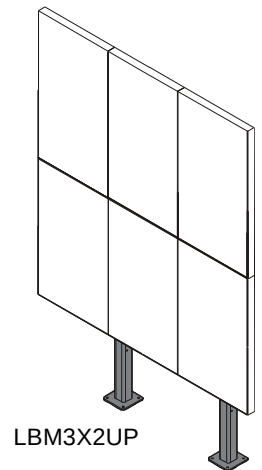
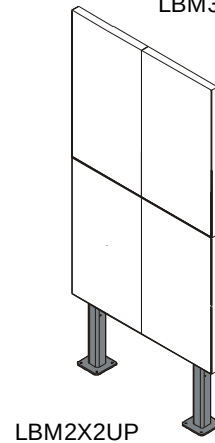
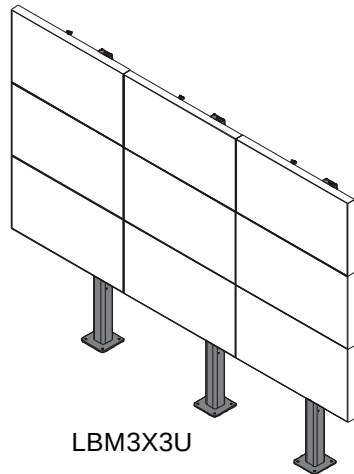
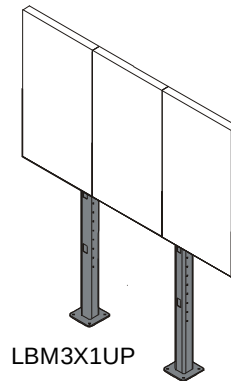
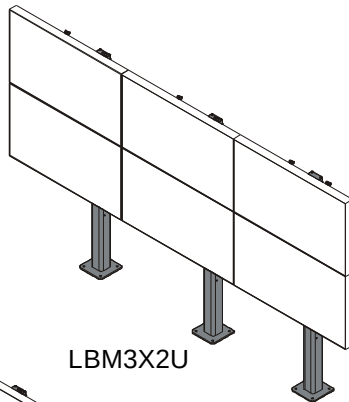
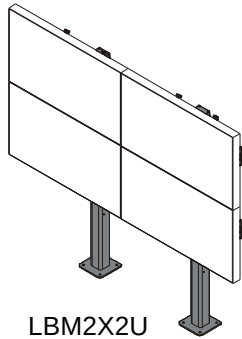

INSTALLATION INSTRUCTIONS



Bolt Down Video Wall

DISCLAIMER

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IMPORTANT SAFETY INSTRUCTIONS



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



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



WARNING: Do NOT stack multiple accessories on the same display wall! Do NOT connect accessories to walls that are already three display high. Display walls may NOT be stacked higher than three displays high!



WARNING: Do NOT install LBM Series mounts to any surface other than concrete! Concrete flooring must be at least 4" in thickness and NOT be covered with any other type of flooring material. Concrete anchors must be installed directly into concrete surface.



WARNING: Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.



WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of each display and attached accessories mounted to the LBM mount does not exceed the limits listed below. If FCA2X1U, FCA3X1U or FCA3X1UP accessories are added to either the LBM2X2U, the LBM3X2U or the LBM3X1UP, the weight limit for each display becomes 100 lbs (45.4 kg) rather than 125 lbs (56.7 kg).

MODEL	Max Weight Allowed for <u>EACH</u> Display	Max Weight Capacity of Mounting System
LBM2X2U	125 lbs (56.7 kg)	500 lbs (226.8 kg)
LBM3X2U	125 lbs (56.7 kg)	750 lbs (340.2 kg)
LBM3X3U	100 lbs (45.4 kg)	900 lbs (408.2 kg)
LBM3X1UP	125 lbs (56.7 kg)	375 lbs (170.1 kg)
LBM2X2UP	100 lbs (45.4 kg)	400 lbs (181.4 kg)
LBM3X2UP	100 lbs (45.4 kg)	600 lbs (272.2 kg)

LBM2X2U

125	125
125	125

LBM3X2U

125	125	125
125	125	125

LBM3X3U

100	100	100
100	100	100
100	100	100

LBM3X1UP

125	125	125
-----	-----	-----

LBM2X2UP

100	100
100	100

LBM3X2UP

100	100	100
100	100	100



WARNING: Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.



WARNING: Do not use this product outdoors.

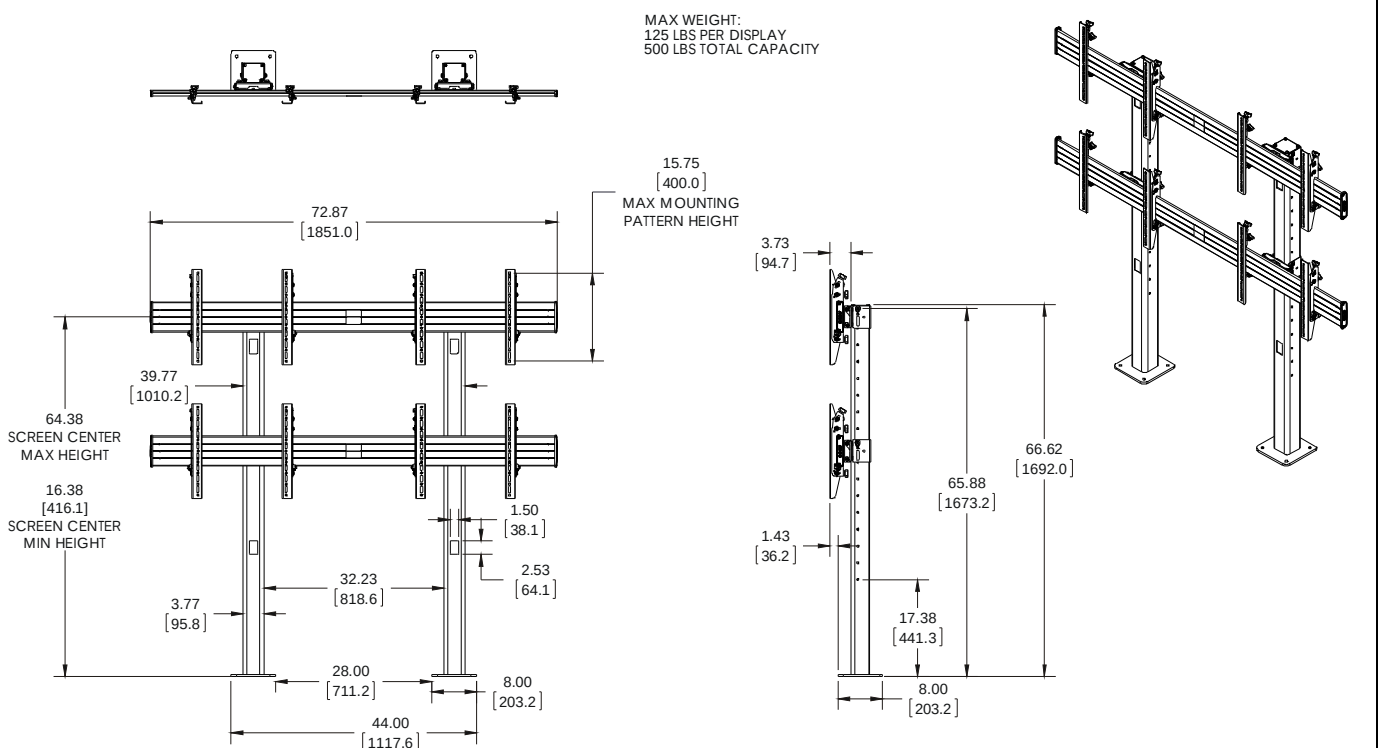
NOTE: The UL listed LBM Series video walls may be used with the UL Listed accessories FCAX20, FCAX14, FCAX08. LBM3X2U may be used with UL listed FCA3X1U and LBM2X2U may be used with UL listed FCA2X1U. LBM3X1UP may be used with UL listed FCA3X1UP.

NOTE: The LBM Series carts have no user serviceable parts.

