peerless-AV

Installation and Assembly Manual:

PRG Precision Gear Projector Mount

Models: PRG-1, PRG-1S, PRG-1W

c (UL) US LISTED

Max UL Load Capacity: 50 lb (22.68 kg)
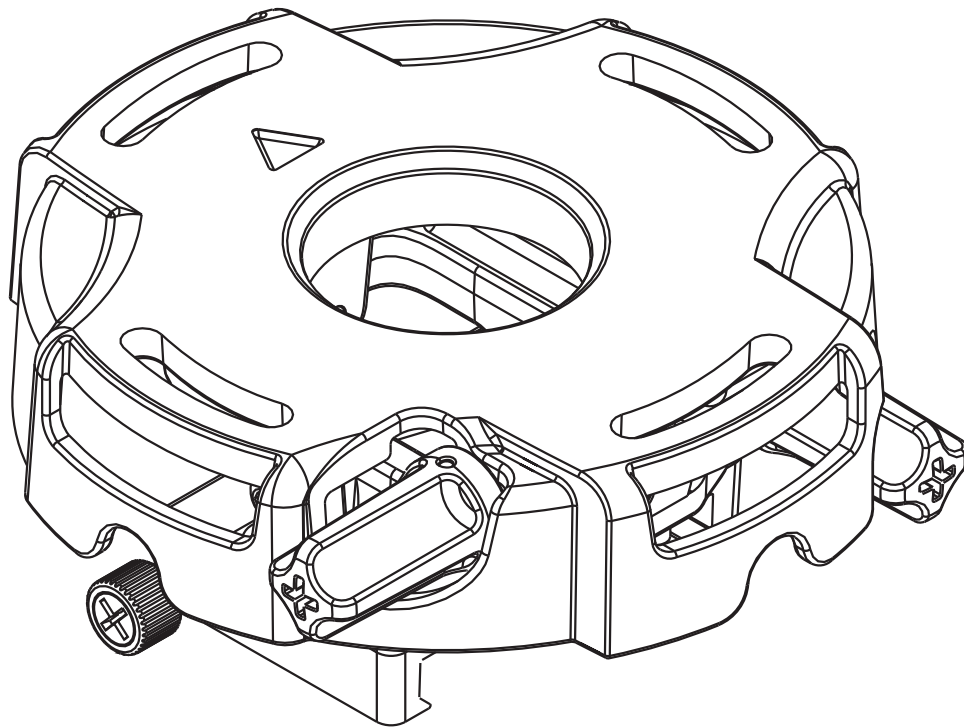
Features:

- ImageLock™ alignment prevents picture sag or drift
- Exclusive aluminum track quick release

NOTE: Read entire instruction sheet before you start installation and assembly.

⚠ WARNING

- Do not begin to install your Peerless product until you have read and understood the instructions and warnings contained in this Installation Sheet. If you have any questions regarding any of the instructions or warnings, please call Peerless customer care at 1-800-865-2112.

- This product should only be installed by someone of good mechanical aptitude, has experience with basic building construction, and fully understands these instructions.

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

- Never exceed the Maximum UL Load Capacity. See page 1.

- If mounting to wood joist ceilings, make sure that mounting screws are anchored into the center of the joist. Use of an "edge to edge" stud finder is highly recommended.

- Always use an assistant or mechanical lifting equipment to safely lift and position equipment.

- Tighten screws firmly, but do not overtighten. Overtightening can damage the items, greatly reducing their holding power.

- This product is intended for indoor use only. Use of this product outdoors could lead to product failure and personal injury.

- This product was designed and intended to be mounted to the following supporting surfaces checked below with the hardware included in this product as specified in the installation sheet. To mount this product to an alternative supporting surface, contact Peerless customer care at 1-800-865-2112.

- This product was designed to be installed on the following ceiling construction only;

CEILING CONSTRUCTION	ADDITIONAL HARDWARE REQUIRED
☒ Wood Stud	None
☒ Wood Joist	None
☒ Solid Concrete	None
☐ Brick	Contact Customer Service (Not Evaluated by UL)
☐ Other or unsure?	Contact Customer Service (Not Evaluated by UL)

Tools Needed for Assembly

- stud finder ("edge to edge" stud finder is recommended)
- phillips screwdriver
- drill
- 5/16" drill bit for concrete surface
- 5/32" drill bit for wood joists
- open end wrench
- level

Table of Contents

Before you start check the parts list to insure all of the parts shown are included.

Parts List

	Description	Qty.	PRG-1 Part #	PRG-1S Part #	PRG-1W Part #
A	projector mount assembly	1	054-1171	054-4171	054-2171
B	4 mm security allen wrench	1	560-9646	560-9646	560-9646
C	#10-32 x 3/8" serrated washer head socket pin screw	2	520-1151	520-2151	520-2151
D	#10-32 x 1/4" socket pin screw	1	520-1196	520-2196	520-2196
E	flat washer	2	540-1078	540-1078	540-1078
F	#14 x 2-1/2 phillips hex head wood screw	2	5S1-015-C03	5S1-015-C04	5S1-015-C04
G	concrete anchor	2	590-0320	590-0320	590-0320
H	2 mm security allen wrench	1	560-1097	560-1097	560-1097
I	connection block	1	580-1065	580-4065	580-4065

