HoverTrack® Series   VWD-4X4-X551

4 Wide x 4 Deep Video Wall Display Installation Guide

This display kit mounts NEC X551UN LCD monitors in a 4 wide by 4 deep landscape configuration. The frame attaches to a wall and receives the LCD monitors by way of four machined fittings (per monitor) that thread into the monitor's VESA holes. These fittings then insert into the frame's channels. The monitor's fittings secure to the frame with locking arms that provide an easy way to remove the monitors for service. A removable panel provides access for media players behind the frame.

Important: Installing video displays is a serious endeavor that requires experienced professionals. *Improperly prepared walls and other structures as well as the equipment being installed can result in property damage, injury, death and/or liability to the installing contractor.* Do not proceed if any part of the installation is in doubt.

Caution: Due to the wide variety of structures, environments, materials and installation methods, the installing contractor must exercise good judgment in selecting the proper mounting area. The mounting structure must be capable of supporting at least 5 times the load of the installed equipment. Consult local building codes for further guidance.

Follow these instructions for the most efficient and safest mounting results.

Package Contents:

1 pc	Upper Frame Assembly w/ locking arms
1 pc	Lower Frame Assembly w/ locking arms
6 pcs	Vertical Joiner bracket w/ hardware
2 pcs	Media player mounting bracket
64 pcs	Adjustable VESA button (black)
42 pcs	Adjustable Lag bolts, 5/16"x2" long
42 pcs	Hex nuts, 5/16"
42 pcs	Flat washer, 5/16
1 pc	Instruction sheet

4 Wide x 4 Deep Video Wall Display (Rear View)

Notes:
Hardware to mount frames to wall is included.

Step 1: Mount Upper Frame to Wall
Scribe a horizontal line on the wall showing the exact location of where the top edge of the upper left monitor will be. Measure down 9.08" (230.6mm) from that line and scribe another horizontal line showing where the horizontal location of the first adjustable lag bolt will be **(Figure 1).**

Scribe a vertical line showing where the top left side of the upper monitor will be. Measure to the right 20.84" (529.4mm) and scribe another vertical line showing where the vertical location of the first adjustable lag bolts **(Figure 1).** Mark the intersection of the vertical and horizontal lines.

Measure 150" (3810mm) to the right for the location of the second adjustable lag bolt. Use a long level to make sure the second location is horizontally aligned to the first lag bolt location **(Figure 1).** Mark the second lag bolt location.
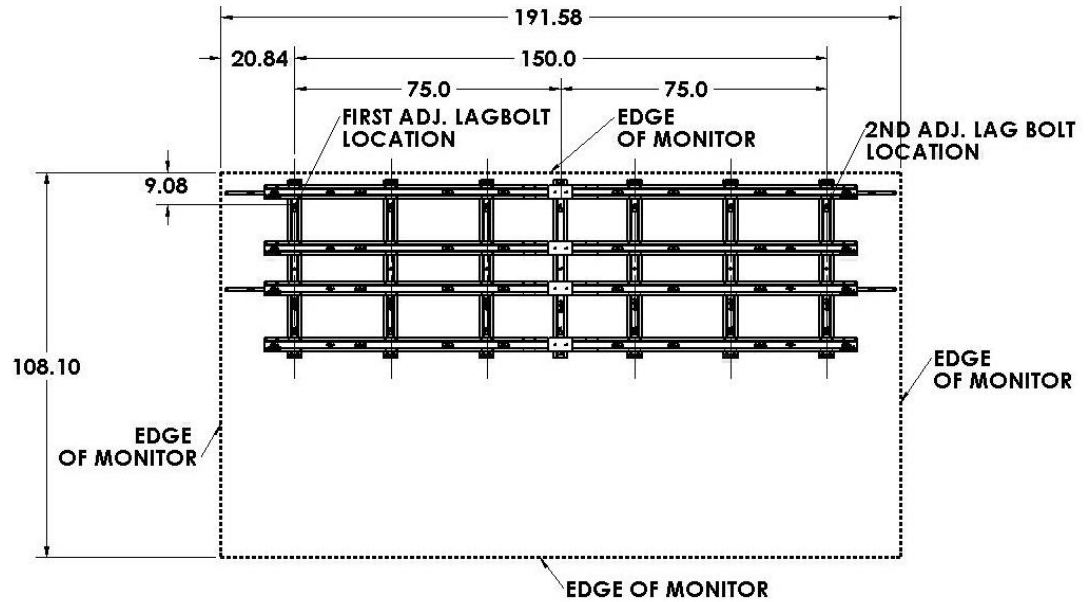
Figure 1

Measure 75" (1905mm) to the right for the middle lag bolt location.