--SAVE THESE INSTRUCTIONS--

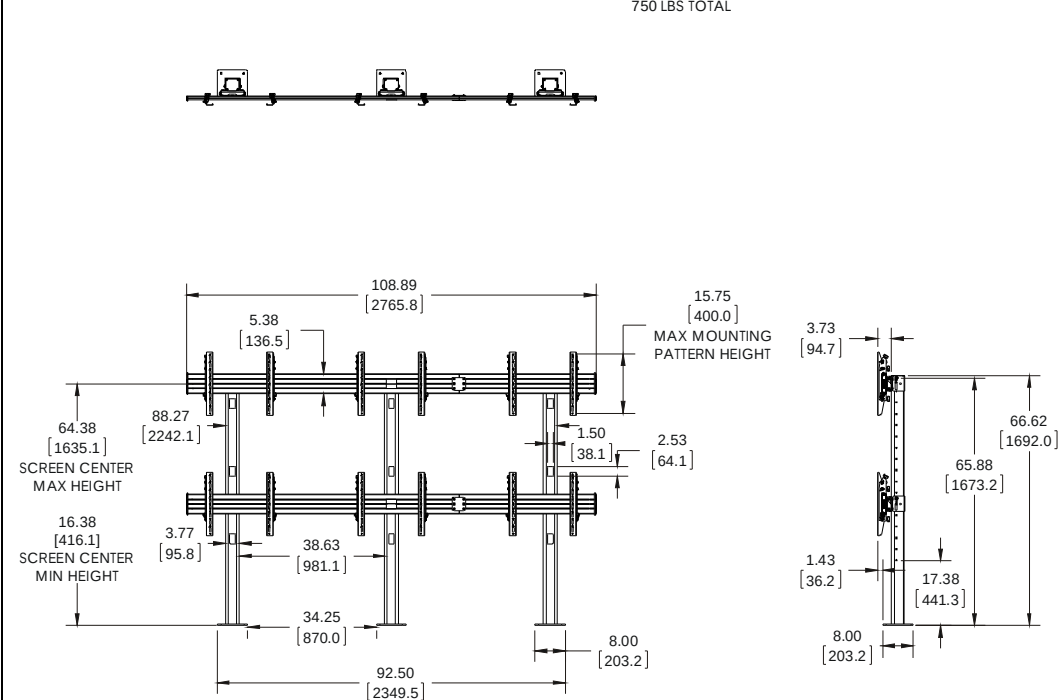
DIMENSIONS

LBM2X2U



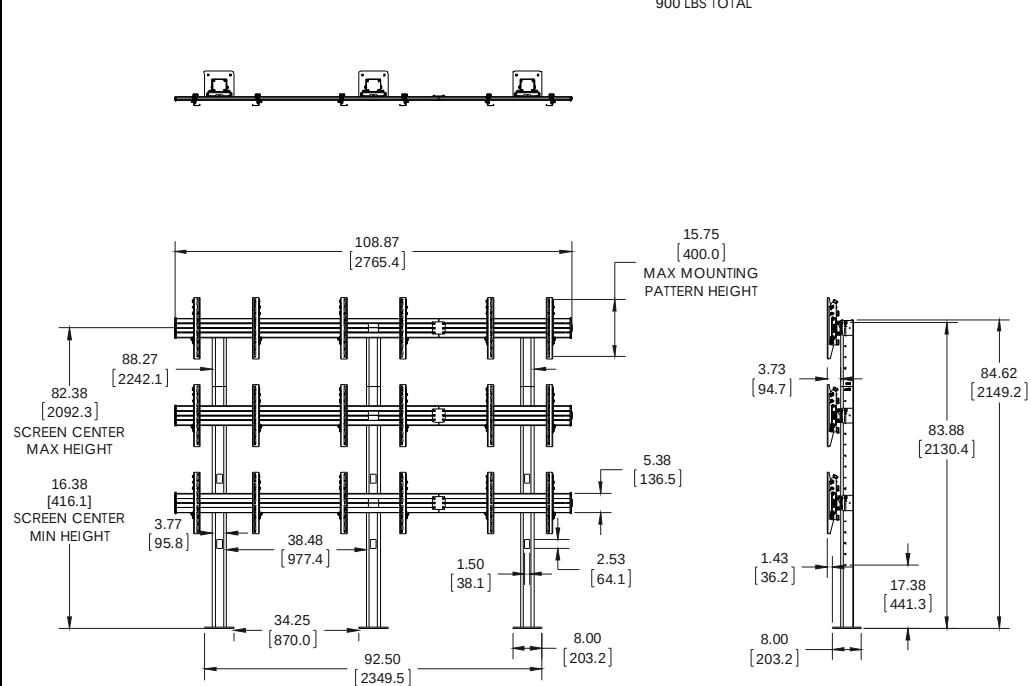
LBM3X2U

MAX WEIGHT:
125 LBS PER DISPLAY
750 LBS TOTAL



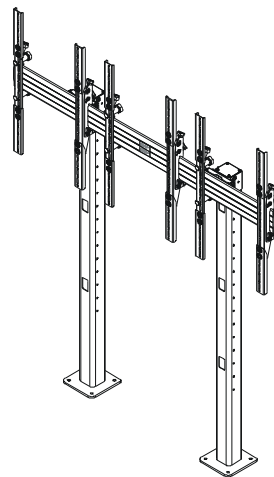
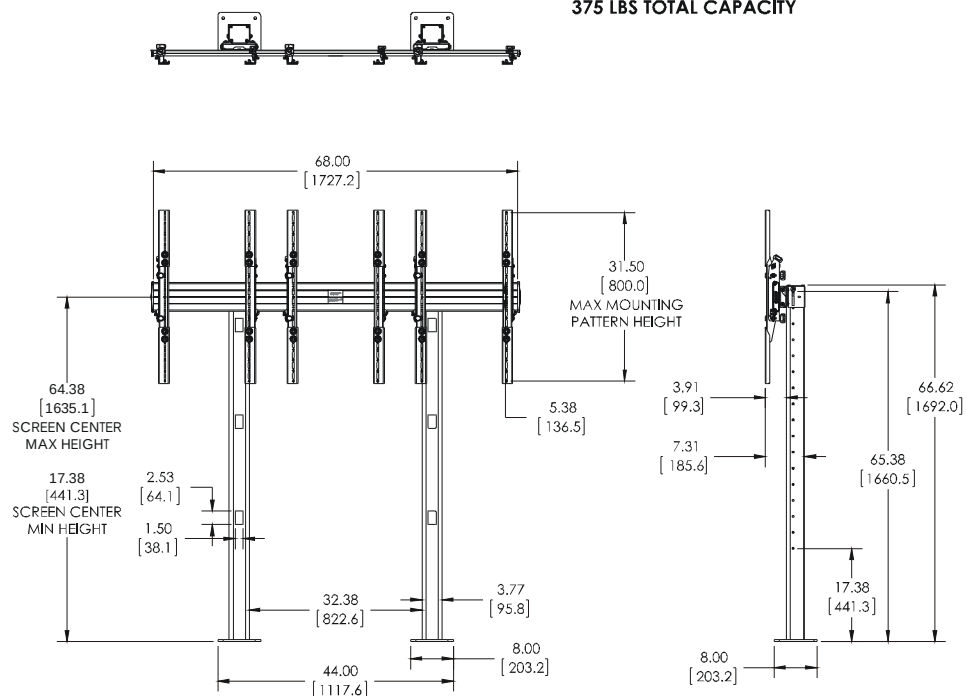
LBM3X3U

MAX WEIGHT:
100 LBS PER DISPLAY
900 LBS TOTAL

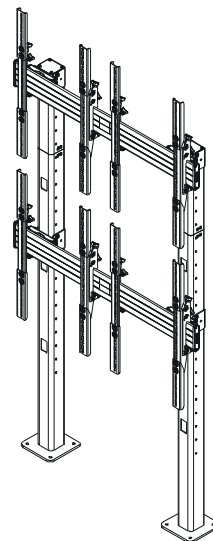
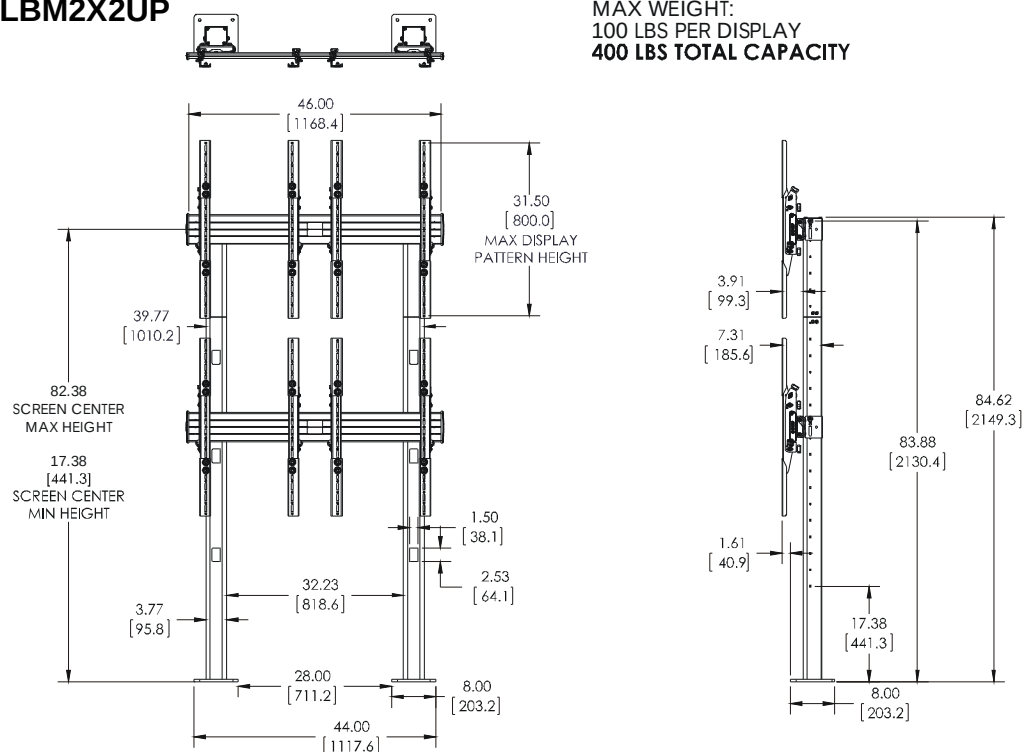