NOTE: Actual parts may appear slightly different than illustrated.
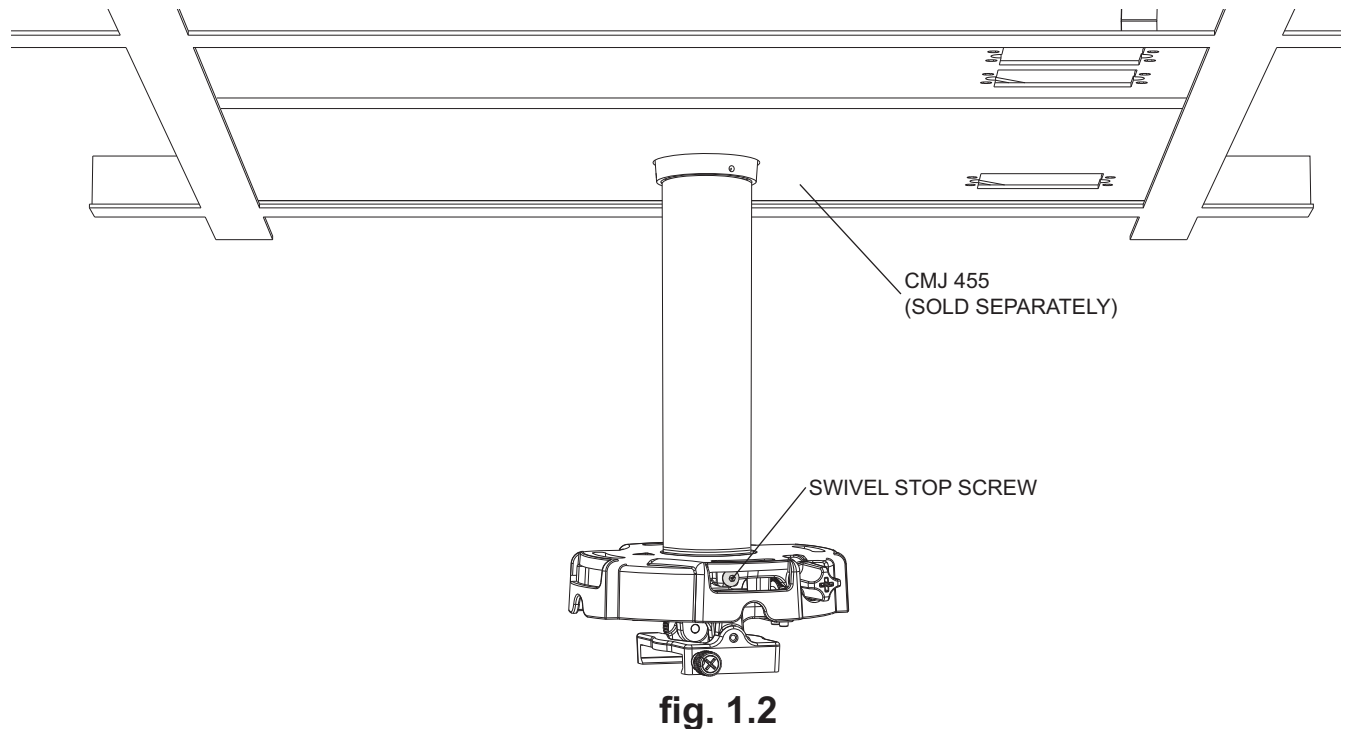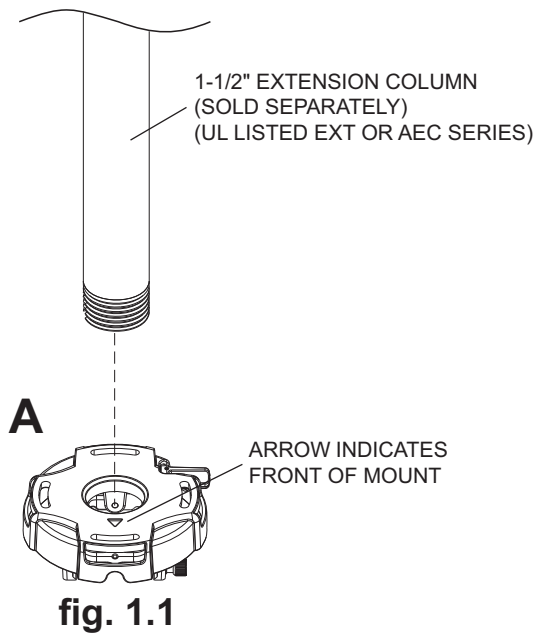
A

I

B

C

D

E

F

G

H
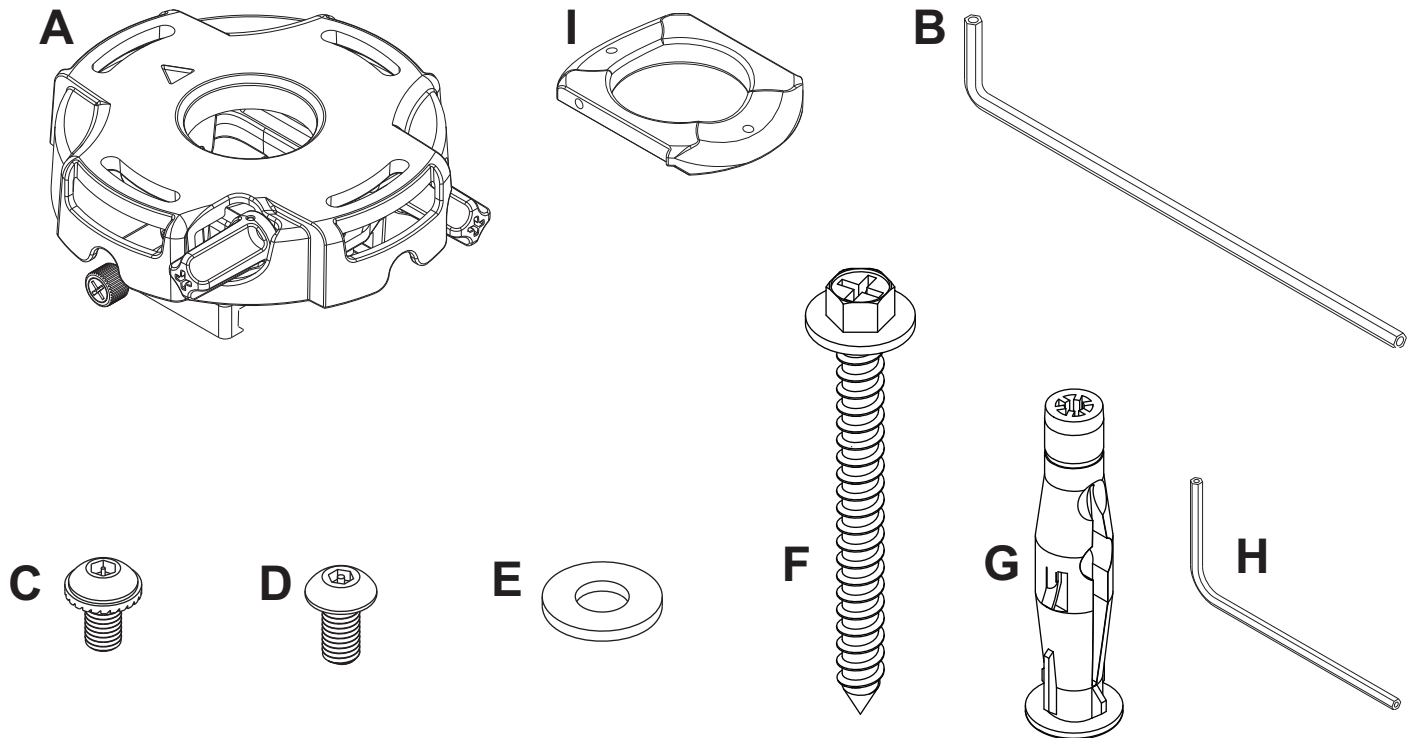
Installation to Extension Column / Ceiling Plate

1

NOTE: Refer to accompanying instructions with ceiling plates (sold separately) for installing these models to ceiling.

Screw projector mount assembly (**A**) onto extension column as shown in figure 1.1. Tighten swivel stop screw against extension column, flush mount tube or reducer using 4mm security allen wrench (**B**) as shown in figure 1.2.

NOTE: Swivel stop screw is used to jam against threads of extension column, flush mount tube or reducer to prevent any excess movement of projector mount assembly (**A**). Do not overtighten screw; overtightening screw will damage threads making it difficult to separate products.

Skip to step 5.