Pre-drill the marked lag bolt locations using a 3/16" or 5mm drill bit. Install the first and second adjustable lag bolts to the pre-drilled holes until the hex part of the bolt is flush to the wall. A deep socket wrench maybe required.
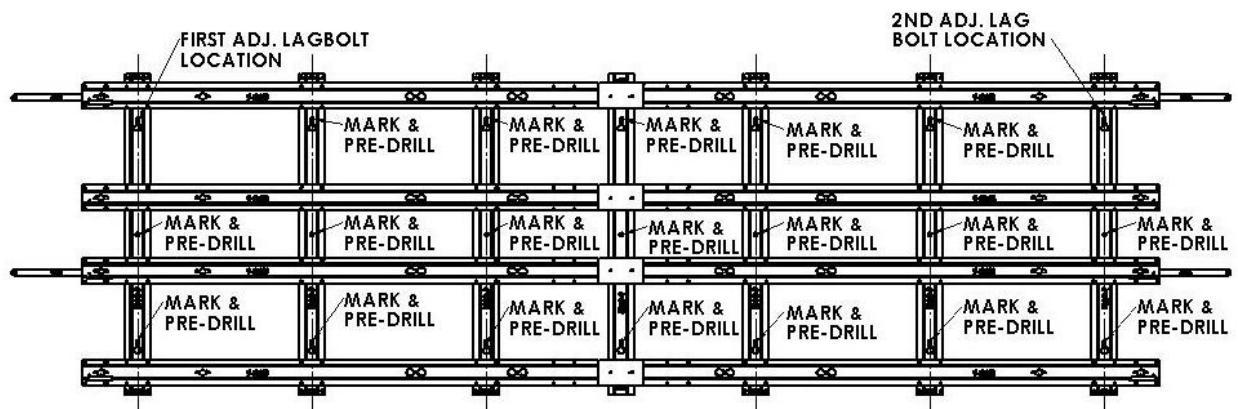
Figure 2

Step 2:
Hang the upper frame to the adjustable lag bolts (Two people required). Install the provided hex nut and flat washer over the adjustable lag bolts, level upper frame then tighten the hex nuts.

Use the frame as a template to mark the other locations of the adjustable lag bolts. Use three (3) per vertical channel, two keyholes and the center hole **(Figure 2).**

Loosen and remove the hex nut and flat washer securing the upper frame to the wall then place the upper frame back on the floor. Pre-drill marked holes using the 3/16" or 5mm drill bit then install the other adjustable lag bolts until the hex part of the bolt is flush to the wall **(Figure 2).**
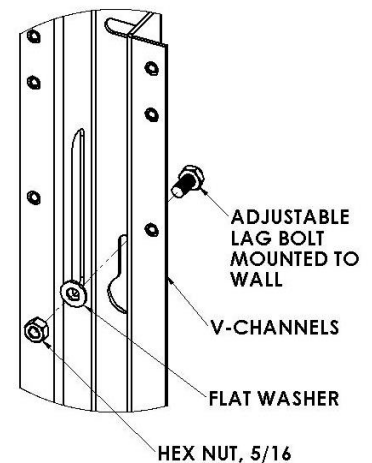
Figure 3

Hang the upper frame back onto the adjustable lag bolts mounted on the wall. Install hex nut and flat washer then snugly tighten hex nuts. **DO NOT TIGTHEN** permanently until the entire video frame is installed and adjusted **(Figure 3).**

Step 4:
Attach the vertical joiner plates on top of the Lower frame. Tighten screws permanently **(Figure 4).**

Step 5: Attach Lower frame to Upper Frame
Align vertical joiner brackets from the lower frame to the bottom of the upper frame's vertical channel holes then secure using the supplied M6 flat head screws (Figure 5). Snugly tighten screws only.

