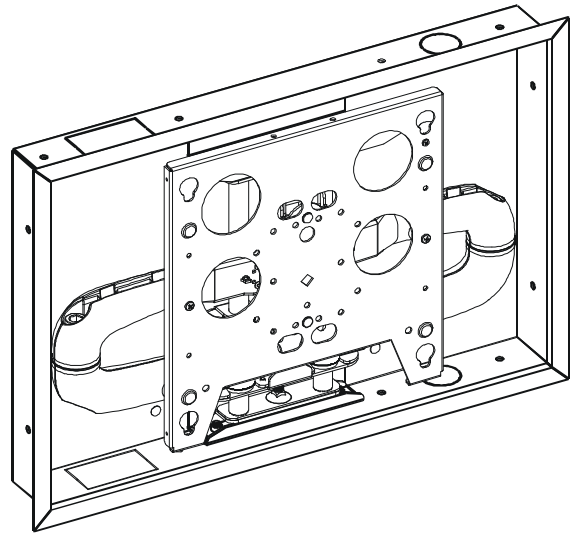

INSTALLATION INSTRUCTIONS

LARGE FLAT PANEL IN WALL ENCLOSURE

Model: PAC-500

Specifications:

- Designed for in-wall installation spanning a minimum of 3 wood studs, 16" on center.
- Accommodates MWR, PWR and PNR swing arm mounts.
- Cutouts provided for single gang electrical box and grommet hole for audio/video cables.
- Weight capacity of 200 lbs (90 kg).



NOTE: Shown with PNR mount installed; MWR/PWR mount similar (mount not included).

BEFORE YOU BEGIN



WARNING: It is the installer's responsibility to make sure all components are properly assembled and installed using the instructions provided. Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty.

- If you have any questions about these instructions or your specific installation, contact Chief Manufacturing at 1-800-582-6480 or 952-894-6280.



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06/07

! IMPORTANT WARNINGS AND CAUTIONS!

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: It is the installer’s responsibility to make sure the structure to which this unit is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the unit. Failure to provide adequate structural strength for this unit can result in serious personal injury or damage to equipment!



WARNING: It is the installer’s responsibility to make sure the combined weight of the display, accessories, and any other attached equipment must not exceed 200 lbs (90 kg), the maximum support weight of this unit. Exceeding the maximum support weight can result in serious personal injury or damage to equipment!

