



## ADJ EVS3 Video Panel User Manual

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User Manual  
EVS3 FLEX 45



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## EVS3 Video Panel

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## DOCUMENT VERSION



<https://qrs.ly/2vbr0rs>

Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

| Date       | Document Version | Software Version | DMX Channels   | Notes           |
|------------|------------------|------------------|----------------|-----------------|
| 11/25/2024 | 1                | N/A              | Not Applicable | Initial Release |
|            |                  |                  |                |                 |
|            |                  |                  |                |                 |

## Europe Energy Saving Notice

### Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

## GENERAL INFORMATION

### INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

The EVS3 Flex45 Video Panel, a cutting-edge solution crafted to redefine your visual experiences with unparalleled clarity and adaptability. Boasting a pixel pitch of 3.91mm and utilizing Kinglight Copper, 3-in-1 SMD 2121 LEDs, this panel delivers exceptional image quality. With a pixel density of 65536 per square meter and a module quantity of four, each panel offers a resolution of 128×128 pixels, ensuring stunning visuals.

Measuring 19.68" x 19.68" x 2.96" (500 x 500 x 75mm) and weighing 15.6 lbs. (7.06kg), it strikes the perfect balance between performance and portability.

Featuring innovative attributes such as Memory on Module (MOM) and Corner Protectors, the EVS3 Flex45 is designed for seamless operation and durability. Its rear serviceability allows for easy replacement of the four video modules, ensuring uninterrupted performance.

Mechanical excellence is guaranteed with a surface flatness that keeps gaps under 0.5mm, providing a smooth viewing experience.

In terms of optics, the panel shines with a brightness of 800 NITS and a wide view angle of Horizontal 160°/Vertical 140° @ 9.75 ft. (3m), delivering vibrant visuals from various perspectives. With a gray scale of ≥14-bit and support for 256 display colors, it offers precise color representation and exceptional image quality. Moreover, brightness adjustment from 0~100% with 100 levels and a contrast ratio of 5000:1 enable customization to suit any environment.

Efficiency is paramount with a power supply that operates from 100~240V 50-60Hz, consuming a maximum of 120W per panel and an average of 48W per panel. Power and data connections are facilitated through Power Lock In/Out and Data Lock In/Out ports, simplifying setup. The control system, powered by Nova Star Synchronous System with Control via DVI, ensures intuitive operation, with support for various input formats and resolutions.

Environmental considerations are addressed with an operating temperature range of -4° to 104°F (-20° to +40°C) and operating humidity of 10 – 90% (No Condensation), making it suitable for diverse conditions. Storage temperature ranges from -40°

to 176°F (-40° to +80°C), with storage humidity at 10-90% (No Condensation), ensuring longevity. Optional accessories like the VSFC8 flight case and FLEX45RB rigging bar provide added convenience and versatility, allowing for secure transportation and flexible installation options. With certifications like cETLus and an IP rating of IP20 (Front and Back), the EVS3 Flex45 Video Panel offers both performance and peace of mind, making it the ideal choice for a wide range of indoor applications.

### UNPACKING

Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event that damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash.

Please recycle whenever possible.

## GENERAL INFORMATION

Customer Support: Contact ADJ Service for any product related service and support needs. Also visit [forums.adj.com](http://forums.adj.com) with questions, comments or suggestions.

Parts: To purchase parts online visit: <http://parts.adj.com> (US)

<http://www.adjparts.eu> (EU)

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**CAUTION!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, as doing so will void your manufacturer's warranty. In the unlikely event your unit may require service, please contact ADJ Products, LLC.

Do not discard the shipping cartoon in the trash. Please recycle when ever possible.

## LIMITED WARRANTY (USA ONLY)

A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, you must obtain a Return Authorization number (RA#) before sending the product back—please contact ADJ Products, LLC Service Department at [800-322-6337](tel:800-322-6337). Send the product only to the ADJ Products, LLC factory. All shipping charges must be prepaid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall incur no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because it was not properly maintained as set forth in the product instructions, guidelines and/or user manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic checkup. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.

E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in

duration to the warranty period set forth above. And all warranties, whether expressed or implied, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Product, LLC be liable for any loss and/or damage, direct and/or consequential arising out of the use of, and/or inability to use this product.

G. This warranty is the only written warranty applicable to ADJ Products, LLC products, and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.





#### MANUFACTURER'S LIMITED WARRANTY PERIODS:

- Non-LED Lighting Products = 1-Year (365 Days) (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- Laser Products = 1-Year (365 Days) (excluding laser diodes which have a 6-Month Limited Warranty)
- LED Products = 2-Year (730 Days) (excluding batteries which have a 180 Day Limited Warranty)
- **NOTE:** 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the United States.  
StarTec Series = 1-Year (365 Days) (excluding batteries which have a 180 Day Limited Warranty)
- ADJ DMX Controllers = 2 Year (730 Days)
- American Audio Products = 1 Year (365 Days)

#### SAFETY GUIDELINES

This device is a sophisticated piece of electronic equipment. To guarantee smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ is not responsible for injury and/or damages resulting from the misuse of this panel due to the disregard of the information printed in this manual.

