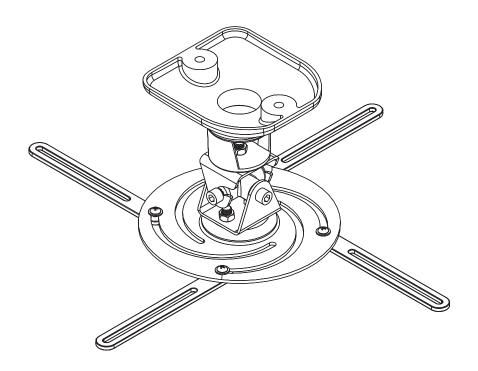


SM-PROJ-M-WH / SM-PROJ-M-BLK

Strong™ Universal Projector Mount



INSTRUCTION MANUAL

1. Warnings and Important Safety Instructions



CAUTION:

This ceiling mount is intended for use only with the maximum weight of 30 lbs. Use with heavier than the maximum weights indicated may result in instability causing possible injury.



- We highly recommend this product be installed by a qualified professional.
- Do not begin installation until you have thoroughly read and understand these instructions.
- Safety gear and proper tools must be used. Failure to do so can result in property damage and/ or serious injury.
- Verify that the ceiling will safely support four times the combined weight of the mount and projector before installation, or reinforce the structure to be capable.
- Under no circumstances should this product be mounted to metal studs.
- Follow all instructions and recommendations regarding adequate ventilation and suitable locations for mounting your projector. Consult the owner's manual for your projector for more information.
- The manufacturer does not accept responsibility for incorrect installation.

2. Table of Contents

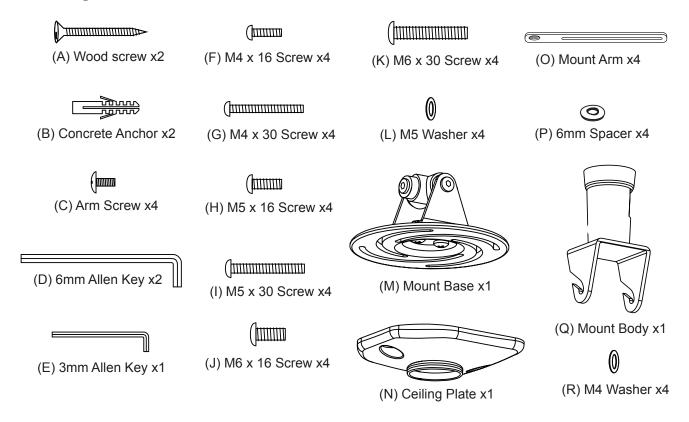
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3. Strong Mounts Product Overview

Thank you for purchasing a Strong® projector mount. We appreciate your purchase and are committed to providing the highest quality products possible.

This Strong SM-PROJ-M Projector Mount was designed to provide the most installer-friendly experience possible. It uses a hanging mount design that allows for easy height adjustment using standard 1.5" NPT threaded hanging rods, and supports a variety of Strong accessories to allow mounting to almost any ceiling and provide wiring concealment.

4. Package Contents



5. Tools Required

- Ladder or scaffolding to allow access to the mounting area
- Pencil (for making temporary alignment marks)
- #2 Philips Screwdriver
- Electric Drill
- 3/16" Drill Bit and Stud Finder (for pilot holes in wood joist ceiling)
- 5/16" Masonry Drill Bit (if mounting in concrete ceiling)
- Hammer (if mounting in concrete ceiling)

6. Installation Considerations

Review this section before beginning to ensure the best possible experience during and after installation of the SM-PROJ-M projector mount.

6.1. Mounting Height and Location

The ideal parameters for projector height and distance from the screen vary with every installation depending on the equipment in use and the operating environment. Before installation, consult with the projector and screen manufacturer documentation to plan the location that is best for performance.

Also, make sure that nothing will obstruct installation of the projector mount and wiring from the sources. This can include items like concealed plumbing, ductwork, electrical wiring or conduit. Ensure that no exposed items on the ceiling or walls will obstruct the line of sight or prevent any part of the system from being mounted correctly.