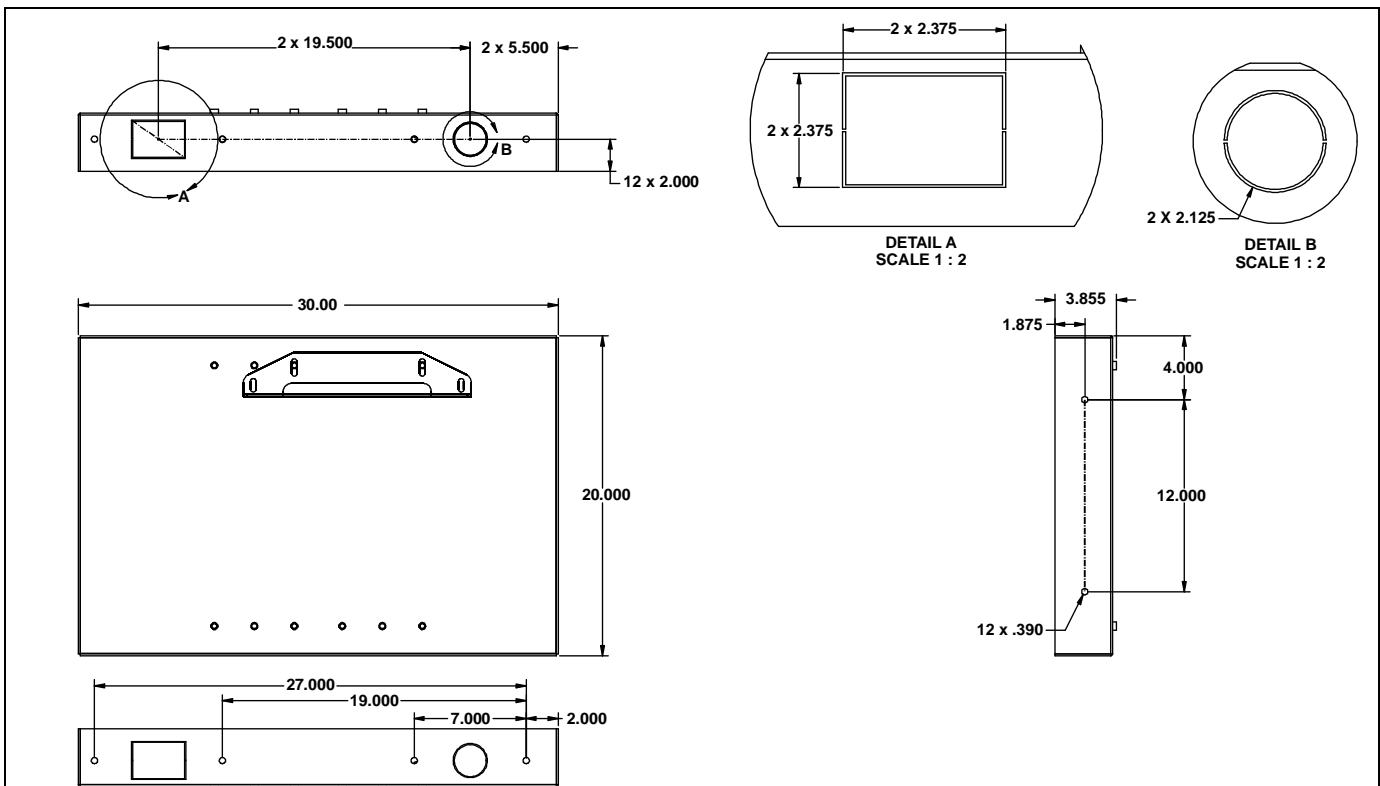


WARNING: Make sure the latch securing the display is fully closed at all times except when removing or installing the display. The latch must be fully closed when installing or removing cables from the display.



WARNING: Watch for pinch points. Do not put your fingers between movable parts.

DIMENSIONS



TOOLS REQUIRED FOR INSTALLATION

- Stud Sensor
- Level
- Saw
- Tape Measure
- Screwdriver (for wood screws)
- 9/16" Wrench
- 3/16" Hex Key (provided)
- 4mm Hex Key (provided)
- 4mm Hex Bit (provided)

NOTE: Other tools may be required depending on your method of installation.

PARTS

After unpacking carton, inspect and verify contents (See Figure 1). If any listed parts are missing or damaged, contact Chief Customer Service at 1-800-582-6480.

Table 1: Parts

Item	Description	Qty
10	HOUSING, In-Wall	1
20	BRACKET, Upper	1
30	BRACKET, Lower (MWR/PWR only)	1
40	BRACKET, Lower (PNR only)	1
50	MOULDING, Vertical	2
60	MOULDING, Horizontal	2
70	SCREW, Button Head Cap, 5/16"-18 x 3/4"	4
80	SCREW, Button Head Cap, 3/8"-16 x 5/8"	4
90	SCREW, Flat Head Cap, 3/8"-16 x 3/4"	2
100	BOLT, Connector, 7mm x 40mm	12
110	WASHER, Flat Machine Screw, 1/4"	4
120	WASHER, Lock, Split, 5/16"	4
130	WASHER, Lock, Split, 3/8"	4
140	PAD, Felt, 1/8" thick	2
150	TAPE, Foam, Square	18
160	COVER, White, 9/16" diameter	4
170	KEY, Hex, 3/16" (slightly larger than 180 below)	1
180	KEY, Hex, 4mm	1
190	BIT, Hex, 4mm	1
200	SHIM, Engineered Wood (package; not shown)	1
201	KEY, Hex, 7/32"	1
	SUPPORT BLOCKS, wood 2x4, 8" long (required, not supplied)	8
	HORIZONTAL FRAMING, wood 2x4, 14-1/2" long; exact length dependent upon specific installation (required, not supplied)	4
	SCREW, Wood, #10 x 2-1/2" (required, not supplied)	40
	ELECTRICAL BOX (optional, not supplied)	1
	GROMMET (optional, not supplied)	1

