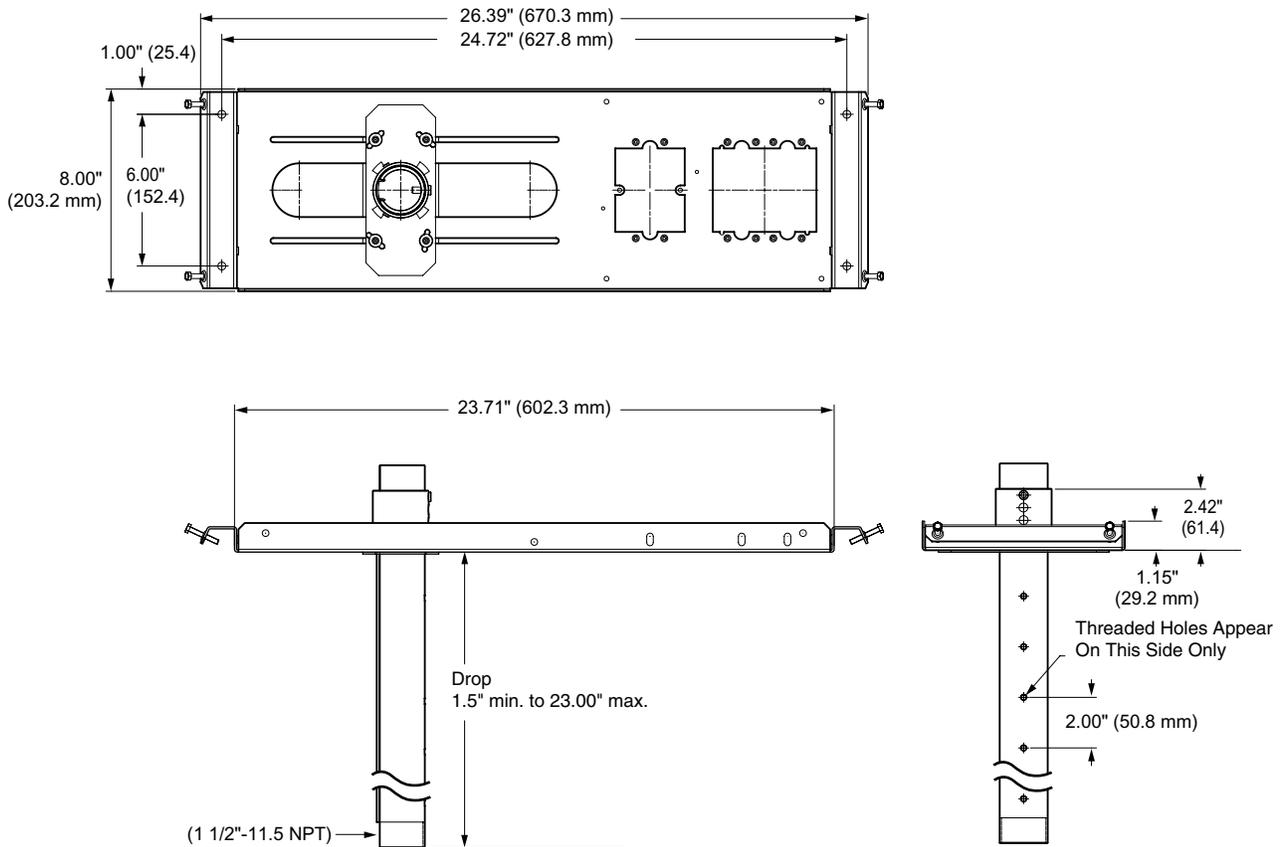
Figure 10 — Fit ring and hole plugs

Specifications

Mounting.....	Ceiling mountable with included hardware
Maximum load capacity.....	50 lbs (22.7 kg)
Material.....	Aluminium
Color/finishes.....	White
Pipe dimensions.....	25" (635 mm) length, 1.5"-11.5 NPT
Product weight.....	4.5 lbs (2.0 kg)
Shipping weight.....	9 lbs (5 kg)
Regulatory Compliances	
Safety.....	CE, c-UL, UL, for use with UL Listed mount and projector
Vibration.....	ISTA 1A in carton (International Safe Transit Association)
Warranty.....	3 years parts and labor
Adjustment ranges	
PCM 340.....	1.5" to 23" drop, 21.5" adjustability, 0.5" steps

NOTE Drop distances are measured from the bottom of the hanger plate.

NOTE Specifications are subject to change without notice.



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