1-1/2" EXTENSION COLUMN
(SOLD SEPARATELY)
(UL LISTED EXT OR AEC SERIES)

A

ARROW INDICATES
FRONT OF MOUNT

fig. 1.1

CMJ 455
(SOLD SEPARATELY)

SWIVEL STOP SCREW

fig. 1.2

Installation To Wood Joist Ceilings
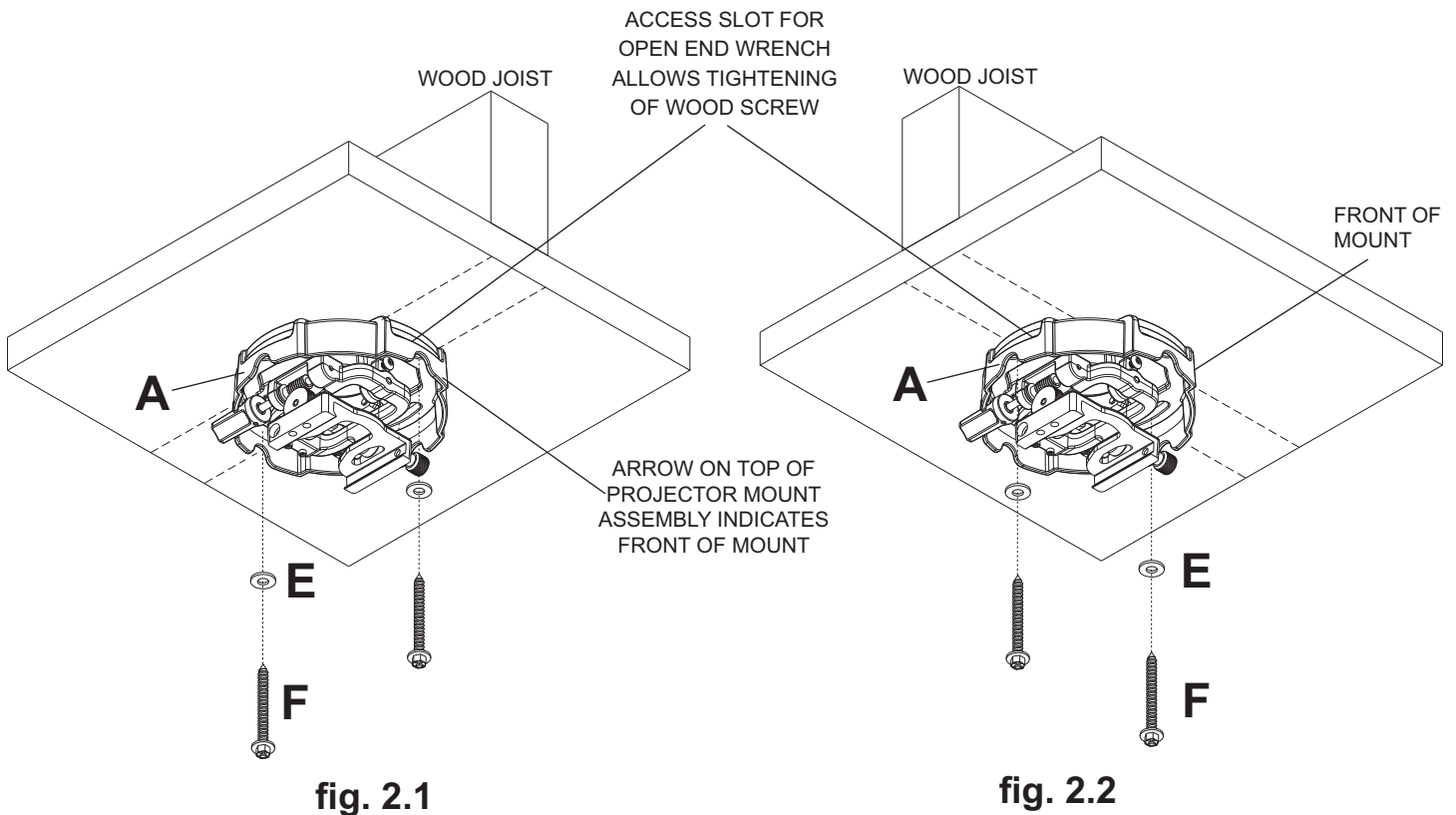

⚠ WARNING

- Installer must verify that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.
- Tighten wood screws so that projector mount assembly is firmly attached, but do not overtighten. Overtightening can damage the screws, greatly reducing their holding power.
- Never tighten in excess of 80 in. • lb (9 N.M.).
- Make sure that mounting screws are anchored into the center of the stud. The use of an "edge to edge" stud finder is highly recommended.
- Hardware provided is for attachment of mount through standard thickness drywall or plaster into wood studs. Installers are responsible to provide hardware for other types of mounting situations (Not Evaluated by UL).

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2 Place projector mount assembly (**A**) on ceiling as a template and mark the center of the two mounting holes. Make sure that the mounting holes are in the center of the wood joist. Drill two 5/32" (4mm) dia. holes to a minimum depth of 2-1/2" (64mm). Attach projector mount assembly (**A**) with two #14 x 2-1/2" (6mm x 65mm) wood screws (**F**) and two flat washers (**E**) as shown in figure 2.1 or figure 2.2 depending on joist orientation.

NOTE: Mounting slots on projector mount assembly allow for 30° (±15°) of swivel adjustment before fully securing wood screws.

Tighten wood screws (**F**) using 3/8" (10mm) socket wrench, phillips screwdriver or 10mm open end wrench until projector mount assembly (**A**) is firmly attached.

Skip to step 5.

ACCESS SLOT FOR OPEN END WRENCH ALLOWS TIGHTENING OF WOOD SCREW

WOOD JOIST

WOOD JOIST

FRONT OF MOUNT

ARROW ON TOP OF PROJECTOR MOUNT ASSEMBLY INDICATES FRONT OF MOUNT

fig. 2.1

fig. 2.2

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For customer care call 1-800-865-2112

Installation to Concrete Ceilings

⚠ WARNING

- Concrete must be 2000 psi density minimum. Lighter density concrete may not hold concrete anchor.
- Make sure that the supporting surface will safely support the combined load of the equipment and all attached hardware and components.

3 Place projector mount assembly (**A**) on ceiling as a template and mark the center of the two mounting holes. Drill two 5/16" (8mm) dia. holes to a minimum depth of 2-1/2" (64mm). Attach projector mount assembly (**A**) using two concrete anchors (**G**), two flat washers (**E**), and two #14 x 2-1/2" wood screws (**F**) as shown in **Illustration A** and **1**, **2** and **3**).

NOTE: Mounting slots on projector mount assembly allow for 30° (±15°) of swivel adjustment before fully securing wood screws.