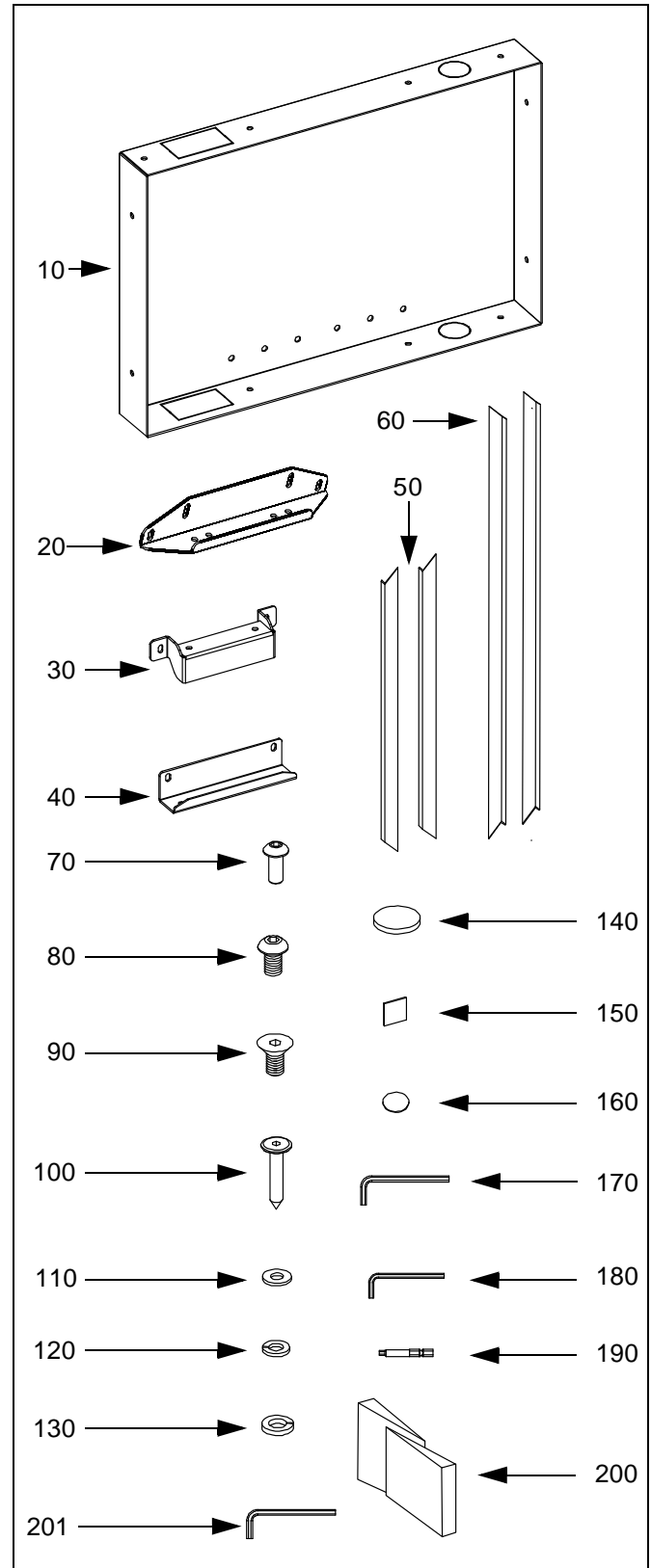


Figure 1: Parts

INSTALLATION AND ASSEMBLY

The following instructions are applicable to:

- Three 2x4 studs, 16" on center; other installations are possible with increased framing complexity.
- MWR/PWR (single swing arm) and PNR (double swing arm) mounts.

OPEN WALL

1. Determine approximate mounting location, keeping in mind the display size.

! IMPORTANT: Installation of housing (10) in 2x4 wall results in nearly direct contact with vertical studs and opposite (back) wall. Inadequate space will remain for electrical wires/cables, plumbing, ductwork, or insulation. Locate housing (10) accordingly.