Mark the locations of the adjustable lag bolts for the lower frame. Three per V-Channels, the same as the upper frame **(Figure 2).** Detach the lower frame from the top frame by unscrewing the screws on the Vertical joiner plate then place lower frame back on the floor.

Pre-drill marked location using a 3/16" or 5mm drill bit then install the adjustable lag bolts until the hex part is flushed with the wall.
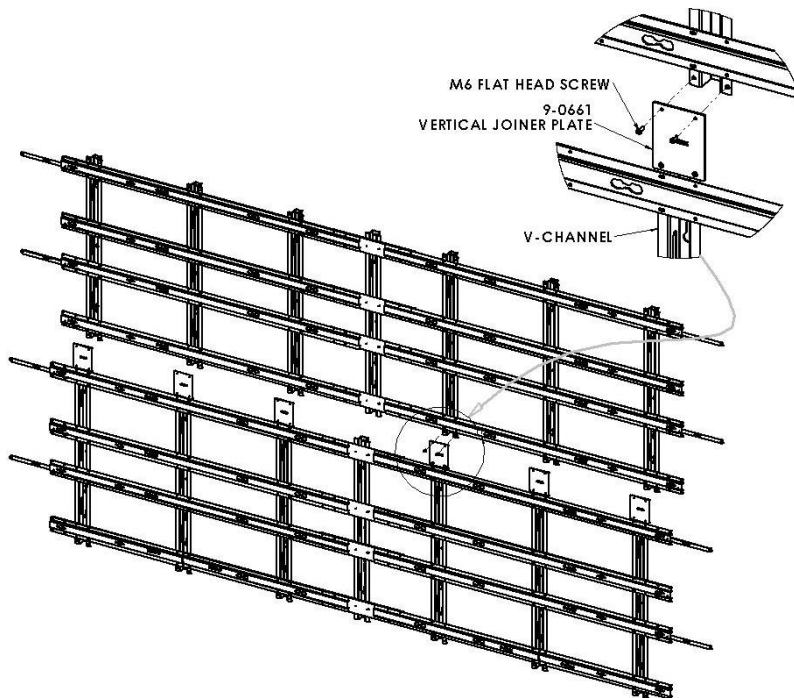

Figure 4

Step 6:
Hang the lower frame to the adjustable lag bolts on the wall then connect the vertical joiner plates to the bottom of the upper frame using the provided screws. Tighten screw permanently.

Install the flat washer and hex nut onto the adjustable lag bolts to secure the lower frame to the wall then snugly tighten **(Figure 5).**

Step 7:
Use a long level to plum the frame by rotating the adjustable lag bolts on the V-channels using the provided adjustment wrench starting from one side of the frame. Rotate counter clockwise to pull the frame forward and clockwise to push the frame back towards the wall **(Figure 6).** Use a long level, a