Tighten wood screws (**F**) using 3/8" (10mm) socket or open end wrench or phillips screwdriver until projector mount assembly (**A**) is firmly attached.
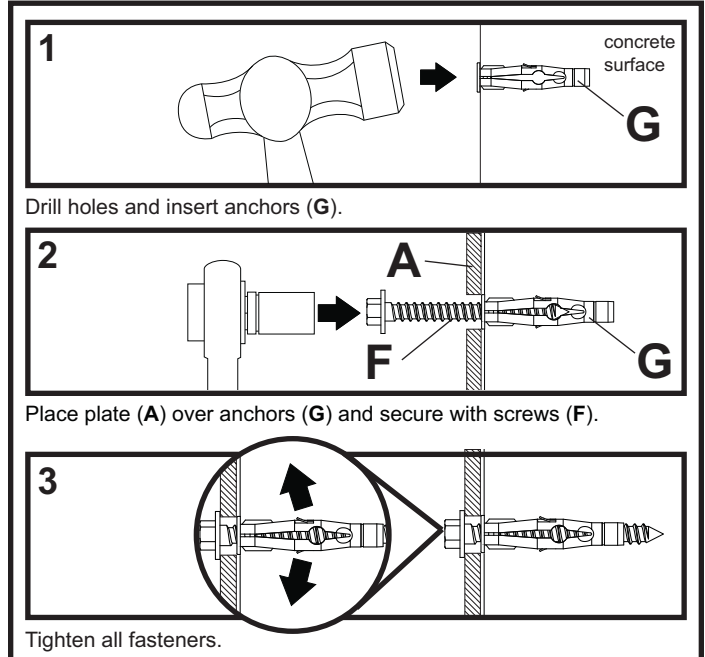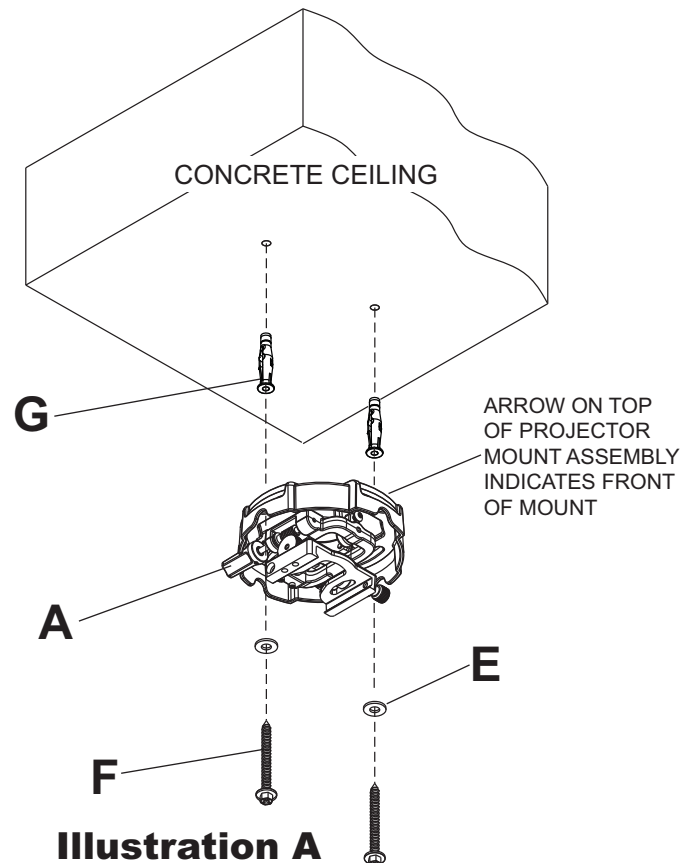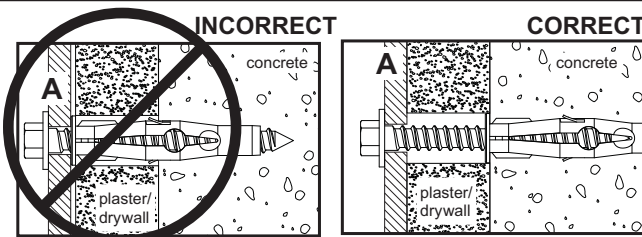
⚠ WARNING

- Tighten wood screws firmly, but do not overtighten. Overtightening can damage the screws, greatly reducing their holding power.
- Never tighten in excess of 80 in • lb (9 N.M.).

⚠ WARNING

- Always attach concrete anchors <u>directly</u> to load-bearing concrete.
- Never attach concrete anchors to concrete covered with plaster, drywall, or other finishing material. If mounting to concrete surfaces covered with a finishing surface is unavoidable (not evaluated by UL), the finishing surface must be counterbored as shown below. Be sure concrete anchors do not pull away from concrete when tightening screws. If plaster/drywall is thicker than 5/8", custom fasteners must be supplied by installer (not evaluated by UL).
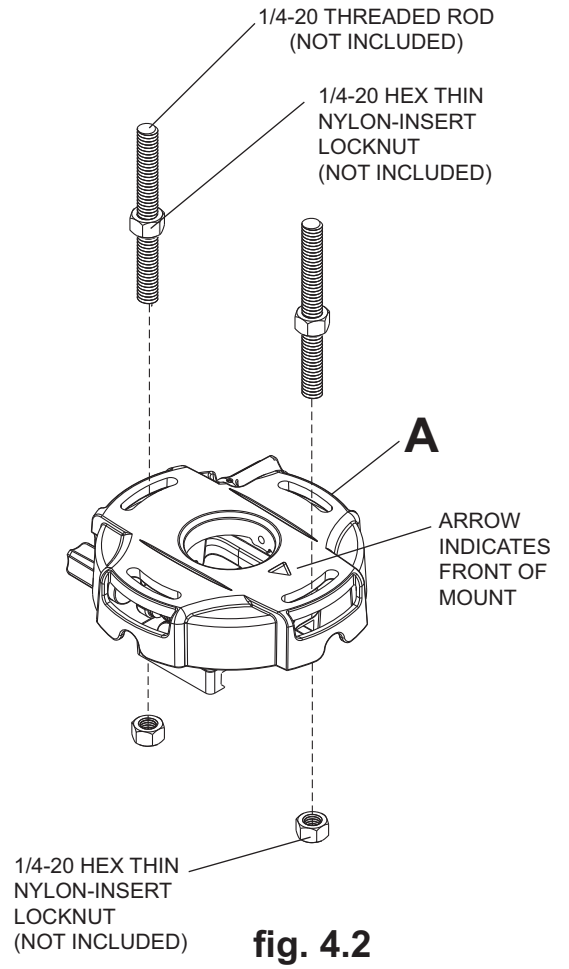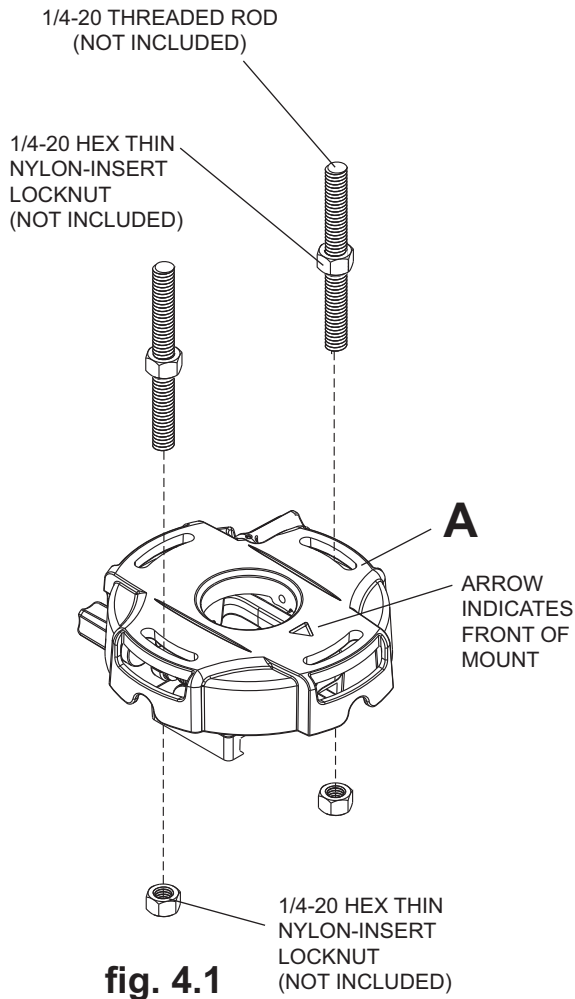
1

concrete surface

G

Drill holes and insert anchors (**G**).