2. Use a stud sensor to locate applicable wood studs. Mark locations with a pencil.
3. Center and level housing (10) between marked studs. Using housing (10) as a template, draw pencil line completely around housing (10) (See Figure 2).

NOTE: A 1/4" gap between sides of housing (10) and adjacent studs is typical.

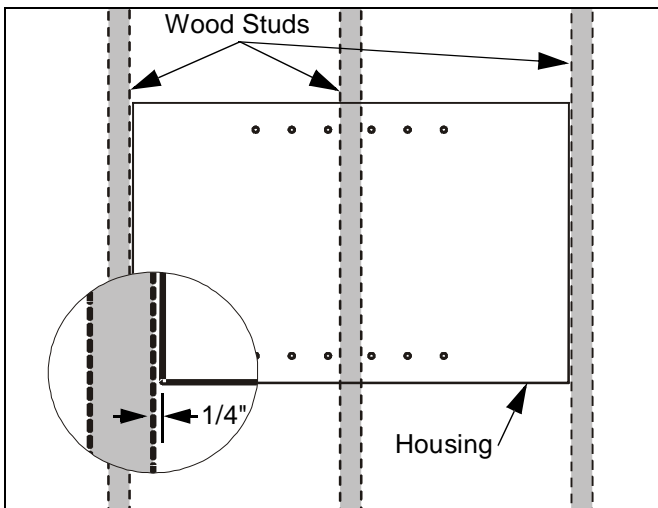


Figure 2: Open Wall

! WARNING: ELECTRICAL SHOCK HAZARD! Cutting or drilling into electrical wires and cables can cause DEATH or SERIOUS PERSONAL INJURY! ALWAYS make certain area behind mounting surfaces is free of electrical wires and cables before cutting, drilling, or installing mount fasteners.

! WARNING: EXPLOSION AND FIRE HAZARD! Cutting or drilling into gas plumbing can cause DEATH or SERIOUS PERSONAL INJURY! ALWAYS make certain area behind mounting surfaces is free of gas,

water, waste, or any other plumbing before cutting, drilling, or installing mount fasteners.

4. Cut drywall on *outside* edge of line (to facilitate installation of housing (10)) and remove.

FRAME HOUSING

The exposed portion of the center wood stud must be removed and the resulting cavity completely framed with wood. The following steps are suggested; the actual procedure is dependent upon the specific installation.

! WARNING: STRUCTURAL FAILURE HAZARD! Ensure removal of center stud will not cause unacceptable loss of structural strength. Consult a qualified building contractor and applicable building codes. Failure to take adequate precautions can cause DEATH or SERIOUS PERSONAL INJURY!

1. Remove exposed portion of center wood stud flush with upper and lower drywall edges (See Figure 3).

NOTE: Stud may be attached to the opposite (back) wall.

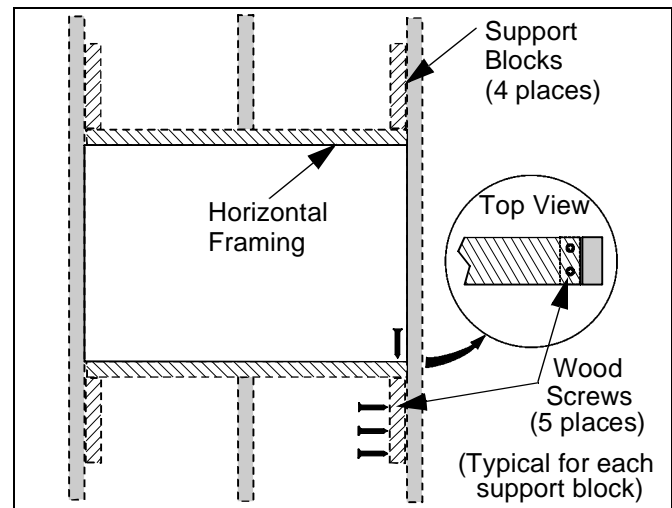


Figure 3: Frame Housing

2. Cut 4 support blocks out of 2x4 wood, each approximately 8" long.
3. Attach each support block to the corresponding stud with three #10 x 2-1/2" countersunk wood screws. Ensure that screws are far enough from end of block to prevent interference with framing screws installed in next step (See Figure 3).