6.2. Ceiling Mounting Options

The SM-PROJ-M projector mounting plate and all Strong mounting accessories utilize 1.5" NPT threads for attachment of mount parts and accessories. The mount body is female-threaded to screw onto the male-threaded ceiling plate.

Strong accessories include ceiling hangers that allow mounting to non-standard ceiling surfaces and materials, extension poles of fixed or adjustable length, and adapters for attaching these accessories to any Strong ceiling mount.

For complete information on using the correct extensions and adapters for this mount, please see the Ceiling Mount Accessory Guide, available at the Support tab on the product page for the SM-PROJ-M at www.SnapAV.com.

7. Installation

Step 1. Install the Mounting Plate or Accessory on the Ceiling

If an alternative mounting accessory is being used to hang the mount from the ceiling, refer to the installation manual for that part to ensure that step 1 of SM-PROJ-M installation is completed correctly. If the included ceiling plate is being used, continue with the directions below for either wood or concrete ceiling material mounting.

Warning! When installing the ceiling plate:



Do not over-tighten any fasteners used to mount to the ceiling plate. Over-tightening could cause damage to the fasteners, reducing their rated holding strength and increasing the possibility of failure.

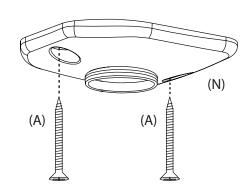
Damage to the mount or projector due to improper installation or fasteners is not covered under warranty.

A. Wood Joist Ceiling Instructions

- 1. Locate the ceiling plate (N) and wood screws (A).
- Place the ceiling plate in the desired location and mark the two mounting holes, and the location of the plate. The use of a stud finder is highly recommended to ensure that screws are threaded into the center of the board above the ceiling surface.

Note: It may be necessary to add extra wood bracing above the ceiling to allow for both screws to be securely fastened to the ceiling frame structure.

- 3. Pre-drill each hole using a drill and 3/16" drill bit to a depth of at least 2" (51mm).
- 4. Using a #2 Phillips screwdriver, insert the screws through the plate mounting slots and tighten them until the plate is securely attached and will not move freely. Hold the plate in place over the alignment marks while tightening the screws.



B. Concrete Ceiling Instructions



Warning! For Concrete or Cinder Block Mounting:

Cinder block must meet ASTM C-90 specifications.

Concrete must be 2000 psi density minimum. Lighter density concrete may not hold concrete anchor. Verify that there is a minimum of 1-3/8" of concrete thickness to be used for the included concrete wall anchors.

Do not drill into mortar joints! Be sure to mount in a solid part of the block, generally 1" minimum from the side of the block.

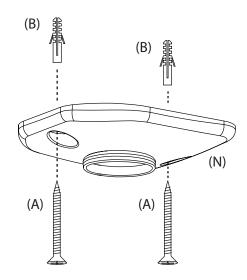
It is suggested that a standard electric drill on slow setting is used to drill the hole instead of a hammer drill to avoid breaking out the back of the hole when entering a void or cavity.

Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.





- 1. Locate the ceiling plate (N), concrete anchors (B), and wood screws (A).
- 2. Place the ceiling plate in the desired location and mark the two mounting hole locations, and the location of the plate.
- 3. Using a drill and a 5/16" masonry bit, drill one hole to a depth of at least 2" (51mm) in each of the four marked locations.
- 4. Install the concrete anchors into the holes, tapping them in lightly with a hammer as needed.
- 5. Using a #2 Phillips screwdriver, insert the screws through the plate mounting slots and into the masonry anchors. Tighten them until the plate is securely attached and will not move freely. Hold the plate in place over the alignment marks while tightening the screws.

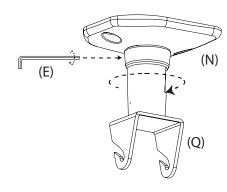


Step 2. Attach the Projector Mount Body and Optional Extension Accessories

After the ceiling plate or accessory is secured to the ceiling, the projector mount may be secured to it, or an extension accessory may be installed, followed by attachment of the mount body.

Refer to the extension documentation to perform any pre-assembly necessary before beginning this step.