2

A

F   **G**

Place plate (**A**) over anchors (**G**) and secure with screws (**F**).

3

Tighten all fasteners.

CONCRETE CEILING

G

ARROW ON TOP OF PROJECTOR MOUNT ASSEMBLY INDICATES FRONT OF MOUNT

A

E

F

Illustration A

CUTAWAY VIEW

INCORRECT

A   concrete

plaster/drywall

CORRECT

A   concrete

plaster/drywall

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Installation to Threaded Rod
(Not evaluated by UL - Professional installation only)

4 Thread two 1/4-20 hex thin nylon-insert locknuts (not included) on two 1/4-20 threaded rods (not included) to the desired height of projector mount assembly. Attach projector mount assembly (**A**) to the two 1/4-20 threaded rods using two 1/4-20 hex thin nylon-insert locknuts as shown in figure 4.1 or figure 4.2.

1/4-20 THREADED ROD
(NOT INCLUDED)

1/4-20 HEX THIN
NYLON-INSERT
LOCKNUT
(NOT INCLUDED)

A

ARROW
INDICATES
FRONT OF
MOUNT

1/4-20 HEX THIN
NYLON-INSERT
LOCKNUT
(NOT INCLUDED)

fig. 4.1

1/4-20 THREADED ROD
(NOT INCLUDED)

1/4-20 HEX THIN
NYLON-INSERT
LOCKNUT
(NOT INCLUDED)

A

ARROW
INDICATES
FRONT OF
MOUNT

1/4-20 HEX THIN
NYLON-INSERT
LOCKNUT
(NOT INCLUDED)

fig. 4.2

Visit the Peerless Web Site at www.peerlessmounts.com

For customer care call 1-800-865-2112

Attaching Adapter Plate to Projector

CAUTION
• It is the responsibility of the installer to ensure that the projector is properly ventilated.

fig. 5.1

NOTCH INDICATES FRONT OF PROJECTOR

SHOULDER

I

DEDICATED ADAPTER PLATE (SOLD SEPARATELY)

C

5 **Installing Dedicated PAP Series Adapter Plate (sold separately)**

NOTE: The projector dedicated adapter plate you are installing may differ in appearance from the sample illustrated in figure 5.1.

Align shoulder of connection block (**I**) opposite notch of adapter plate. Attach dedicated adapter plate to connection block (**I**) using two #10-32 x 3/8" serrated washer head socket pin screws (**C**) as shown in figure 5.1.

NOTE: For PAP 35, PAP 40, and PAP 45 adapter plates, use two #10-32 x 3/4" screws provided with adapter plate in place of screws (**C**).

NOTE: Attach dedicated adapter plate to projector (see PAP instructions) before proceeding to step 6.
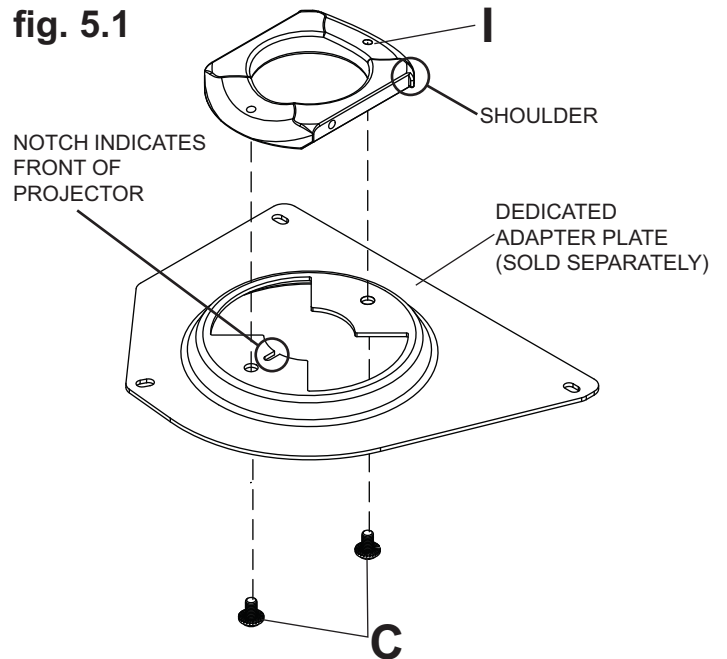
5 **Installing PAP-UNV Adapter Plate (sold separately)**

Align shoulder on connection block (**I**) opposite notch in adapter plate. Attach PAP-UNV adapter plate to connection block (**I**) using two #10-32 x 3/8" serrated washer head socket pin screws (**C**) as shown in figure 5.2.

NOTE: Attach PAP-UNV adapter plate to projector (see PAP-UNV instructions) before proceeding to step 6.

fig. 5.2

I

SHOULDER

NOTCH INDICATES FRONT OF PROJECTOR

PAP-UNV ADAPTER PLATE (SOLD SEPARATELY)

C

For customer care call 1-800-865-2112
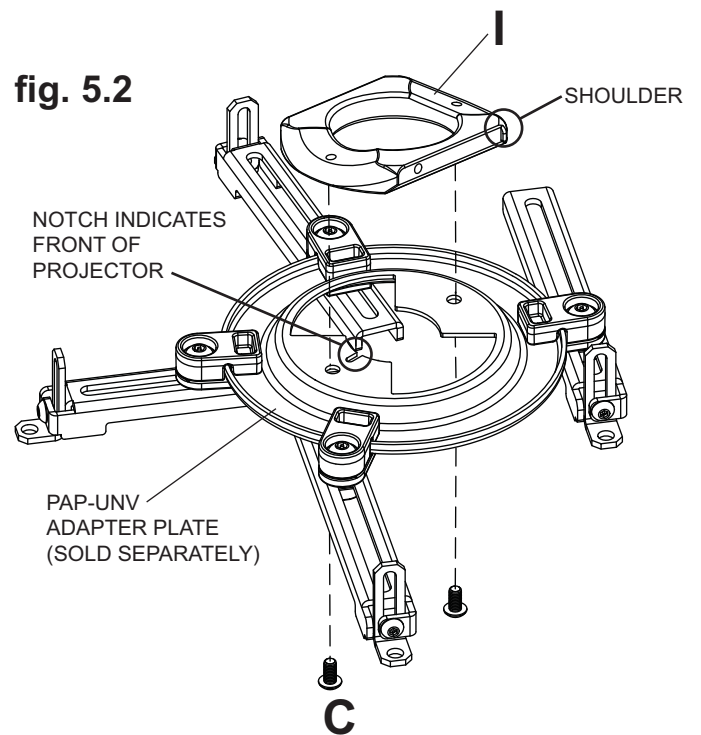
# Attaching Adapter Plate to Projector Mount

⚠ WARNING

- Do not lift more weight than you can handle. Use additional man power or mechanical lifting equipment to safely handle placement of the projector.

6 Slide connection block (**I**) with projector into projector mount assembly (**A**) as shown. Tighten captive screw to secure projector to projector mount assembly (**A**).