Figure 5

straight edge or a piece of string secured on each side of the frame to make the horizontal H-slat straight by adjusting the adjustable lag bolts closest to the H-slat. Once the frame is plumed and leveled, tighten all hex nuts permanently.
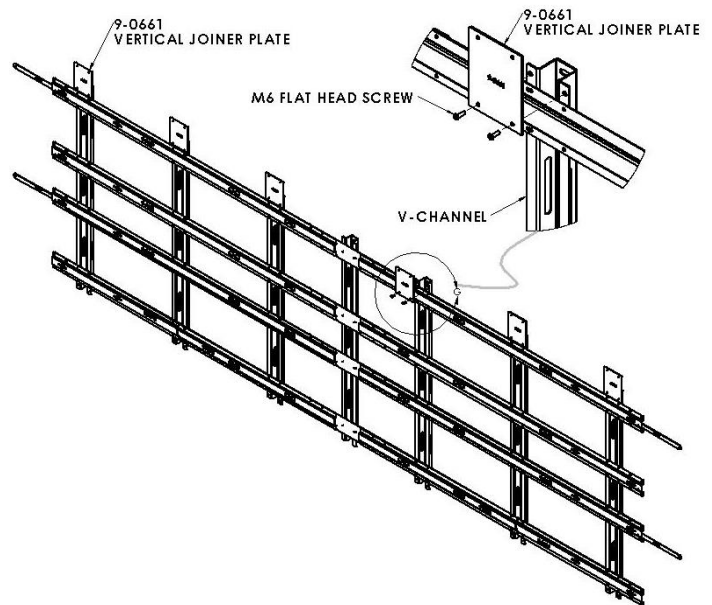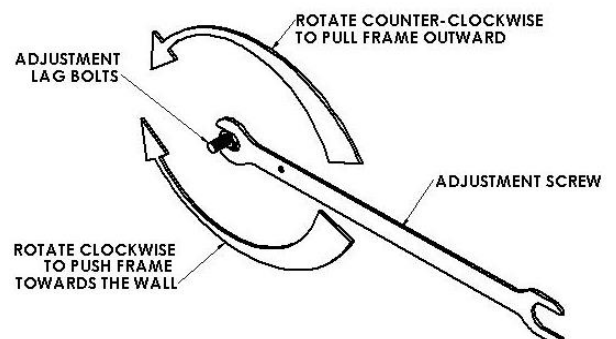

Figure 6

Step 8: Install Brackets to Media Player (<u>OPTIONAL</u>)
Attach the media player brackets to the sides of the media player using its existing side screws **(Figure 7).**

Step 9: Install Media Player (<u>OPTIONAL</u>)
Choose and remove the bottom left or right lower side H-slat by unscrewing its flat head screws **(Figure 8).**   Install the media player to the wall in between the two vertical V-channels using the appropriate fasteners for the media player's bracket. Re-install the bottom lower side H-slat **(Figure 8).**