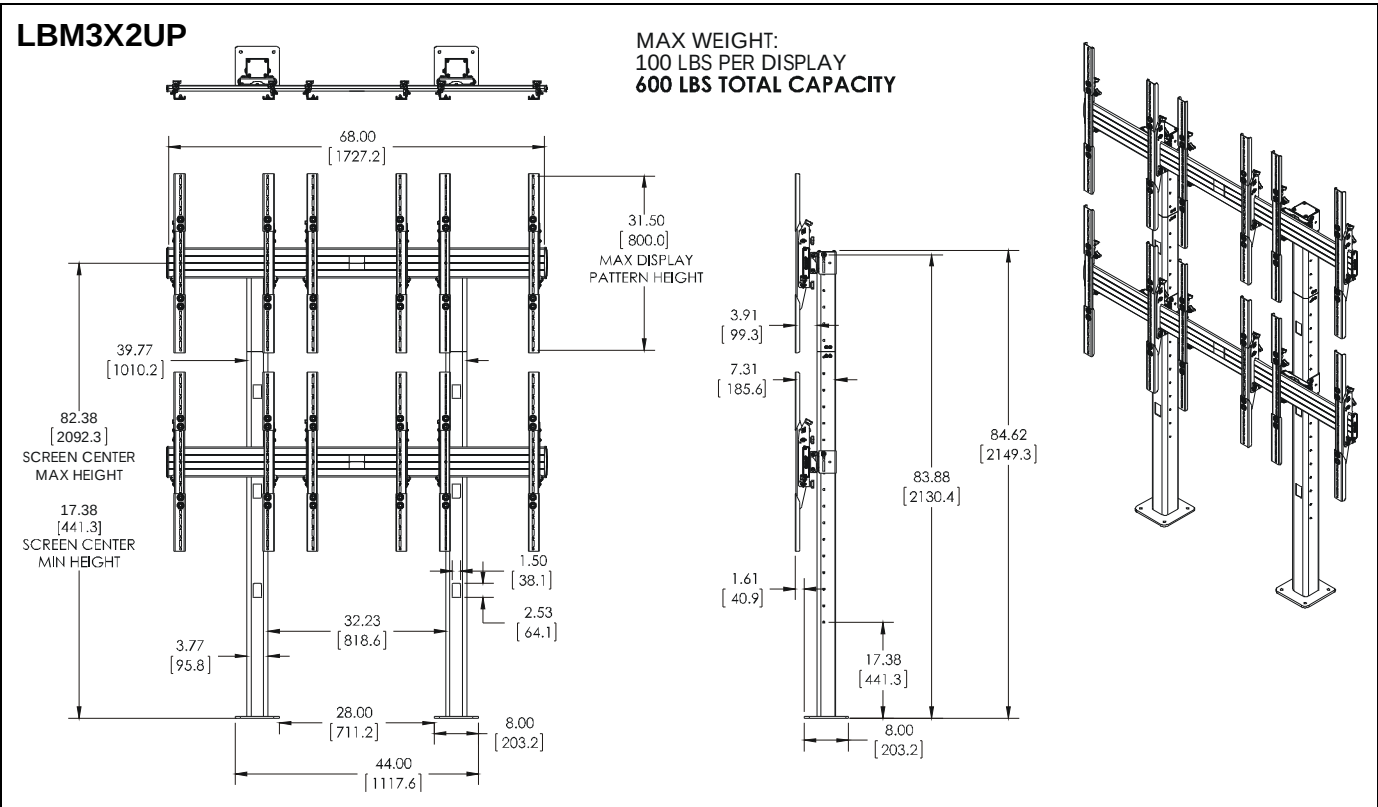
LBM3X1UP

MAX WEIGHT:
125 LBS PER DISPLAY
375 LBS TOTAL CAPACITY

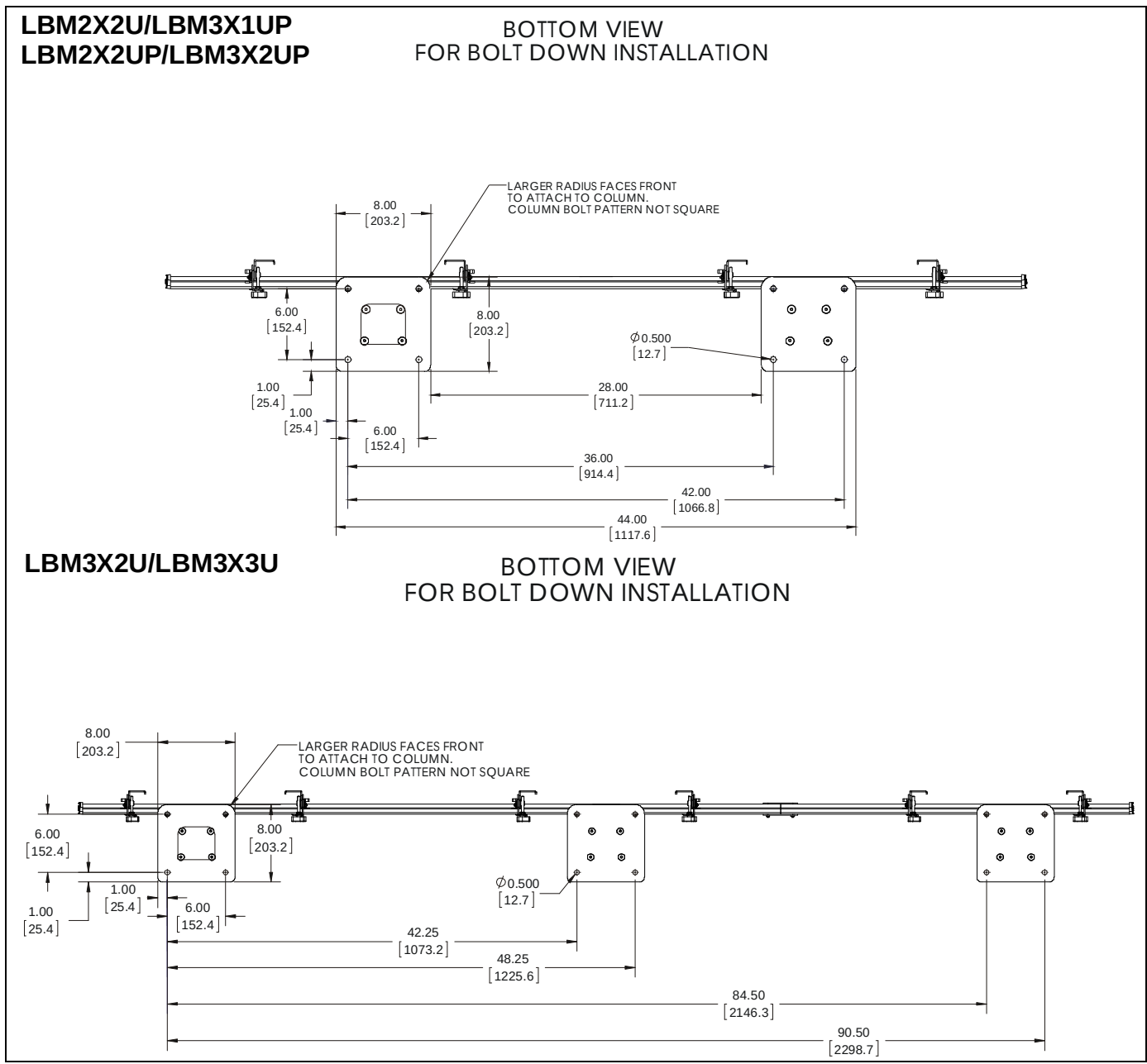
**LBM2X2UP**

MAX WEIGHT:
100 LBS PER DISPLAY
400 LBS TOTAL CAPACITY

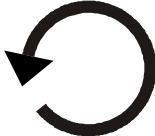




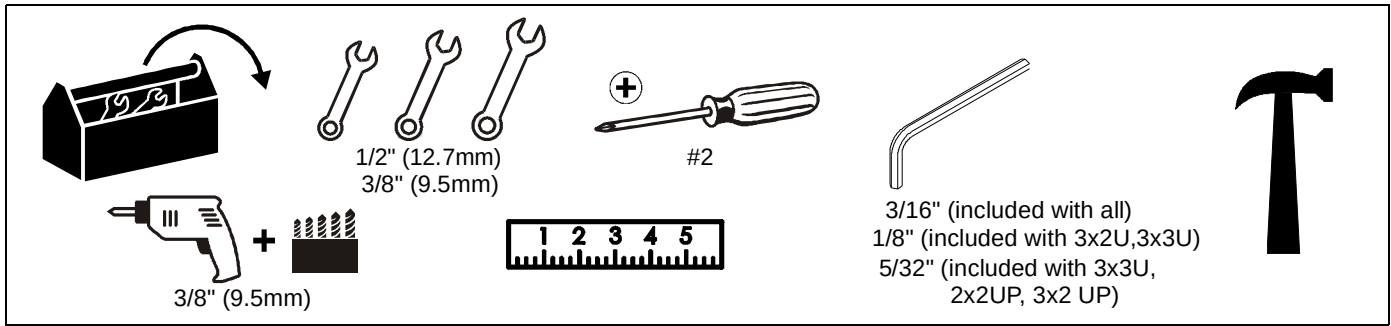
Bolt Down Dimensions



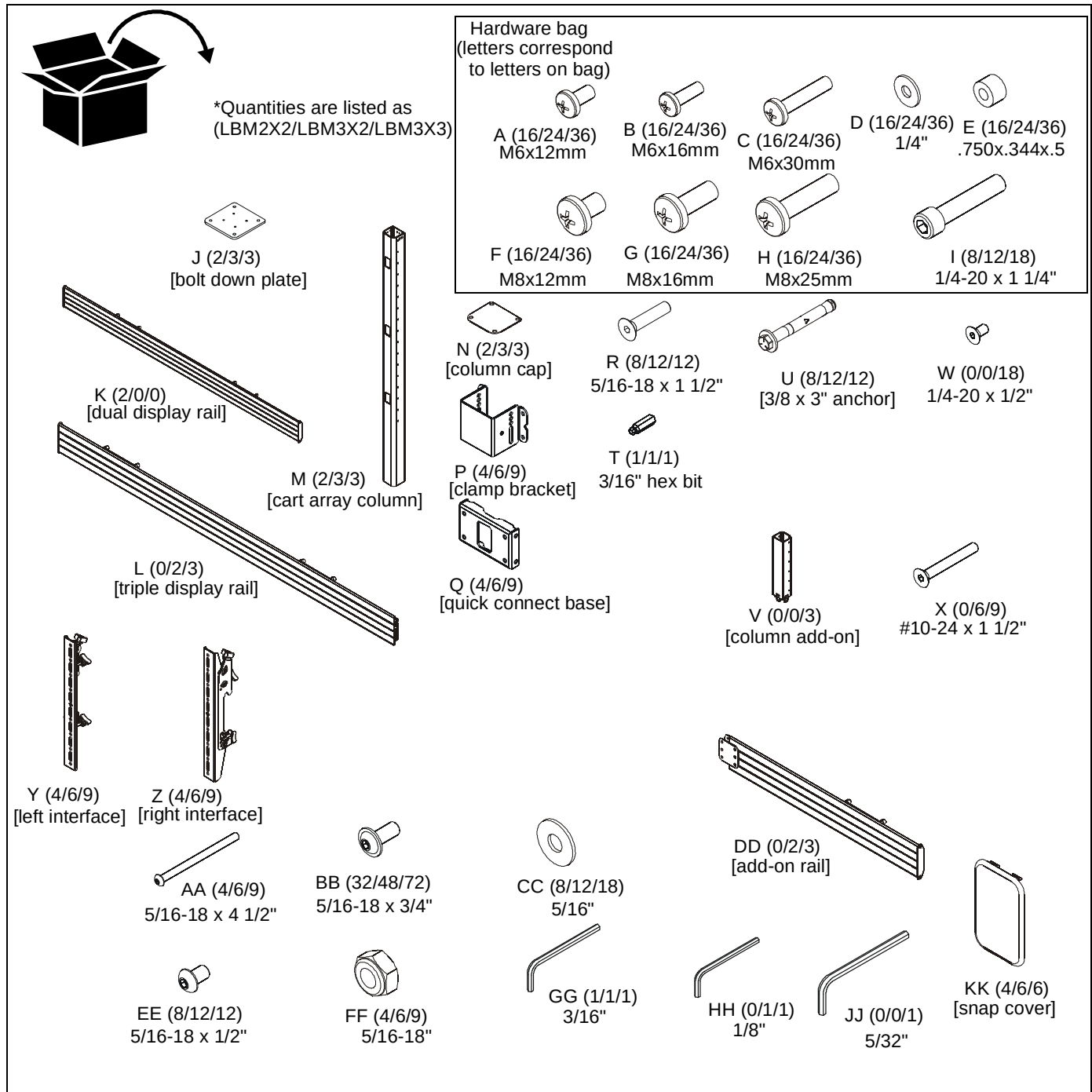
LEGEND

	Tighten Fastener Apretar elemento de fijación Befestigungsteil festziehen Apertar fixador Serrare il fissaggio Bevestiging vastdraaien Serrez les fixations		Pencil Mark Marcar con lápiz Stiftmarkierung Marcar com lápis Segno a matita Potloodmerkteken Marquage au crayon
	Loosen Fastener Aflojar elemento de fijación Befestigungsteil lösen Desapertar fixador Allentare il fissaggio Bevestiging losdraaien Desserrez les fixations		Drill Hole Perforar Bohrloch Fazer furo Praticare un foro Gat boren Percez un trou
	Phillips Screwdriver Destornillador Phillips Kreuzschlitzschraubendreher Chave de fendas Phillips Cacciavite a stella Kruiskopschroevendraaier Tournevis à pointe cruciforme		Adjust Ajustar Einstellen Ajustar Regolare Afstellen Ajuster
	Open-Ended Wrench Llave de boca Gabelschlüssel Chave de bocas Chiave a punte aperte Steeksleutel Clé à fourche		Remove Quitar Entfernen Remover Rimuovere Verwijderen Retirez
	By Hand A mano Von Hand Com a mão A mano Met de hand À la main		Optional Opcional Optional Opcional Opzionale Optie En option