- A. For direct mounting, thread the projector mount body (Q) into the ceiling plate (N) by hand as tightly as possible while still pointing toward the screen correctly - and then skip to step D.
- B. If an extension pole is being utilized, thread the extension and any adapters together, and then thread the top of the extension into the ceiling plate/adapter by hand as tightly as possible. Tighten any setscrews for the accessories at this time (see extension or adapter documentation for specific instructions).
- C. Thread the projector mount body into the bottom of the extension or adapter by hand as tightly as possible while still keeping the mount pointed in the direction of the screen.
- D. After the mount body is aimed at the screen, use the 3mm Allen key (E) to tighten the set screws on the mount body. (Minor alignment changes can be made after installation is complete.)

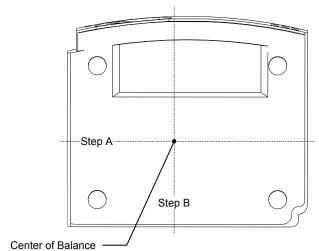


Step 3. Attach the Mounting Base and Arms to the Projector

A. Finding the Center of Balance

In order for the projector to hang evenly from the mount once it is installed, the mounting base must be attached and secured to the projector so that the center of gravity of the projector is centered in relation to the center of the mounting base. Usually the center of gravity will not be in the center of the unit, but slightly closer to the side the lens is on.

- To allow for the correct balance when attaching the projector to the mount, begin by picking up the projector on opposite sides and trying to balance it between both hands. Move hands forward or back until the projector nearly balances in your hands. Once the balance is found, make a temporary mark or note to indicate the balance on that axis.
- 2. Repeat step A for the opposite axis.
- The intersection of the lines is the approximate center of balance. Make a temporary mark or note of this point for use in the next step of installation.



B. Attaching the Mounting Base and Arms to the Projector

After the center of balance is found, the mounting base must be attached to the projector. Attachment will vary for every projector, so a variety of hardware is included to ensure compatibility with most common brands.

- Loosely assemble the projector mount base (M) and arms (O), using the arm screws (C) and washers (L). Attach the arms to the base so that one arm is attached to each of the four slots.
- 2. Next, identify the screw thread pitch needed to attach the projector to the arms. Screws (F, G, H, I, J, K) are included for this purpose. Gently try to thread one screw at a time into a projector mounting hole until the correct thread pattern is found. If none of the included screws fit, consult with the projector manufacturer to get the correct thread pitch and length to use.

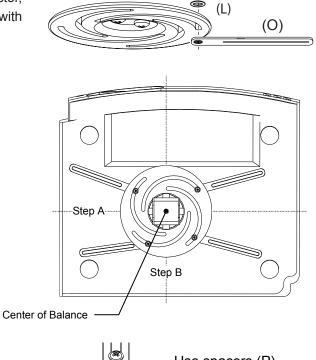
Note: If screws (F) or (G) are used for attaching the arms to the projector, use one M4 washer (R) between the screw (F) or (G) and the mounting arm (O) when attaching the arm.

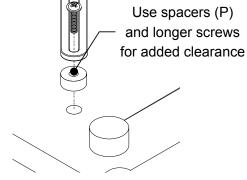
- Next, lay the mounting base assembly over the center
 of gravity mark. Position one arm over each of the
 mounting holes on the projector mount body. Pivot
 the arms in the slots as needed to maintain balance
 in relation to the arms.
- If the arms cannot attach to the projector due to lack of spacing, spacers (P) may be used between the projector and the mounting arms.

Arm and Base Assembly

(C)

(M)

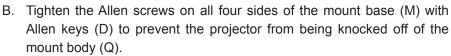




Step 4. Hang the Projector

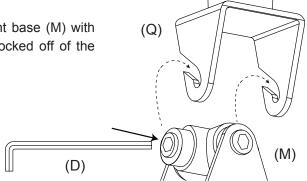
After the projector has been attached to the mounting base, it can be attached to the projector mount body.

A. Carefully hook the mount base (M) with your projector attached to the mount body (Q).



Two Allen keys are provided for this step to allow for easier tightening.

Installation is now complete. Continue to the next section for picture adjustment instructions.