Step 10: Install upper stand-off buttons to monitors
Thread the adjustable VESA buttons to the VESA mounting holes in the back of each monitor using a large flat head screw driver **(Figure 9).**
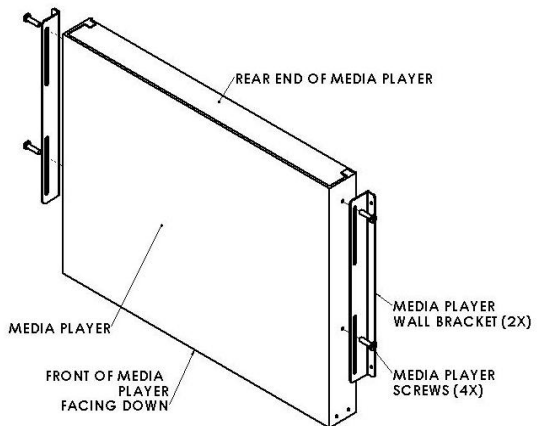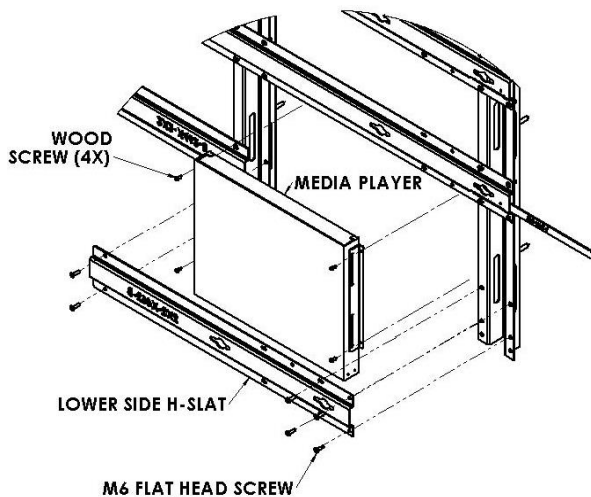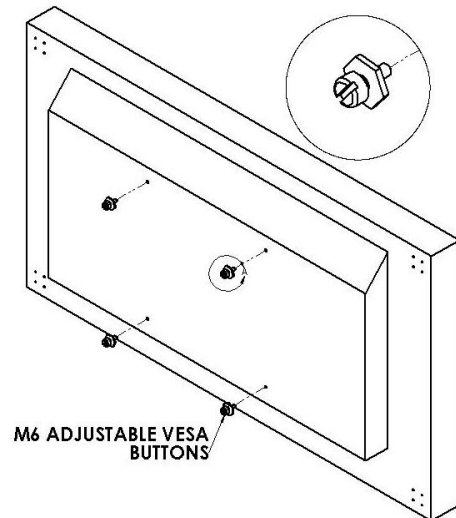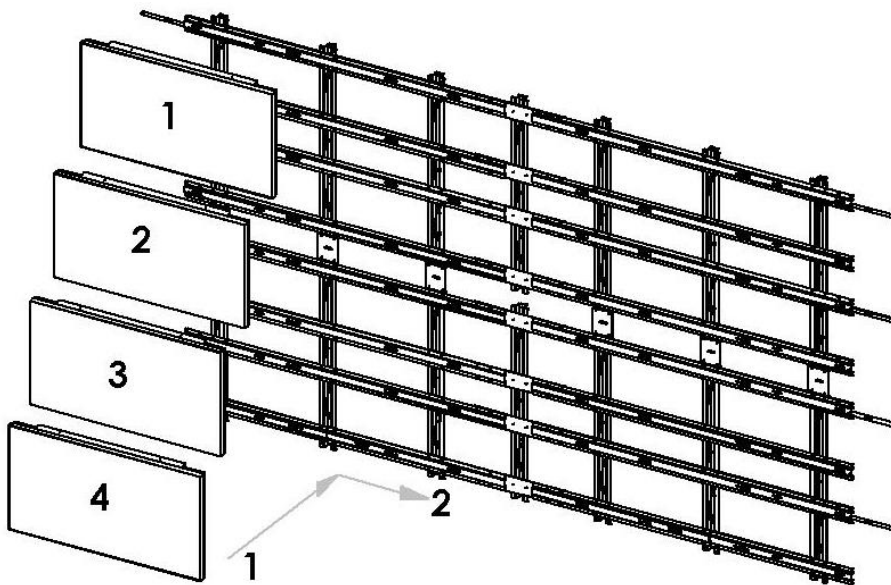

Figure 7

Figure 9

Figure 8

Step 11: Install Monitors to the Left Column
Lift up the locking arms on the left side of the frame. Starting with the upper left monitor, connect power and signal wires to each monitor then align its four Adjustable VESA buttons with the four large slots in the H-slats then slide the monitor from left to right until it stops. Pull down the locking arm to lock monitor into place (Figure 10). Repeat step 9 for the three lower monitors.

Step 12: Note on alignment:
While installing monitors, check for front and side alignment of the monitors. The surfaces

Figure 10

of all monitors must be aligned and flush to each other. If one or more screens are tilted more than others use the adjustment wrench to reach the hex portion of the M6 adjustable VESA buttons at the rear of the monitor then rotate counter clockwise to pull the front of the monitor forward or clockwise to push it back towards the wall. If access to the rear is not accessible remove the screen(s) and depending whether the monitor needs to be tilted forward or backward rotate the buttons using the adjustment wrench, a flat head screw driver or fingers **(Figure 11).** Reinstall and recheck surface alignments. Repeat where necessary.