ARROW INDICATES
FRONT OF MOUNT

FRONT OF MOUNT

A

I

CAPTIVE SCREW
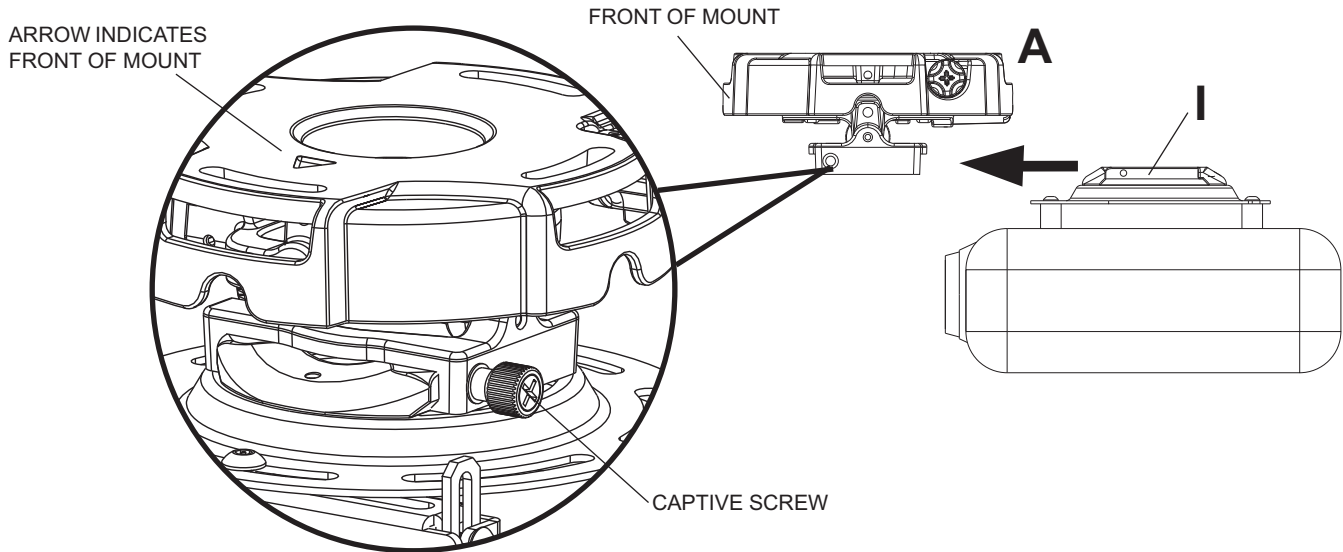
7 **IMPORTANT**: For security installations, insert one #10-32 x 1/4" socket pin screw (**D**) through projector mount assembly (**A**) and into connection block (**I**) as shown. Tighten screw using 4mm security allen wrench (**B**).

A

D

I

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For customer care call 1-800-865-2112
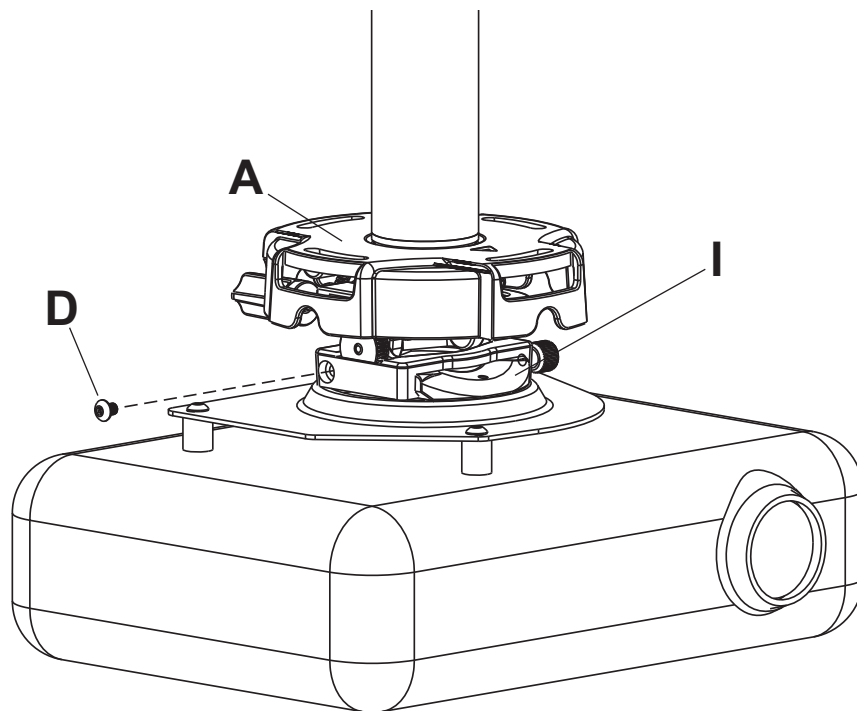
Cable Management

8 To make an opening to route cables through projector mount assembly, adjust projector mount assembly to full upward tilt position by turning knob for tilt adjustment as shown in figure 8.2. Left or right roll position can be adjusted if more space is required.

NOTE: Be certain tamper resistant screws are not engaged before making adjustments (see step 9).

Route cables through top of extension column as shown in figure 8.1 and figure 8.2.

NOTE: A method for assisting cables through extension column may be required (example: string tied to connector to help pull through extension column).

Route cables through projector mount assembly as shown in figure 8.2 and connect to projector.

fig. 8.1

CABLES WITH COMBINATION OF VGA CONNECTOR AND RCA PLUGS

BEND WIRES OF RCA PLUGS IN OPPOSITE DIRECTION

ROUTE CONNECTOR THROUGH FIRST

DO NOT CRIMP WIRES

NOTE: INNER DIAMETER OF EXTENSION COLUMN MAY NOT ALLOW PASSAGE FOR ALL CONNECTOR TYPES.

CABLE CONNECTOR

INNER DIAMETER OF EXTENSION COLUMN

fig. 8.2

EXTENSION COLUMN

KNOB FOR ROLL ADJUSTMENT

OPENING FOR ROUTING CABLES

KNOB FOR TILT ADJUSTMENT

Projector Alignment

9 **To adjust yaw (swivel) for threaded rod mounting applications**: Loosen locknuts on threaded rods (step 4), until projector mount can be rotated. Rotate mount to desired position and retighten locknuts.

To adjust yaw (swivel) for extension column applications: Loosen screw on projector mount assembly (**A**) indicated below until projector mount can be rotated. Rotate mount to desired position and retighten screw.

To adjust pitch (forward and backward tilt): Turn knob on back of mount as shown below. Pull knob out and turn by hand for easy adjustment or insert #2 phillips screwdriver in end of knob and turn.

To adjust roll (side to side tilt): Turn knob on side of mount as shown below. Pull knob out and turn by hand for easy adjustment or insert #2 phillips screwdriver in end of knob and turn.