Step 5. Adjusting the Projector



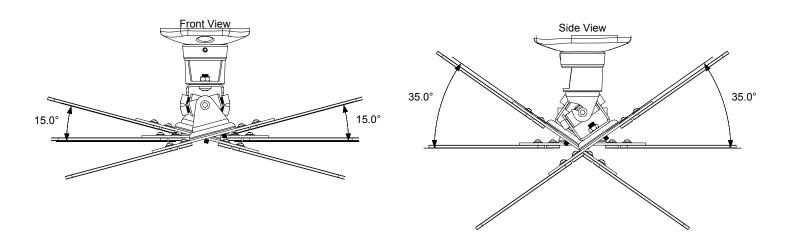
Warning! When adjusting the direction, only turn the mount enough to reach the desired direction. DO NOT CONTINUALLY TURN THE PROJECTOR OR MOUNT IN A COUNTER-CLOCKWISE DIRECTION! This can cause the mount to come apart due to unthreading and may cause damage and/or injury.

Now that the mount and projector are fully assembled and installed, complete all wiring connections and supply power to the projector. Final adjustments can then be made to perfectly align the projected image with the screen.

To change the tilt of your projector, use Allen keys (D) to first loosen the Allen screws on the mount base (M). Tilt the projector into the desired position and re-tighten the screws. To change the direction your projector faces, first loosen the set screw with the Allen key (E). Turn the projector to the desired direction and re-tighten the set screw. For easier adjustments, loosen the screws only enough to allow for movement of the parts while maintaining some friction (1/8-1/4 turn).

Note: The SM-PROJ-M can tilt up to 35° from horizontal between the mounting surface and projector. If the mounting angle of the ceiling plate (N) is greater than 15° from horizontal (as with sloped or angled ceilings) then the projector mount may need to be adjusted so that tilt can be increased. The image below illustrates the axes on which the mount can tilt and the maximum angle available in each axis.

If adjustment is necessary, loosen the setscrew at the mount body (Q) to ceiling plate (N) threads and adjust the orientation of the mount base (M) as needed to allow for enough tilt.



8. Specifications

General

Color	White or Black	
Finish Type	Powder Coated, Matte Finish	
Product Weight	2.87 lbs	
Certifications	UL	

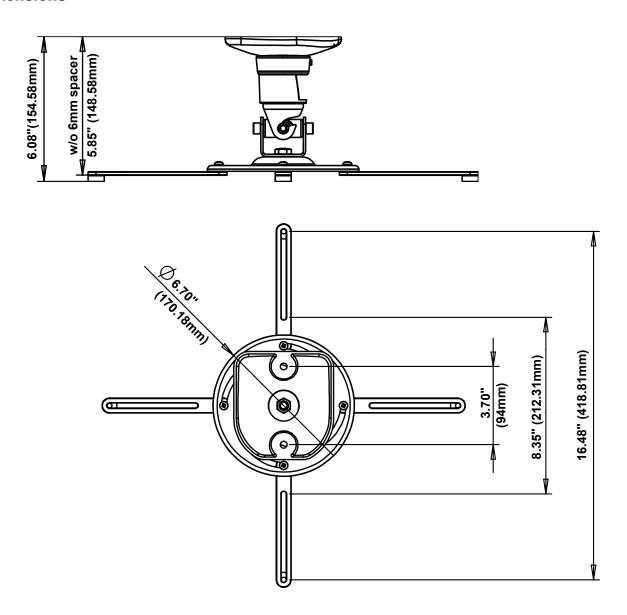
Compatibility

Maximum Projector Weight	30lbs.	
Minimum Mounting Pattern	2.36" x 2.36" (60mm x 60mm)	
Maximum Mounting Pattern	16.5" x 16.5" (419mm x 419mm)	
Maximum Offset- Projector to Arm	.23" (6mm)	

Adjustments

Maximum Tilt	+/- 35° from Horizontal	
Horizontal Rotation	360°	
Offset From Projector	0, .23" (includes 1 optional spacer per screw)	

9. Dimensions



10. Warranty



Lifetime Limited Warranty

Strong™ Mounts have a Lifetime Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization number (RA).

11. Contacting Technical Support

Phone: (866) 838-5052

Email: Techsupport@snapav.com