NOTE: Use of wood screws (not included) instead of nails is less likely to cause damage to surrounding drywall or paint.

4. If necessary, cut rectangular hole in horizontal framing to accommodate electrical box. Do NOT eliminate bolts (100) to accommodate electrical installation. All 12 bolts (100) must be used to secure housing (10) to wall structure.

- Attach horizontal framing to each support block with two #10 x 2-1/2" countersunk wood screws (See Figure 3).

INSTALL HOUSING

⚠ WARNING: ELECTRICAL SHOCK AND FIRE HAZARD! Consult a qualified electrical contractor and applicable electrical codes. Failure to take adequate precautions can cause DEATH or SERIOUS PERSONAL INJURY!

- If applicable:
 - Attach electrical box to housing (10) and connect electrical wiring.

NOTE: The cutout in housing is sized to accommodate a standard RACO Single Gang junction box.

- Route audio/visual cables through grommet (not supplied) into housing (10).

NOTE: Housing (10) can be rotated 180° to position electrical and audio/visual cutouts.

- Center housing (10) in framed cavity. Ensure housing (10) protrudes 3/8" - 1/2" beyond front face of wood stud (for 1/2" drywall; adjust as required for other wall construction) (See Figure 4).

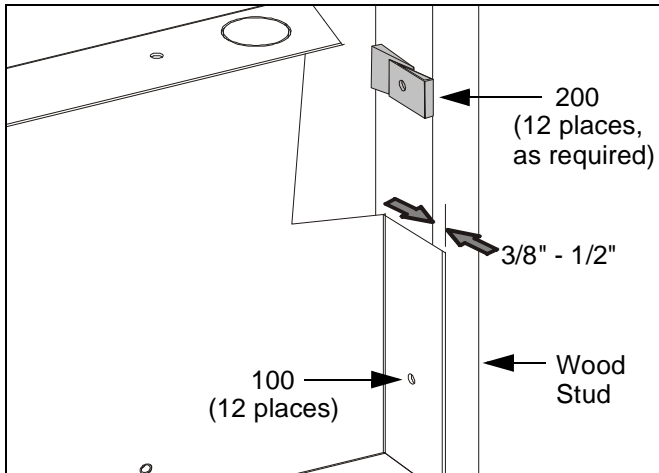


Figure 4: Install Housing

⚠ CAUTION: Housing (10) must either be in direct contact with studs/horizontal framing, or shims must be installed. Failure to do so will result in deformation of housing (10) when bolts (100) are tightened.

- Cut and overlap shims (200) as required to completely fill space between fastener holes in housing (10) and studs/horizontal framing (See Figure 4).
- Using key (180) or bit (190) install all 12 bolts (100) through housing (10) (and shims (200), if required) into studs/horizontal framing (See Figure 4). Tighten securely.

TRANSFER MWR/PWR/PNR MOUNT ASSEMBLY

NOTE: See instructions that came with MWR/PWR/PNR mount for specific display removal procedures.

- Disconnect all cables from display.

NOTE: Cables can remain installed in mount arm channel(s).

- Remove PAC-140 Q-Clamp (if installed) and open latching flag.

⚠ WARNING: Display is very heavy! Ensure display can be safely lifted and maneuvered as required to remove from mount. Failure to take adequate precautions can result in serious personal injury or damage to equipment!

- Lift and maneuver display mounting buttons out of button openings. Place display on protective surface.
- Using 9/16" wrench, remove and discard four bolts and washers attaching top and bottom brackets to mount assembly (See Figure 5). Place mount assembly on protective surface.