	Hex-Head Wrench Llave de cabeza hexagonal Sechskantschlüssel Chave de cabeça sextavada Chiave esagonale Zeskantsleutel Clé à tête hexagonale		Security Wrench Llave de seguridad Sicherheitsschlüssel Chave de segurança Chiave di sicurezza Veiligheidssleutel Clé de sécurité

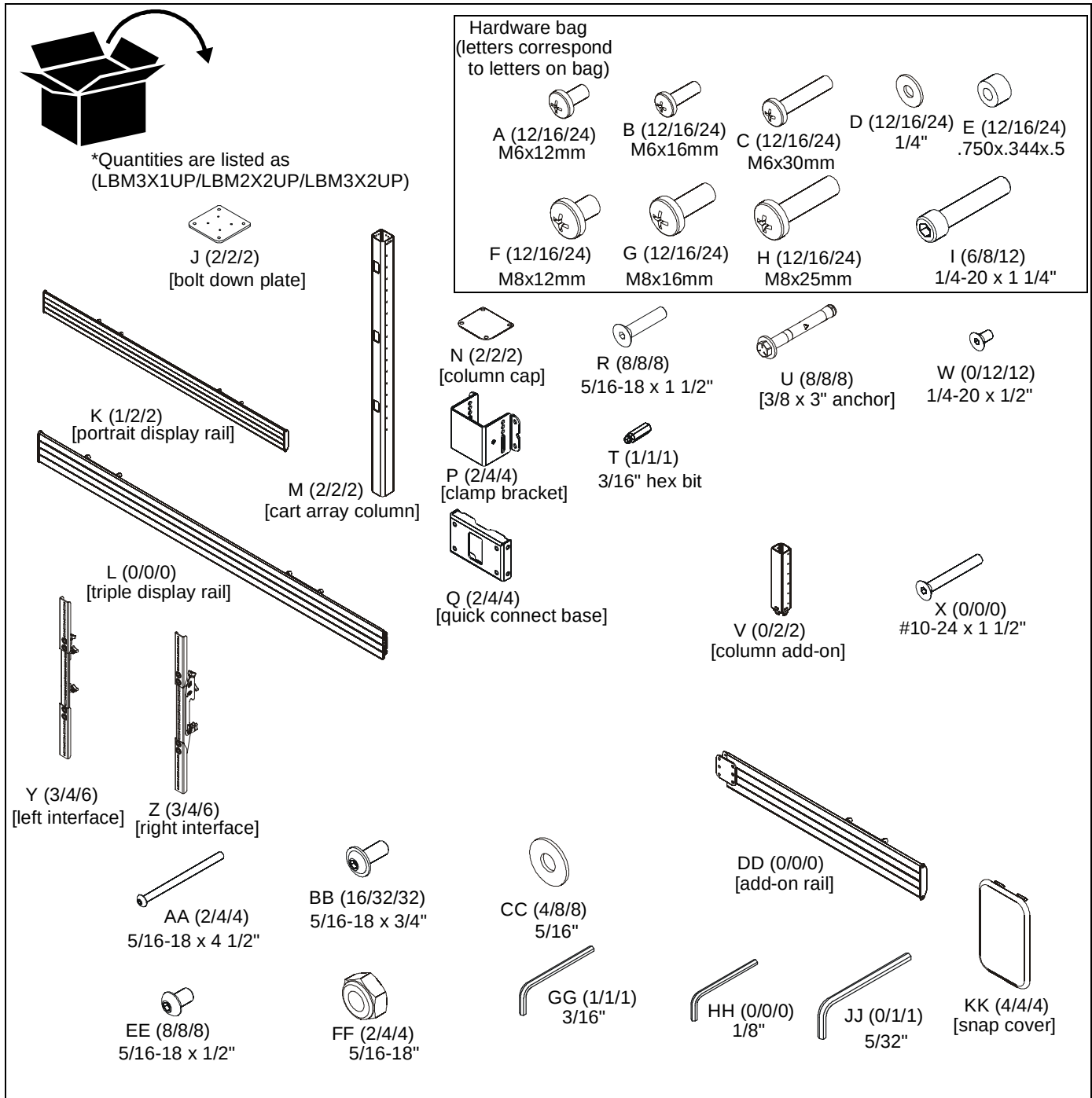
TOOLS REQUIRED FOR INSTALLATION



PARTS - Non-portrait Models - LBM2X2U/LBM3X2U/LBM3X3U (Portrait Models on next page)



Parts - Portrait Models - LBM3X1UP/LBM2X2UP/LBM3X2UP



Assembly And Installation

Bolt Down Columns to Floor

1. Lay array columns (M) down on a flat surface.
2. Use four 5/16-18 x 1 1/2" flat head cap screws (R) to connect each bolt down plate (J) to each columns (M). (See Figure 1)

IMPORTANT ! : Inside bolt pattern is NOT square!
Corners of front of plate have larger radii than corners on back of plate. Plate must be properly aligned in order to attach to column.

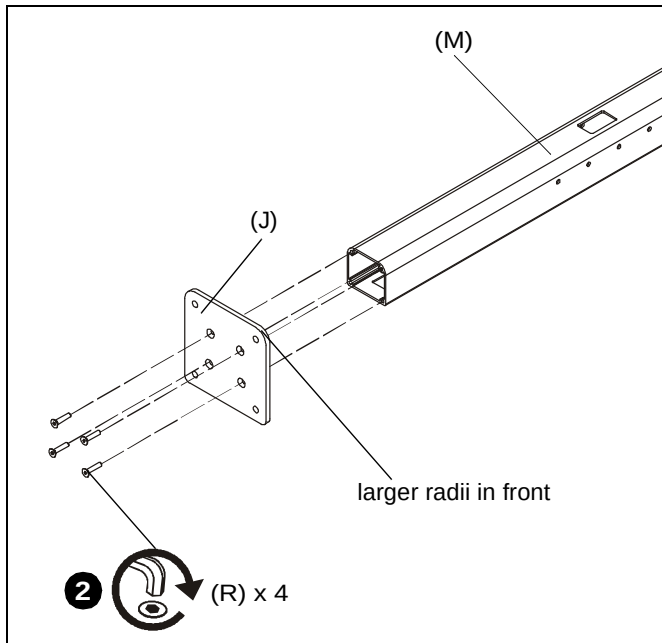


Figure 1

3. Using template found at end of this instruction manual (Figure 20), mark four holes at outside hole locations for each column. (See Figure 2) and (See Figure 21)



WARNING: Do NOT install LBM Series mounts to any surface other than concrete! Concrete flooring must be at least 4" in thickness and NOT be covered with any other type of flooring material. Concrete anchors must be installed directly into concrete surface.