Step 13: Install Second Column Monitors
Starting with the top monitor, connect the power and signal wires to each monitor then align its four M6 adjustable VESA buttons with the four large slots in the H-slats. Slide the monitor from right to left until it is snug against the left column monitor **(Figure 12).** Repeat step 11 for the three lower monitors. Check for front and side alignments-refer to Step 12.
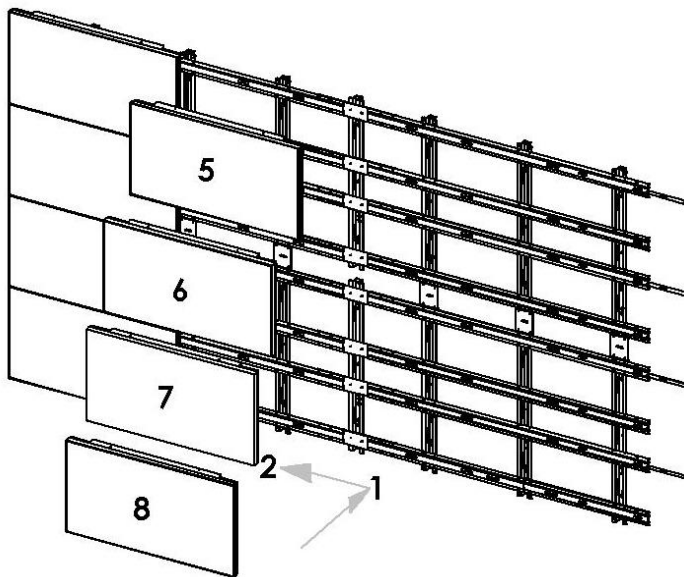

Figure 11

Figure 12

Step 14: Install Third Column Monitors
Repeat step 13 to install the third column monitors (Figure 13)**.**

Step 15: Install Fourth Column Monitors
Lift up the locking arms on the right side of the frame. Starting with the upper monitor, connect power and signal wires to each monitor then align its four M6 adjustable VESA buttons with the four large slots in the H-slats. Slide the monitor from right to left until it is snug against the next column monitor. Pull down the locking arm to lock monitor into place **(Figure 14).**

Repeat step 12 for the lower three monitors. Check for front and side alignments. Refer to Step 12.

Servicing Tips
First (Left) Column Monitor Removal
Reach fingers between the wall and the monitor and lift the locking arm to unlock. Slide monitor to the left about 1.00" (25.4mm) until its VESA buttons disengage from the frame, lift a little to support the weight of the monitor then slowly pull to remove **(Figure 15).**

Second Column Monitor Removal
Reach fingers between the left-side wall and the monitor to the left of the monitor being removed. Lift the locking arm to unlock then slide the monitor to its extreme left position, about 1.5" (40 mm.) Slide the second column monitor to the left until its VESA buttons disengage from the frame, lift a little to support the weight of the monitor then slowly pull to remove.
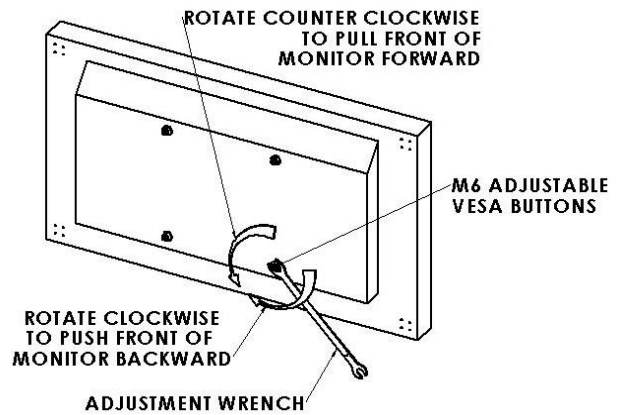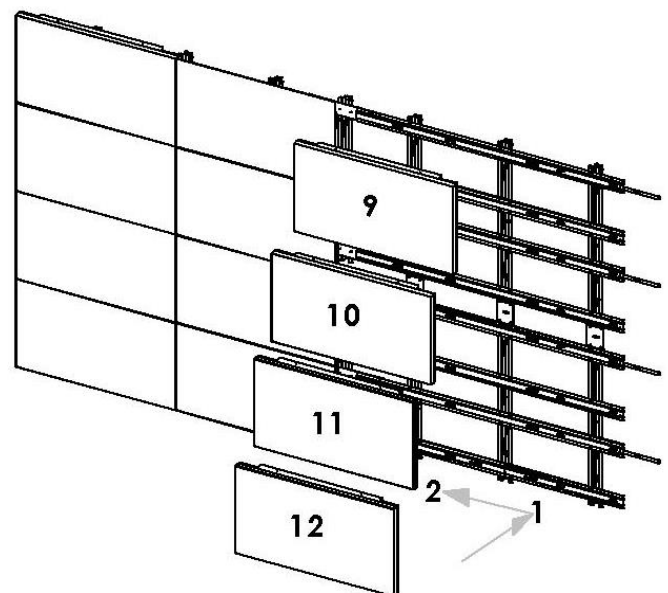