ARROW INDICATES
FRONT OF MOUNT

A

KNOB FOR PITCH
ADJUSTMENT

ACCESS SLOT FOR
OPEN END WRENCH
ALLOWS TIGHTENING
OF LOCKNUTS
WITHOUT REMOVING
PROJECTOR

BACK OF MOUNT

SCREW FOR YAW (SWIVEL) STOP
(REFER TO STEP 1, INSTALLATION
TO EXTENSION COLUMNS, FIG. 1.1)

KNOB FOR ROLL
ADJUSTMENT
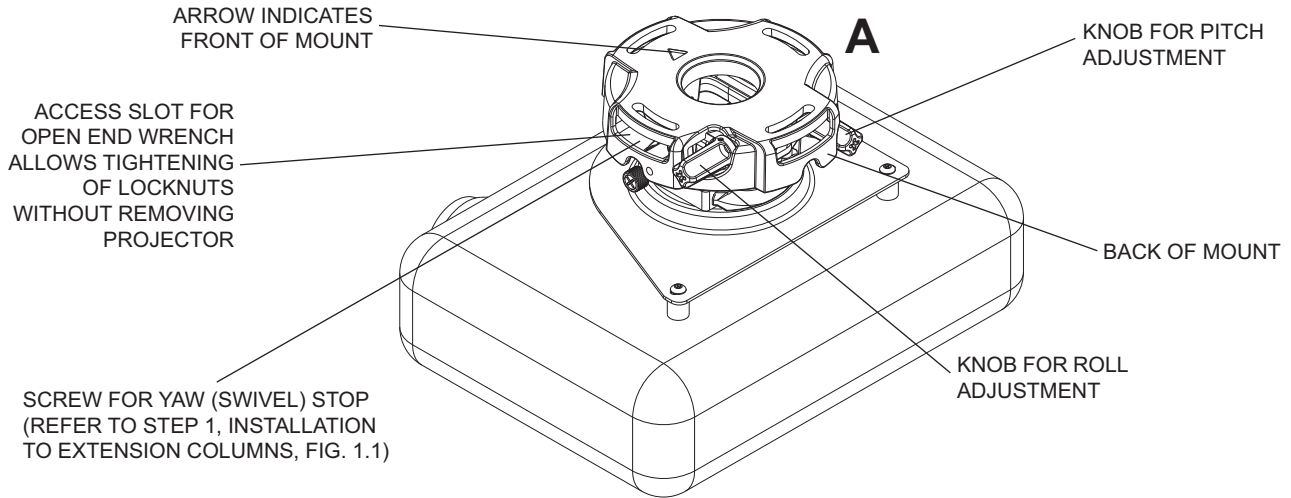
9-1 **To prevent tampering with the pitch and roll adjustments**: Tighten the two tamper resistant security screws on the projector mount assembly using 4mm security allen wrench (**B**) to lock the pitch and roll adjustments as shown below.

NOTE: Tighten screws firmly, but do not overtighten. Overtightening can damage the mount.

| CAUTION |
|---|
| • Do not adjust pitch or roll while tamper resistant security screws are fully engaged. |
| • Loosen the two tamper resistant security screws one complete turn before adjusting the projector mount assembly or damage may occur. |

TO LOCK ROLL,
TIGHTEN
TAMPER
RESISTANT
SECURITY SCREW

TO LOCK PITCH,
TIGHTEN
TAMPER RESISTANT
SECURITY SCREW
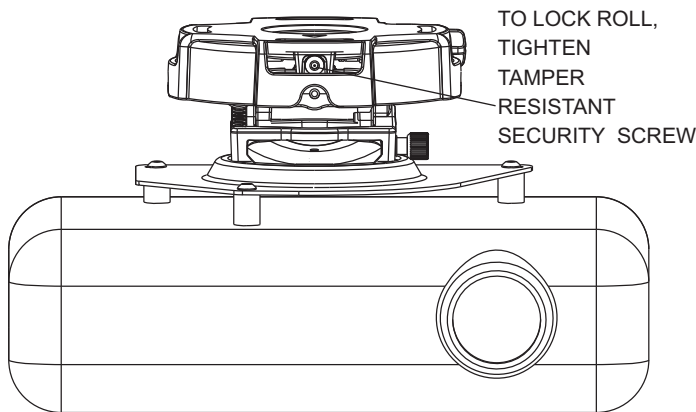
FRONT VIEW

SIDE VIEW

For customer care call 1-800-865-2112
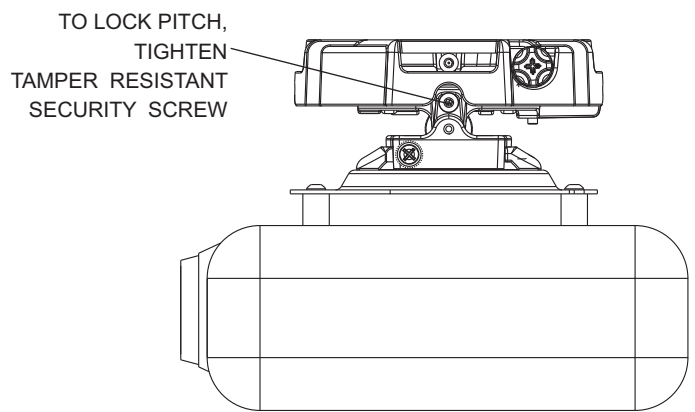
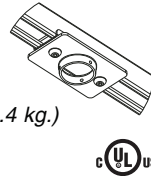# PRG Series Projector Mount Accessories

Truss Ceiling Adapter

MODEL: ACC 557*

MAX LOAD: 250 lbs. (113.4 kg.)
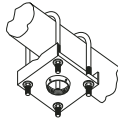
COLOR: Black

- Attaches to a square, round, rectangular, or I-Beam truss up to 3" in diameter
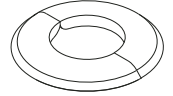
Unistrut® Adapter

MODEL: ACC 550

MAX LOAD: 250 lbs. (113.4 kg.)

COLOR: Black

- Designed for use with 1 5/8" x 1 5/8" 12 gauge Unistrut
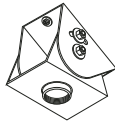
Escutcheon Ring

MODEL: ACC 640

- Covers hole where extension column passes through ceiling
- Hinged ring wraps around extension column
- Included with CMJ 500

New!

Lightweight Cathedral Ceiling Plate

MODEL: ACC 912*

MAX LOAD: 60 lbs. (27.2 kg.)

COLOR: Black

- Designed specifically for projectors
- Allows a projector to be mounted on an angled ceiling

New!

Lightweight Adjustable Suspended Ceiling Kit

MODEL: CMJ 500

MAX LOAD: 60 lbs. (27.2 kg.)

COLOR: White
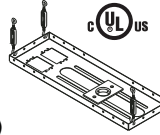
- Mounts above 2' x 4' or 2' x 2' false ceiling tile
- Includes tie wire supports, flush mount tube, and offers two knockout panels for outlet boxes
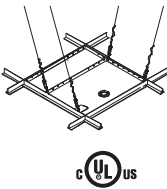- Offers unlimited adjustment for projector placement

Round Ceiling Plate

MODEL: ACC570(S)(W)

COLOR: Black, silver or white

MAX LOAD: 150 lb (68 kg)

SHIP WEIGHT: 1.7 lb (.8 kg)
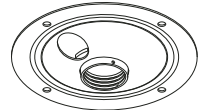
- Designed for finished or structural ceilings (wood or concrete)
- Features a cord management

Lightweight Suspended Ceiling Kit

MODEL: CMJ 455

MAX LOAD: 50 lbs. (22.7 kg.)