IMPORTANT ! : See Bolt Down Dimensions on page 6 to measure distances between each bolt down plate.

IMPORTANT ! : Make sure columns will be installed far enough away from any walls so that displays may be installed.

4. Using a 3/8" drill bit, drill a hole 3 3/8" in depth at each marked location. (See Figure 2) and (See Figure 3)
5. Blow each hole clean of any concrete debris with a large air hose or compressed air in a can. (See Figure 3)

IMPORTANT ! : Do NOT modify the anchors or advance the bolt in the anchors prior to installation!

6. Place each bolt down plate (J) on top of drilled holes making sure holes on plate are aligned with drilled holes. (See Figure 3)
7. Use a hammer to drive anchors (U) through plate holes into the drilled holes until the bolt head is firmly seated against the plate. (See Figure 2) and (See Figure 3)
8. Tighten each anchor by turning the head three to four turns past finger tight. (See Figure 3)

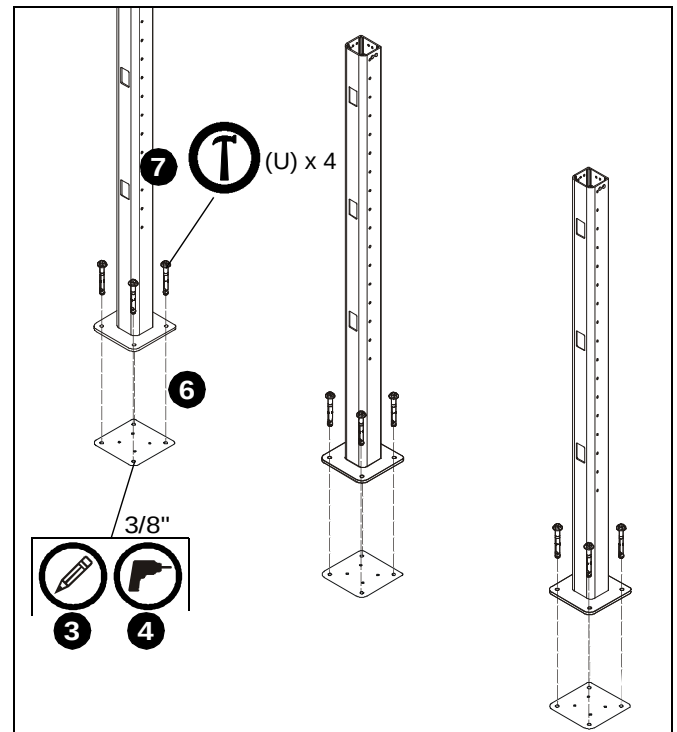


Figure 2

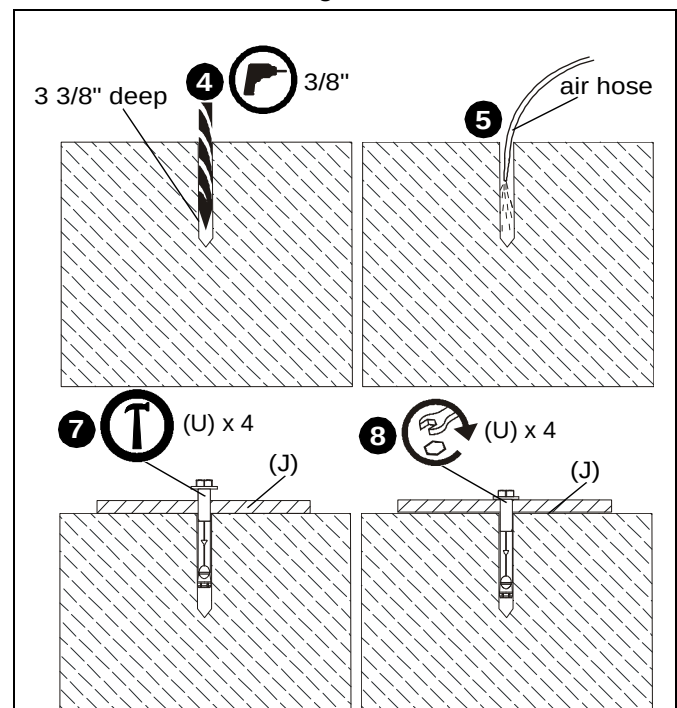


Figure 3

9. Repeat Steps 4-8 for additional column(s).

Column Add-On Installation (LBM3X3U/ LBM2X2UP/LBM3X2UP only)

1. Insert one column add-on (V) to each column (M) making sure holes are lined up on each side. (See Figure 4)
2. Use 5/32" hex key (J) and six 1/4-20 x 1/2" flat head cap screws (W) to secure each column add-on (V) to each column (M). (See Figure 4)

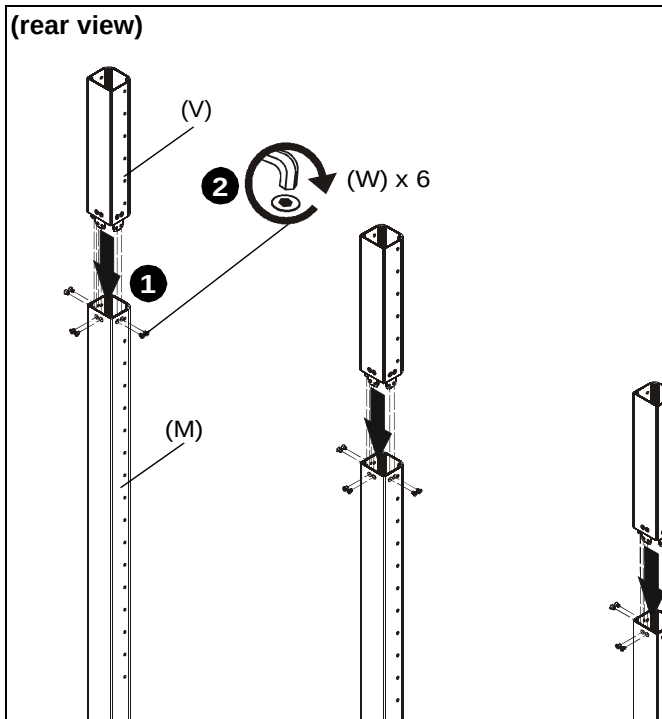


Figure 4

Rails Installation

1. Using display dimensions, determine where the center of the top displays will be on the cart.

IMPORTANT ! : Install all column add-ons (V), if applicable, prior to installing rails to columns.

2. Place clamp brackets (P) on columns in the position of where the center of the top displays will be on the cart with the diamond on the brackets being placed at the exact center location. (See Figure 5)

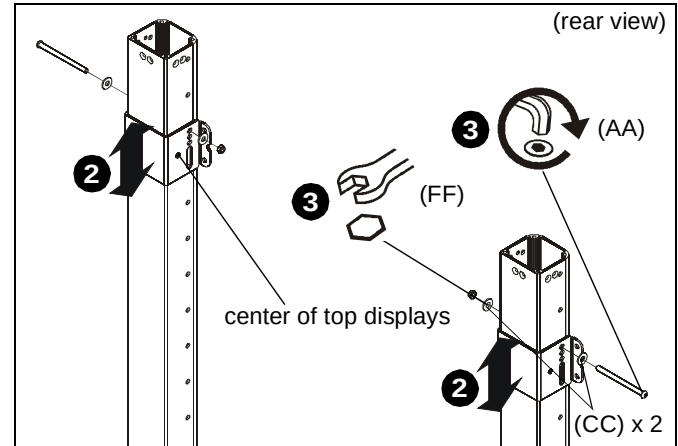


Figure 5

3. Use 5/16-18 x 4 1/2" button head cap screw (AA), two 5/16" washers (CC) and 5/16-18" lock nut (FF) to secure each clamp bracket (P) to column. (See Figure 5)

NOTE: Clamp brackets (P) may be flipped in order to use long slots for installation if necessary. (See Figure 6)

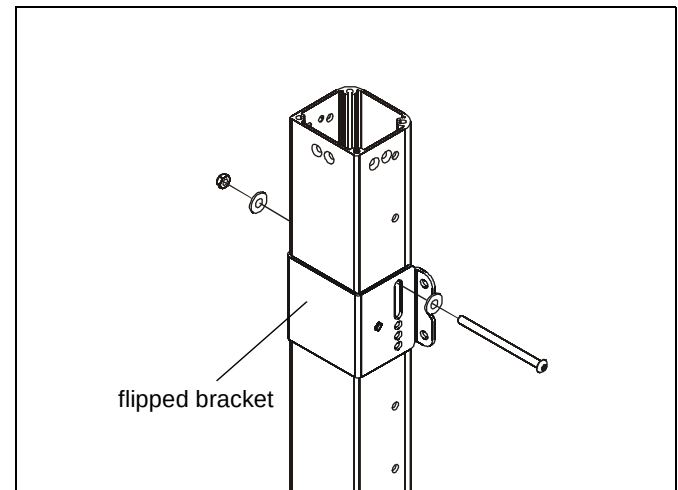


Figure 6

NOTE: If installing LBM3X1UP, proceed ahead to Step 6.

4. Measure one screen height down from center point on installed clamp brackets to determine mounting location of lower clamp brackets. (See Figure 7)
5. Use 5/16-18 x 4 1/2" button head cap screw (AA), two 5/16" washers (CC) and 5/16-18" lock nut (FF) to install clamp brackets for lower displays with center diamond one screen height below center diamond of upper installed brackets. (See Figure 7)

NOTE: If some clearance is desired in between displays, install lower brackets slightly more than one screen height below upper brackets.