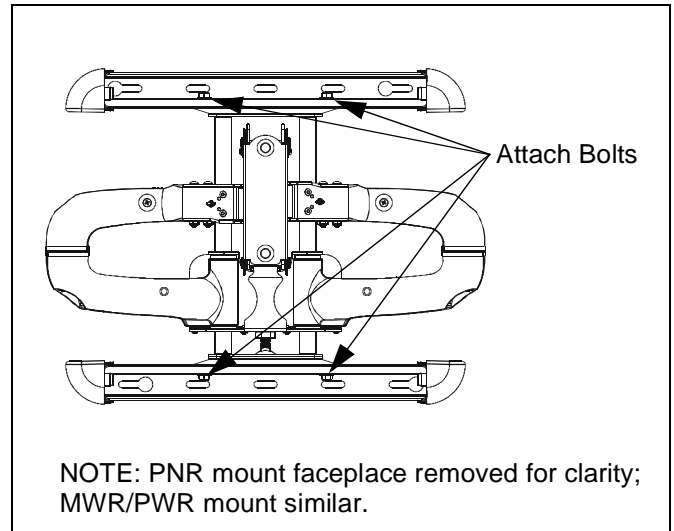


Figure 5: Remove Mount

- Using key (170), attach upper bracket (20) to housing (10) with screws (70), washers (120), and washers (110) (See Figure 6). Do not tighten screws (70) at this time.

NOTE: Bracket (20) is shown centered for PNR installation. Bracket (20) is offset to the right for MWR/PWR installation.

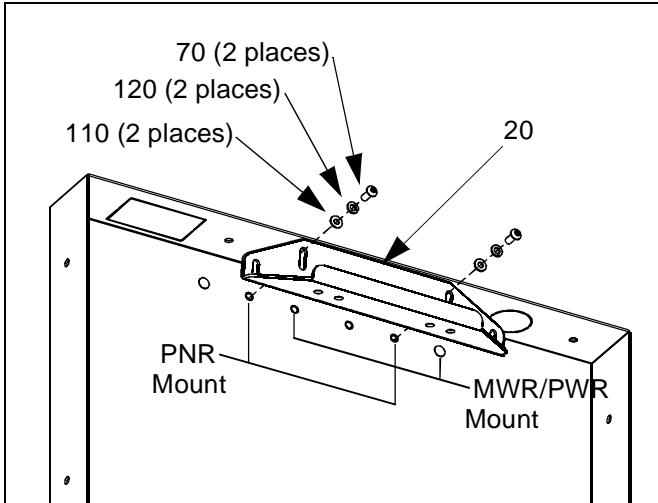


Figure 6: Attach Upper Bracket

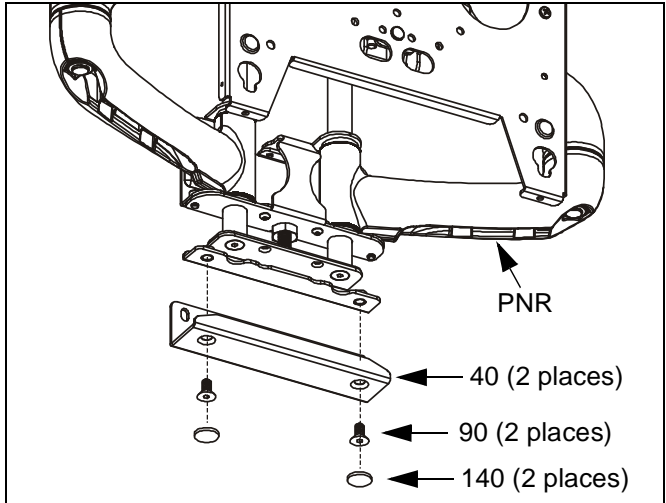


Figure 8: Attach Lower Bracket (PNR Mount)

6. Attach lower bracket (30):

- MWR/PWR mount: Using key (170), attach lower bracket (30) to mount assembly with screws (80) and washers (130) (See Figure 7). Tighten securely.
- PNR mount: Using key (170), attach lower bracket (40) to mount assembly with screws (90) (See Figure 8). Tighten securely, and then install adhesive felt pad (140) to each screw head (90).