COLOR: White

- Five different projector mount attachment points
- Includes tie wire supports, flush mount tube, and offers two knockout panels for outlet boxes
- May either **replace** a 2' x 2' false ceiling tile or mount **above** an existing 2' x 2' or 2' x 4' ceiling tile

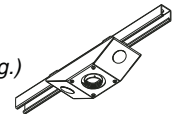### Unistrut or Structural Ceiling Plates

MODELS: CMJ 300*, CMJ 310*

MAX LOAD: 250 lbs. (113.4 kg.)

COLOR: Black

Unistrut
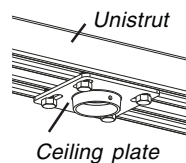
Ceiling plate

- CMJ 300 is a 4" x 4" ceiling plate
- CMJ 310 is a 8" x 8" ceiling plate
- Designed for a Unistrut ceiling (1 5/8" x 1 5/8" 12 gauge Unistrut) or a solid structural ceiling (mounting hardware not included)

Anti-Vibration Ceiling Plates

MODELS: ACC 840*, ACC 845*

MAX LOAD: 60 lbs. (27.2 kg.)

COLOR: Black

- ACC 840 was designed for a structural ceiling (wood only)
- ACC 845 was designed for a Unistrut ceiling (1 5/8" x 1 5/8" 12 gauge Unistrut)
- Reduces unwanted vibrations that may cause internal damage to the equipment and/or cause the screen image to vibrate
- Features two cord management access holes
- Patent pending

I-Beam Clamps

MODELS: ACC 558, ACC 559

MAX LOAD: 250 lbs. (113.4 kg.)

COLOR: Black
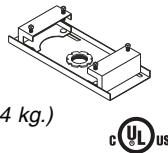
- ACC 558 clamps onto 4"-8" I-Beam
- ACC 559 clamps onto 7"-12" I-Beam

Accessory Pack for CMJ 455

MODEL: ACC 455*

This pack includes 4 hanger brackets and 4 hanger clamps for additional stability. For use with model CMJ 455.

* = Not UL Listed

PRG Series Projector Mount Accessories

Cord Wrap

**MODELS:** ACC 852(W)(S)*

COLOR: Black, White, or Silver

- Includes, four, 2' sections
- Designed to externally route cords along the outside of an 1/2" extension column
- Sections can be stacked to create longer lengths or cut to desired length

Extension Columns

Fixed Length 1 1/2" Extension Columns

COLOR: Black

MODEL	Drop Length	Ship Weight
EXT 006	8" (20 cm)	2.5 lbs (1.13 kg)
EXT 018	20" (51 cm)	5 lbs (2.27 kg)
EXT 101	14" (36 cm)	3.5 lbs (1.59 kg)
EXT 102	26" (66 cm)	6 lbs (2.72 kg)
EXT 103	38" (97 cm)	9.25 lbs (4.2 kg)
EXT 104	50" (127cm)	12 lbs (5.44 kg)
EXT 105	62" (158 cm)	14.75 lbs (6.69 kg)
EXT 106	74" (188 cm)	18 lbs (8.16 kg)
EXT 107	86" (219 cm)	20.75 lbs (9.41 kg)
EXT 108	98" (249 cm)	23.25 lbs (10.55 kg)
EXT 109	110" (279 cm)	26.5 lbs (12.02 kg)
EXT 110	122" (310 cm)	29 lbs (13.15 kg)
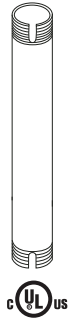
Adjustable Length 1 1/2" Extension Columns

COLOR: Black

| MODEL	Drop Length	Ship Weight
ADJ 006009	8"-11"	4 lbs. (1.81 kg)
ADJ 012018	14"-20"	4.75 lbs. (2.15 kg)
ADJ 018024	20"-26"	6.25 lbs. (2.83 kg)
ADJ 0203	26"-38"	8 lbs. (3.63 kg)
ADJ 0305	38"-62"	13.5 lbs. (6.12 kg)
ADJ 0406	50"-74"	16.25 lbs. (7.37 kg)
ADJ 0507	62"-86"	18.5 lbs. (8.39 kg)
ADJ 0608	74"-98"	21.75 lbs. (9.87 kg)
ADJ 0709	86"-110"	24.5 lbs. (11.11 kg)
ADJ 0810	98"-122"	27 lbs. (12.25 kg)
ADJ 0911	110"-134"	29 lbs. (13.15 kg)
ADJ 1012	122"-146"	31 lbs. (14.06 kg)
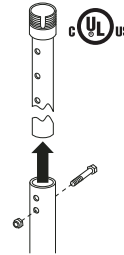
Security Accessories
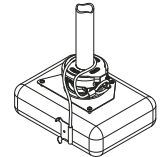
Armor Lock™ Plus Security Cables

MODEL: ACC 020*

- With security lock
- For use with projectors that have a built-in security slot
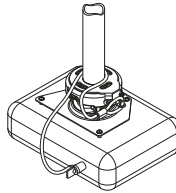
MODEL: ACC 021*

- With 1/4" security cable and fasteners
- Includes adhesive for non-fastener applications

Additional Projector Mount Accessories

Extension Column Stabilizer Kit

MODEL: ACC 050*

COLOR: Black

- Can be used to reduce unwanted swaying that may occur with extension column installations
- Includes a hose clamp, two stabilizer column supports, & hardware for mounting to wood joists
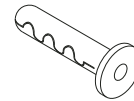- For use with extension columns over 21"
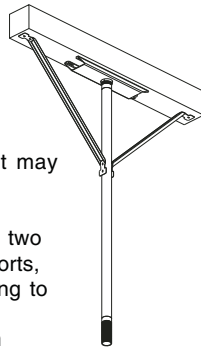
ALLIGATOR®

Concrete Anchors

MODELS: ACC 203, 204

- ACC 203 contains 3 anchors
- ACC 204 contains 4 anchors
- Used for attachment to concrete, concrete block, or brick
- Used in conjunction with wood screws (supplied with projector mount and/or ceiling plate)
- Expands in length and binds to the contours of the hole and the screw

Extension Column Connector with Cord Management

MODEL: ACC800, ACC850(S)

**COLOR:** ACC800 Black
ACC850 Black or Silver

- 1-1/2" access hole for internal cord management
- Unit has 1-1/2"-11.5 NPT fitting for attachment of extension column
- Security screws included
- ACC800: One male and one female connection to provide internal cord management between extension column and mount or ceiling plate
- ACC850: Two female connectors to join two extension columns to create maximum length of 20'

Side-To-Side Adjuster

MODEL: ACC 830*

COLOR: Black

- Provides 4" of radial adjustment side to side
- Includes Flush Mount Tube, EXT 002

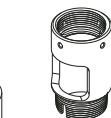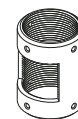Extension column

Side to side adjuster
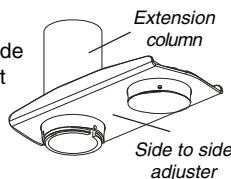
Extension Column Connector

MODEL: ACC 109*

COLOR: Black

- Can be used to join two 1-1/2" extension columns to create a maximum length of 20'
- Secures to columns with Armor Lock™ Security screws

ACC800

ACC850

* = Not UL Listed

ISSUED: 08-15-07 SHEET #: 055-9491-8 07-15-11

For customer care call 1-800-865-2112