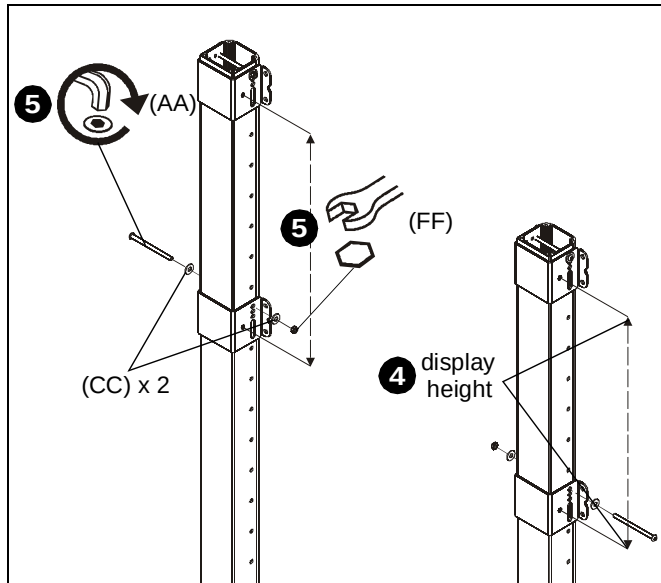


Figure 7

6. Use four 5/16-18 x 3/4" button head flange screws (BB) to secure each attached clamp bracket (P) to each quick connect base (Q). (See Figure 8)

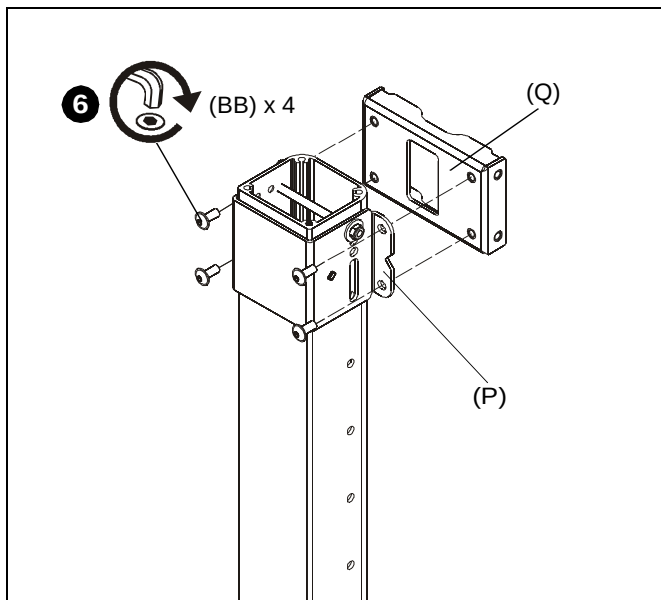


Figure 8

NOTE: If rails must be installed over cable management holes on column, cables must be routed prior to installing rails onto quick connect bases. See Cable Management section for details.

7. Install two 5/16-18 x 3/4" button head flange screws (BB) into the top holes on each quick connect base (Q). (See Figure 9)

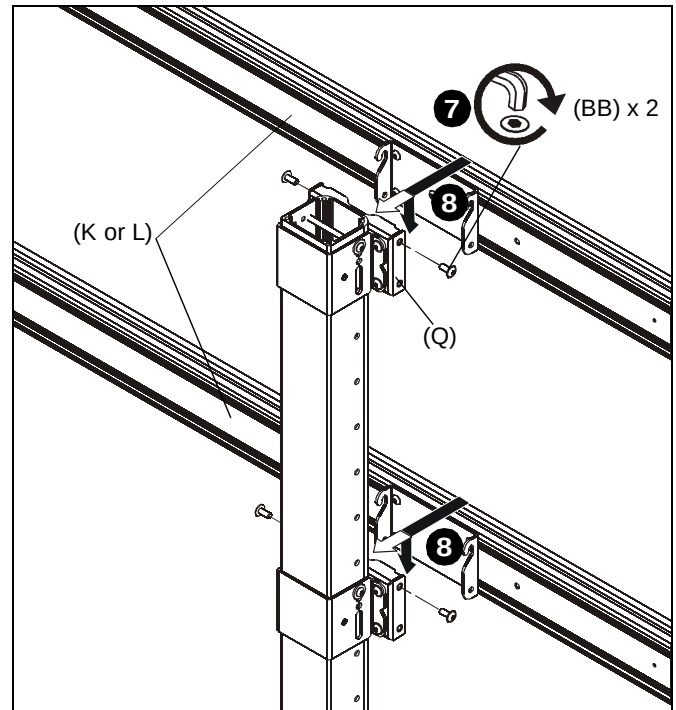


Figure 9

8. Hang rails (K or L) into screws installed in previous step to quick connect bases (Q). (See Figure 9)

IMPORTANT ! : If installing the triple display rail (L), install rail to left and center columns so that add-on rail can be installed to right column. See Add-On Rail Installation section for details.

9. Install two 5/16-18 x 3/4" button head flange screws (BB) into the lower holes on each quick connect base (Q) to secure rails to quick connect bases. (See Figure 10)
10. Tighten all 5/16-18 x 3/4" button head flange screws (BB).

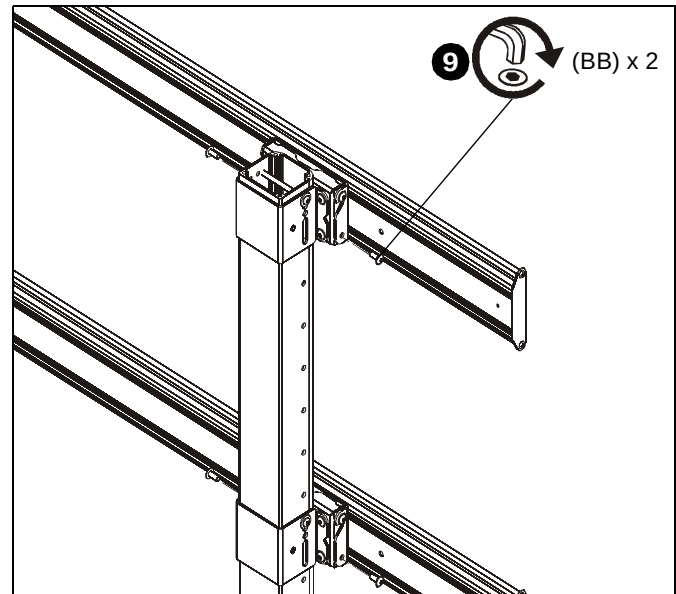


Figure 10

Add-On Rail Installation (LBM3X2U/LBM3X3U only)

1. Install add-on rails (DD) to right column following instructions in Rails Installation section.
2. Use three #10-24 x 1 1/2" flat head cap screws (X) to attach each add-on rail (DD) to display rail (L). (See Figure 11)

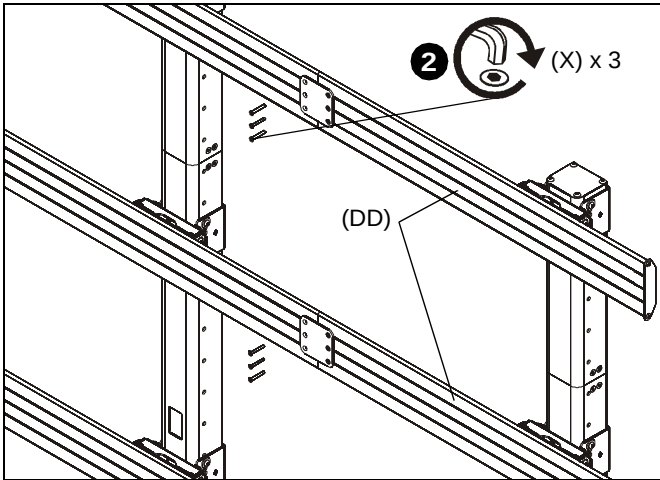


Figure 11

Display Installation

1. Place display face down on a soft, non-abrasive surface.

NOTE: For best access, route display cables through columns prior to display installation. See Cable Management section for details.



CAUTION: Using screws of improper diameter may damage your display! Proper screws will easily thread into display mounting holes.

2. Select screw *diameter* by examining hardware (A-C and F-H) (6mm or 8mm) and comparing with mounting holes on display. (See Figure 12) or (See Figure 13)
3. Select spacers:
 - If mounting holes are not recessed and interface brackets (Y and Z) can lay flat against display, then no spacers are required.
 - If mounting holes are recessed, or if protrusions prevent brackets (Y and Z) from laying flat, then spacers (E) must be used.



CAUTION: Using screws of improper length may damage your display! Proper screws will have adequate thread engagement without contacting bottom of display mounting holes.