Figure 13

Third Column Monitor Removal

Reach fingers between the right side wall and the monitor to the right of the monitor being removed. Lift the locking arm to unlock then slide the monitor to its extreme right position, about 1.5" (40 mm). Slide the third column monitor to the right until its VESA buttons disengage from the frame, lift a little to support the weight of the monitor then slowly pull to remove.

Fourth (Right) Column Monitor Removal

Reach fingers between the wall and the monitor and lift the locking arm to unlock. Slide the monitor to the right until its VESA buttons disengage from the frame, lift a little to support the weight of the monitor then slowly pull to remove **(Figure 14).**
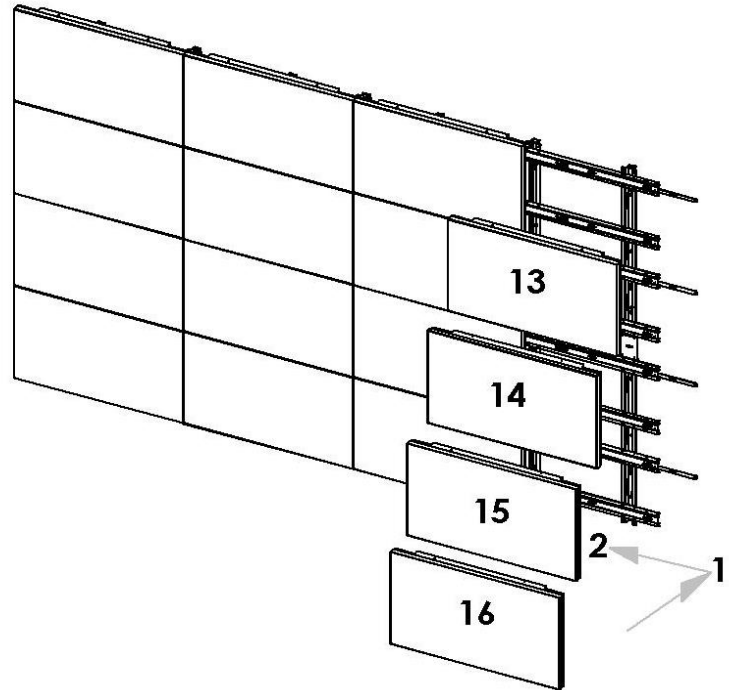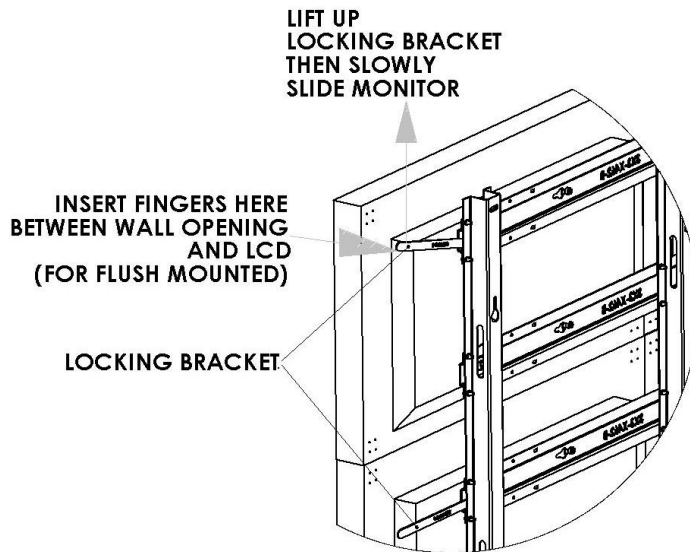
Figure 14

Figure 15