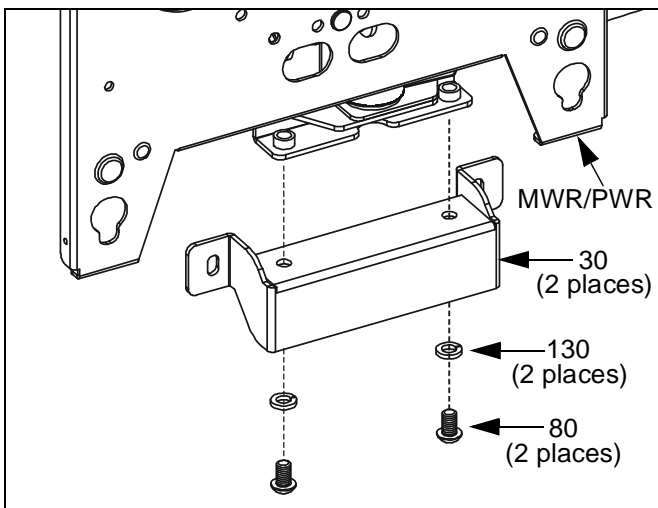


Figure 7: Attach Lower Bracket (MWR/PWR Mount)

7. Tilt and insert upper portion of mount assembly into upper bracket (20), then tilt and insert lower portion of mount assembly into housing (10) (See Figure 9).

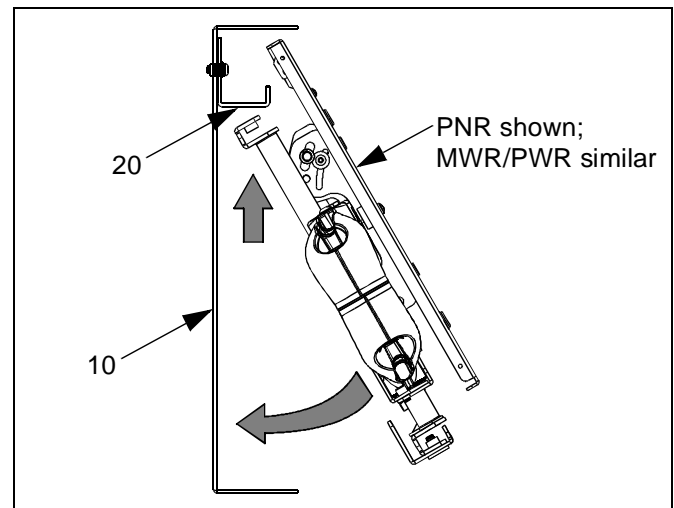


Figure 9: Insert Mount

8. To gain access to fastener holes for next steps, hold lower mount bracket (30 or 40) and pull mount faceplate out from housing (10).

9. Attach mount assembly to upper bracket (20):

- MWR/PWR mount: Using key (170), install screws (80) and washers (130) through *inner* holes of bracket (20) into mount assembly (See Figure 10). Ensure mount assembly is offset to the right of housing (10). Tighten securely.
- PNR mount: Using key (170), install screws (80) and washers (130) through *outer* holes of bracket (20) (See Figure 11). Ensure mount assembly is centered in housing (10). Tighten securely.

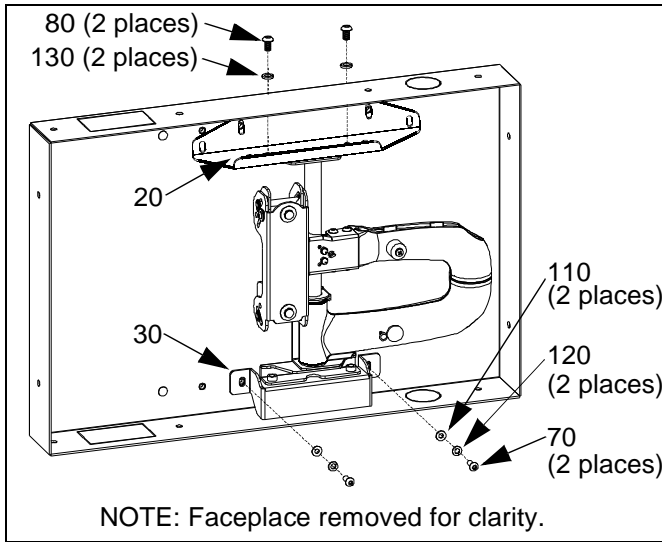


Figure 10: Install MWR/PWR Mount

- Housing edge gaps may be filled with (optional) drywall compound or other filler material.