4. Select screw *length*: (See Figure 12) and (See Figure 13)
 - Using your hand, insert **SHORTEST** length screw of selected diameter (A or F) through 1/4" washer (D), bracket (Y or Z), selected spacer (E, if required), into display mounting hole. Do NOT thread screw into hole at this time.
 - Proper screw length requires base of screw head to protrude above flat washer a *distance equal to or greater than the screw diameter*. If screw length is inadequate, select longer screw. Select *shortest* screw which will protrude the required distance.
5. Use selected screws (A-C or F-H), washers (D) and spacers (E), if necessary, to connect interface brackets (Y and Z) to back of display. Make sure diamond on interface brackets is even with center of display. (See Figure 12)

(non-portrait models)

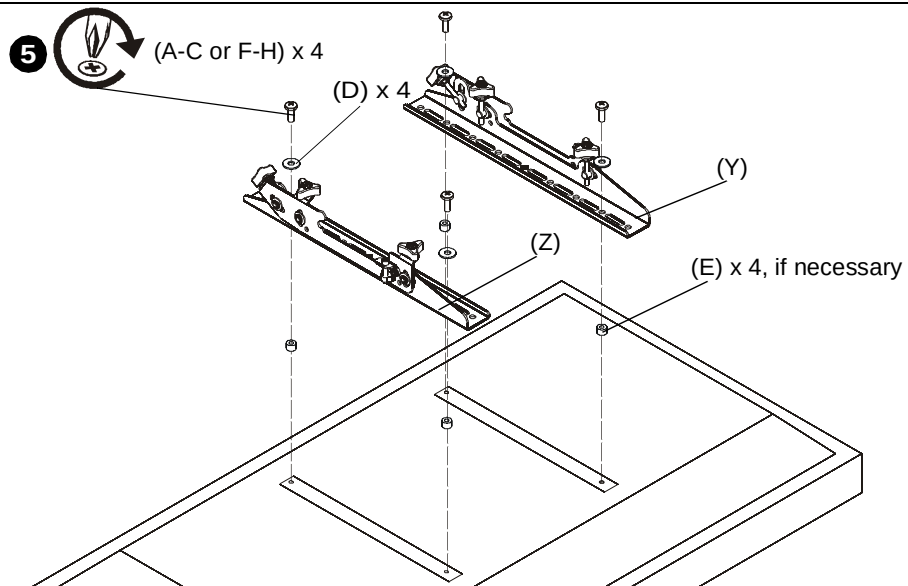


Figure 12

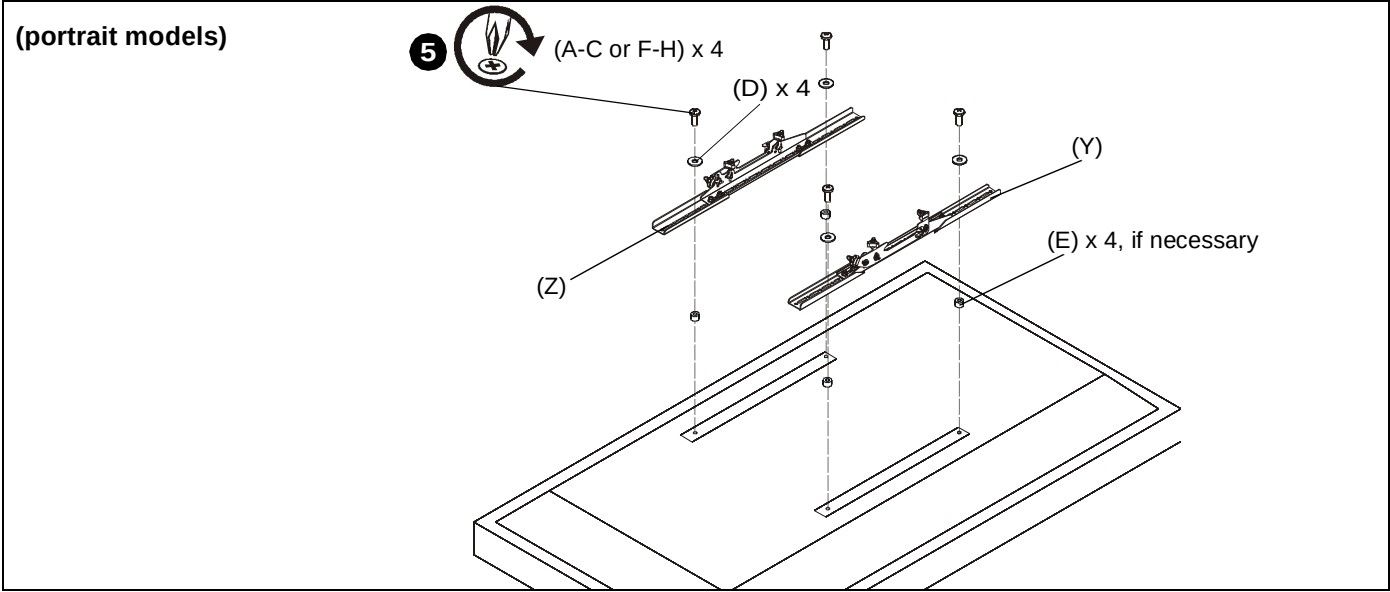


Figure 13

⚠ WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of each display and attached accessories mounted to the LBM mount does not exceed the limits listed below. If FCA2X1U, FCA3X1U or FCA3X1UP accessories are added to either the LBM2X2U, the LBM3X2U or the LBM3X1UP, the weight limit for each display becomes 100 lbs (45.4 kg) rather than 125 lbs (56.7 kg).

MODEL	Max Weight Allowed for <u>EACH</u> Display	Max Weight Capacity of Mounting System
LBM2X2U	125 lbs (56.7 kg)	500 lbs (226.8 kg)
LBM3X2U	125 lbs (56.7 kg)	750 lbs (340.2 kg)
LBM3X3U	100 lbs (45.4 kg)	900 lbs (408.2 kg)
LBM3X1UP	125 lbs (56.7 kg)	375 lbs (170.1 kg)
LBM2X2UP	100 lbs (45.4 kg)	400 lbs (181.4 kg)
LBM3X2UP	100 lbs (45.4 kg)	600 lbs (272.2 kg)

LBM2X2U		LBM3X2U		
125	125	125	125	125
125	125	125	125	125
LBM3X3U				
100	100	100		
100	100	100		
100	100	100		
LBM3X1UP				
125	125	125		
LBM2X2UP		LBM3X2UP		
100	100	100	100	100
100	100	100	100	100

6. Starting from the bottom and working up, hang interface brackets (Y and Z) to display rails (K or L). (See Figure 14)
7. Use 1/4-20 x 1 1/4" socket head cap screws (I) to secure interface brackets (Y and Z) to rails for each display. Screws must engage through both holes to be fully secured. (See Figure 14)

NOTE: Display positions may need to be adjusted after height and/or plumb adjustments in order to maintain desired alignment.

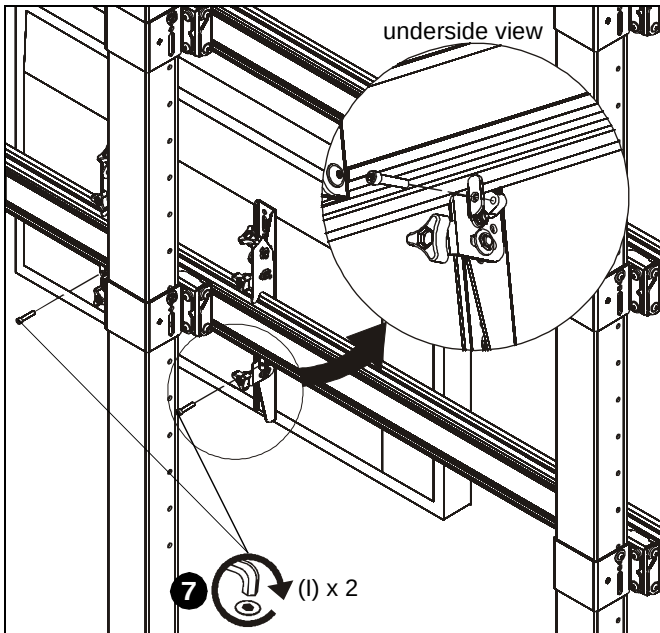


Figure 14

Column Cap Installation

NOTE: If the top holes on columns will be used for cable management, do NOT install column caps to columns as illustrated below. See Cable Management section for details.

1. Use four 5/16-18 x 1/2" button head cap screws (EE) to install each column cap (N) to each column. (See Figure 15)

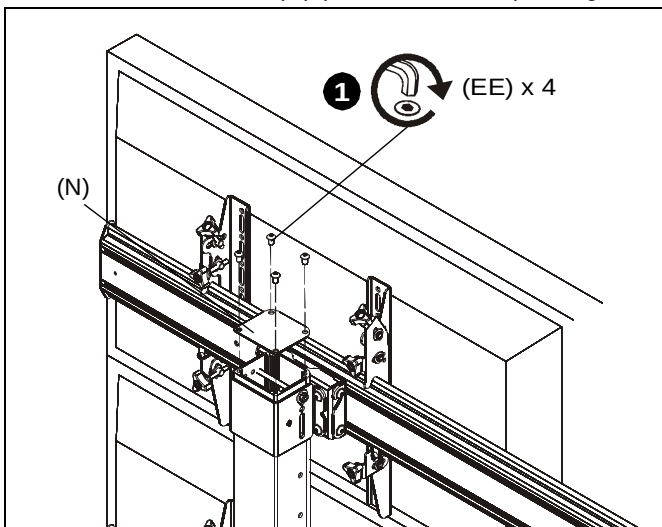


Figure 15

Adjustments

Height Adjustment

1. Use upper knob on back of interface brackets (Y and Z) to adjust the height of each display. (See Figure 16)

NOTE: Adjust both brackets in order to maintain a level mount.

Plumb Adjustment

2. Use middle and lower knobs on back of interface brackets (Y and Z) to make plumb adjustments to each display. (See Figure 16)

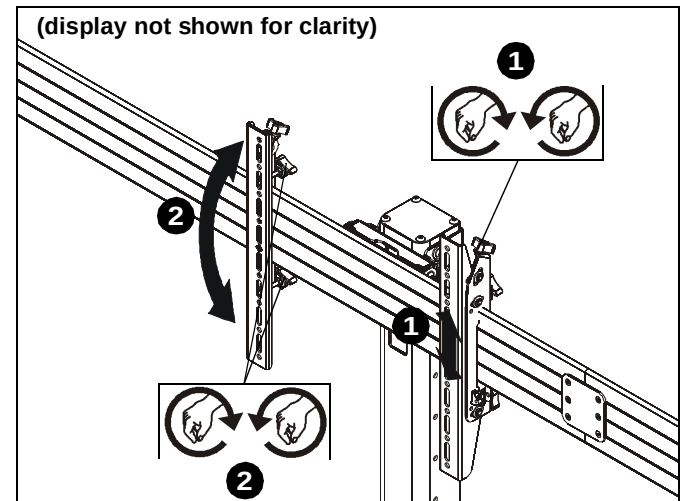


Figure 16

Cable Management

1. Route cables from displays through nearest holes on front of columns and out through back cable management hole. (See Figure 17)

NOTE: For best access, route display cables through columns prior to display installation. See Cable Management section for details.

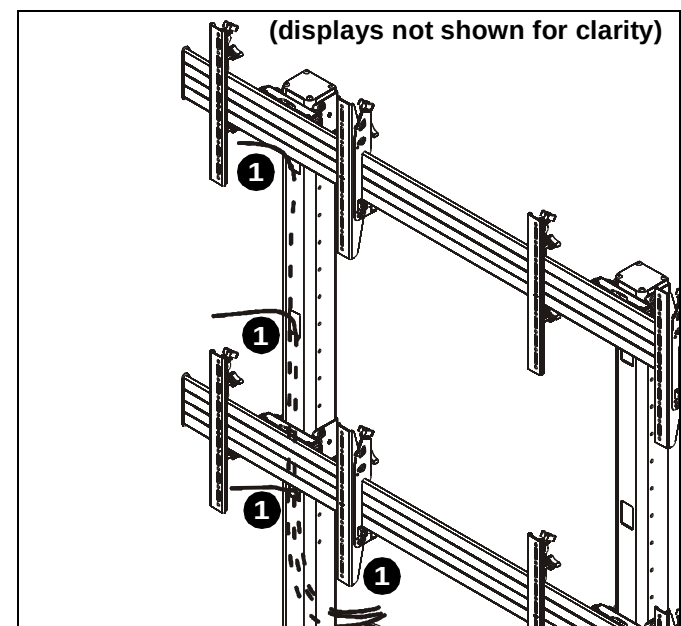
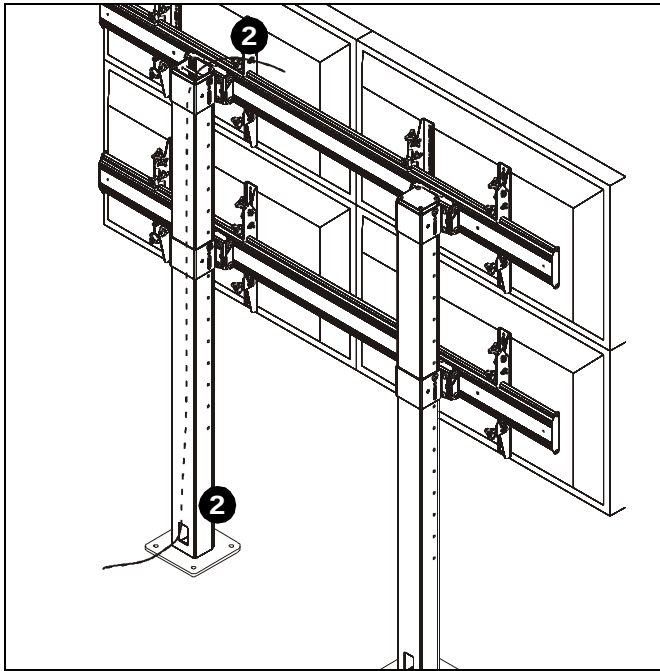


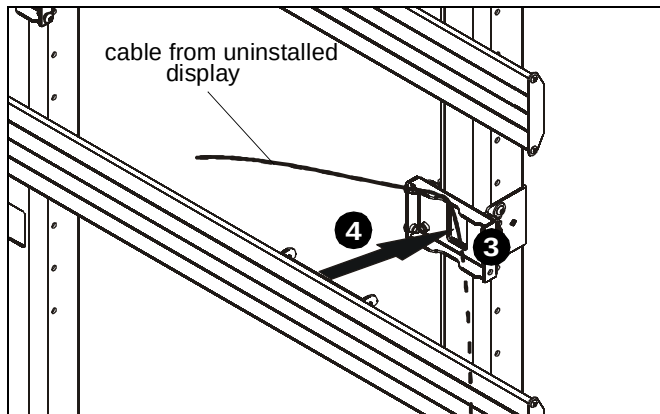
Figure 17

Additional Cable Management Options

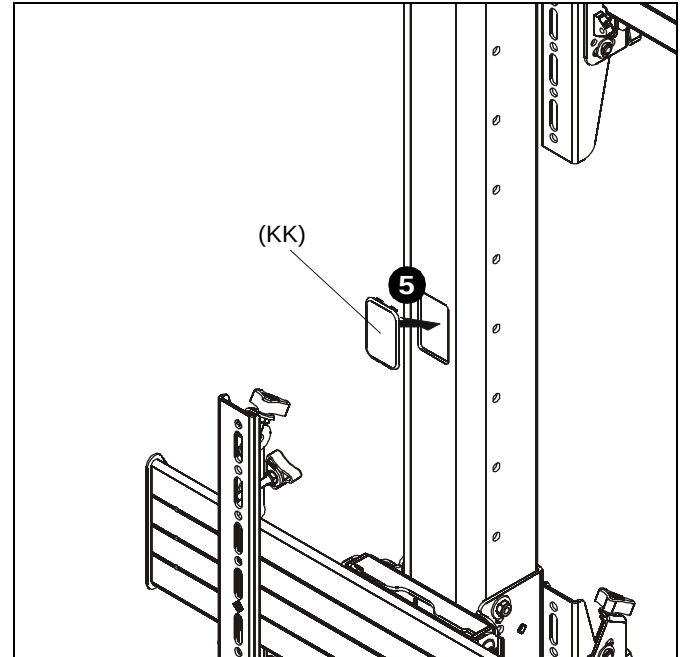
2. Cables may be routed through tops of columns and out through the back cable management hole. (See Figure 18)

**Figure 18**

3. If rails needed to be installed on top of cable management holes, cables may be routed through quick connect bases (Q) prior to the rails being installed. (See Figure 19)
4. Install rails according to Rails Installation section making sure cable is routed through cable opening on quick connect base (Q). (See Figure 19)

**Figure 19**

5. For any cable management holes that are not used, snap covers (KK) may be used to cover holes as desired. (See Figure 20)

**Figure 20**

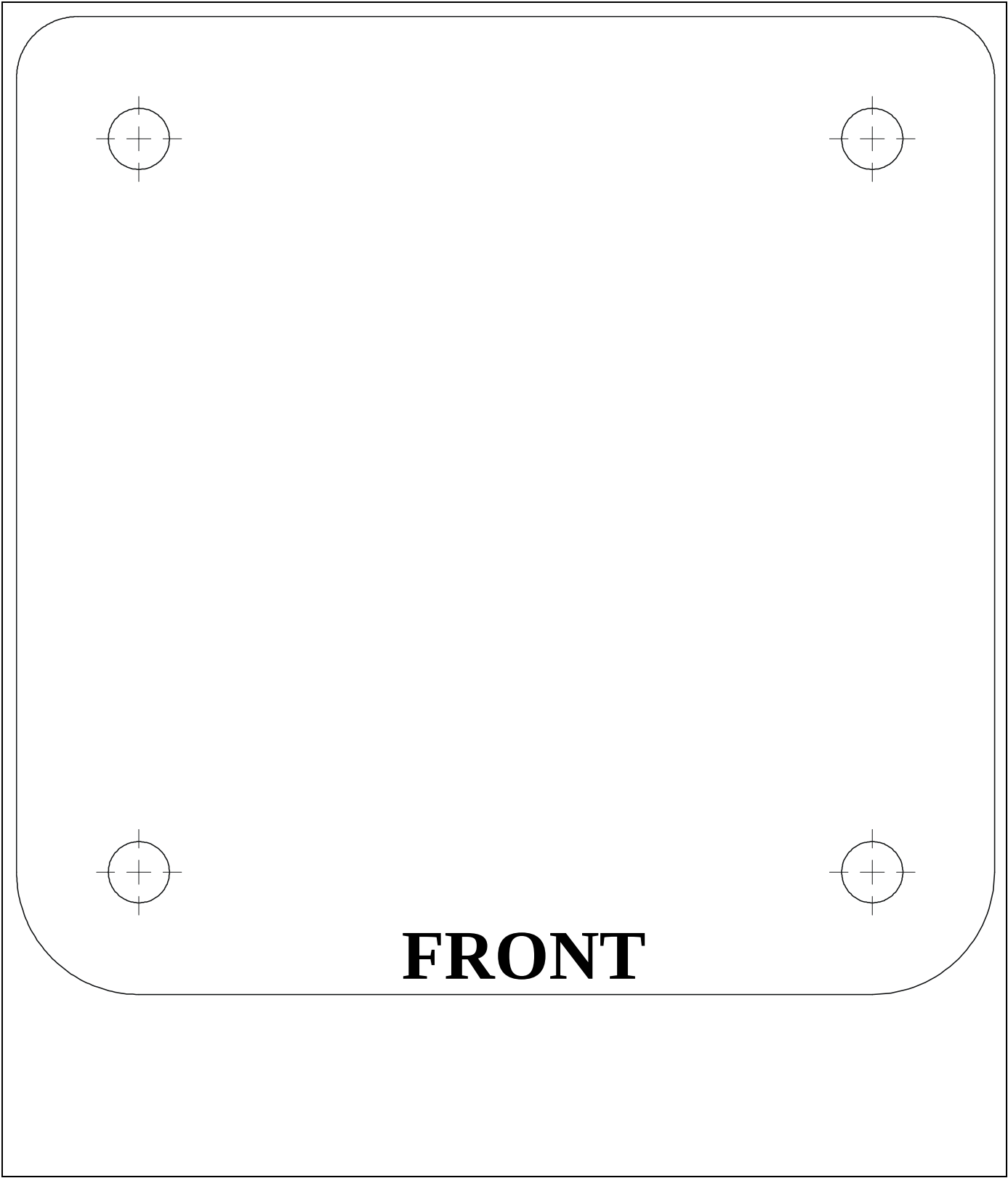


Figure 21



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