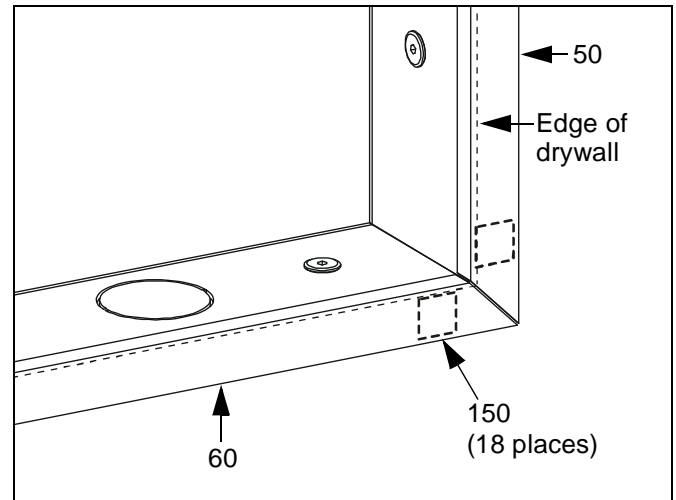


Figure 12: Install Moulding

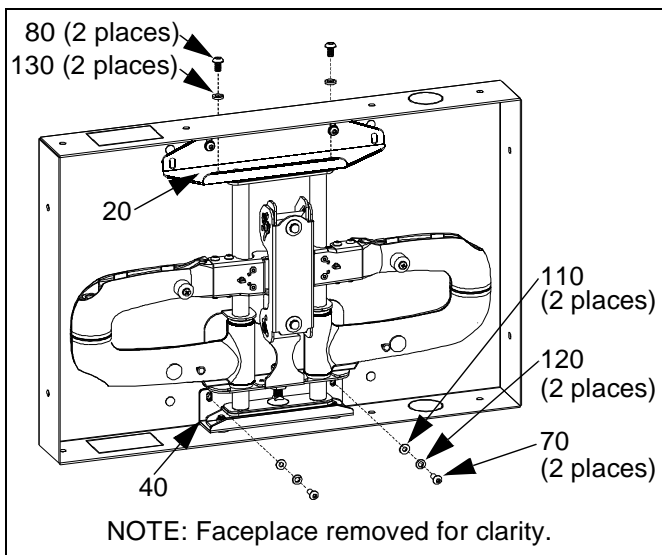


Figure 11: Install PNR Mount

10. Using key (170), securely tighten screws (70) attaching upper bracket (20) to housing (10) (See Figure 6).
11. Using key (170), install screws (70), washers (120), and washers (110) through lower bracket (30 [MWR/PWR] or 40 [PNR]) into housing (10) (See Figure 10) or (See Figure 11). Tighten securely.
12. Install covers (160) to unused threaded holes in back wall of mount (10).
13. Finish housing (10) edge gaps:
 - Moulding (50) and (60) may be installed. First apply tape (150) to inner surface of long leg of moulding, then press moulding into place (See Figure 12).
 - Other (optional) framing may be installed.

INSTALL DISPLAY

NOTE: See instructions that came with MWR/PWR/PNR mount for specific display installation procedures.



WARNING: Display is very heavy! Ensure display can be safely lifted and maneuvered as required to install to mount. Failure to take adequate precautions can result in serious personal injury or damage to equipment!

1. Ensure latching flag is fully opened.
2. Lift and maneuver display such that all buttons fit into button openings on mount assembly. Lower display firmly into place. Ensure each button has fully seated in its button opening.
3. Close latching flag.
4. Install PAC-140 Q-Clamp (if applicable).
5. Attach all cables to display.