Only qualified and/or certified personnel should perform the installation of this panel and all included rigging parts and/or accessories. Only the original included rigging parts and/or rigging accessories for this panel should be used for proper installation. Any modifications to the panel, including to rigging and/or accessories, will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.

|   |  |
|---|--|
|  | PROTECTION CLASS 1 – PANEL MUST BE PROPERLY GROUNDED.  |
|  | THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS PANEL. DO NOT ATTEMPT TO PERFORM ANY REPAIRS BY YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS PANEL AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS. |
|  | DO NOT PLUG PANEL INTO A DIMMER PACK!<br>NEVER OPEN THIS PANEL WHILE IN USE!<br>UNPLUG POWER BEFORE SERVICING PANEL!<br>NEVER TOUCH FRONT OF PANEL DURING OPERATION, AS IT MAY BE HOT!<br>KEEP FLAMMABLE MATERIALS AWAY FROM PANEL.  |
|  | INDOOR / DRY LOCATIONS USE ONLY!<br>DO NOT EXPOSE PANEL TO RAIN AND/OR MOISTURE!<br>DO NOT SPILL WATER AND/OR LIQUIDS ON OR INTO THE PANEL!  |

- DO NOT touch panel housing during operation. Turn OFF power and allow approximately 15 minutes for panel to cool down before servicing.
- DO NOT operate devices with covers open and/or removed.
- DO NOT shake panel, and avoid brute force when installing and/or operating.
- DO NOT expose any part of the panel to open flame or smoke. Keep panel away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- DO NOT install/use in extremely hot/humid environments, or handle without ESD precautions.
- Operating ambient temperature range is from -20°C to 40°C (-4°F to 104°F). DO NOT operate this device when ambient temperature is outside this range, as doing so will result in damage.
- DO NOT operate if power cord is frayed, crimped, damaged, and/or if any of the power cord connectors are damaged and do not insert into the panel securely and with ease. NEVER force a power cord connector into the panel. If the power cord or any of its connectors are damaged, replace immediately with a new cord and/or connector of the same power rating.
- DO NOT block air ventilation slots/vents. All fan and air inlets must remain clean and never blocked.
- Allow approximately 6" (15cm) between panel and other devices or a wall for proper cooling.
- ALWAYS disconnect panel from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end, and never pull out the plug by tugging the wire portion of the cord.
- ONLY use the original packaging materials and/or case to transport the panel in for service.
- PLEASE recycle shipping boxes and packaging whenever possible.
- To avoid causing physical damage, read the installation instructions carefully before installation.
- Panels should be installed/operated by qualified and trained professionals ONLY.
- Always mount panels in a safe and stable manner.
- INDOOR / DRY location use ONLY! Outdoor use will void the manufacturer's warranty.
- Wear appropriate safety equipment during panel installation.
- Turn OFF power to panel, computers, servers, system boxes, and monitors before making any type of power or data connections and before performing any maintenance work.
- Electronics used in this panel are ESD (Electrostatic Discharge) sensitive. To protect device from ESD, wear a grounded ESD wrist strap or similar grounding device when handling panel.
- Panel must be properly grounded before operating. (resistance must be less than 4Ω)
- Ensure all power is disconnected from panel before unplugging any data cables from the panel, especially serial line ports.
- Route power and data cables so that they are NOT likely to be walked on or pinched.
- Air conditioning is required if operating environment temperature exceeds 30°C (86°F).
- If panels are not in regular use for an extended period, it is advised to test run the devices for 2 hours each week to ensure that they remain in proper working condition.
- Cases used to transport panel must be properly waterproofed for transportation.

## **MAINTENANCE GUIDELINES**

- Careful and regular maintenance is necessary to optimize the potential functional lifespan of the video panels.
- Read the installation and operation instructions for correct operation of the video panels.
- Although the video panels are designed and built to withstand some impact forces when installed correctly, care

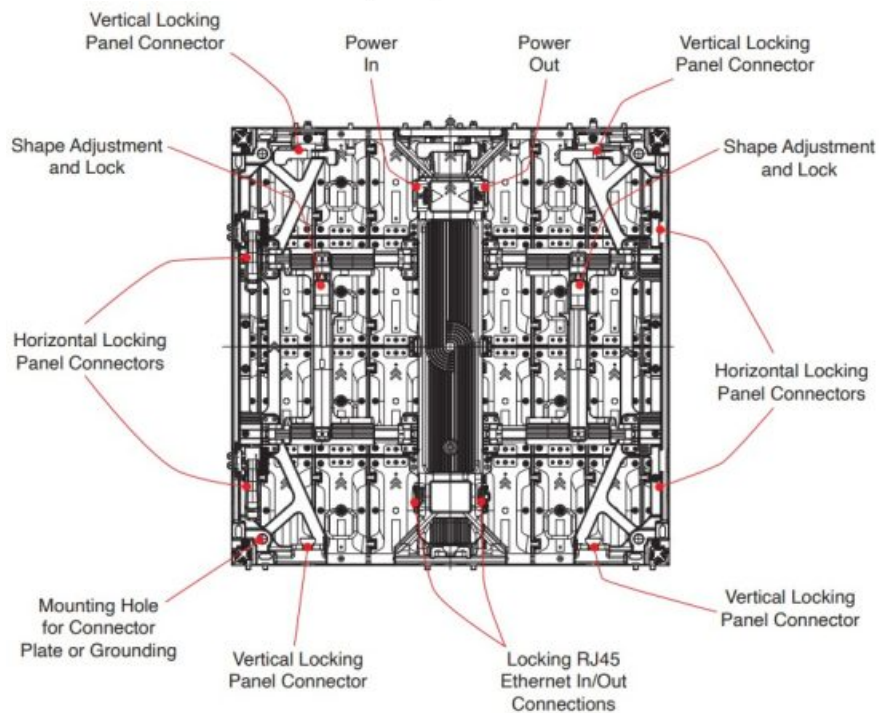
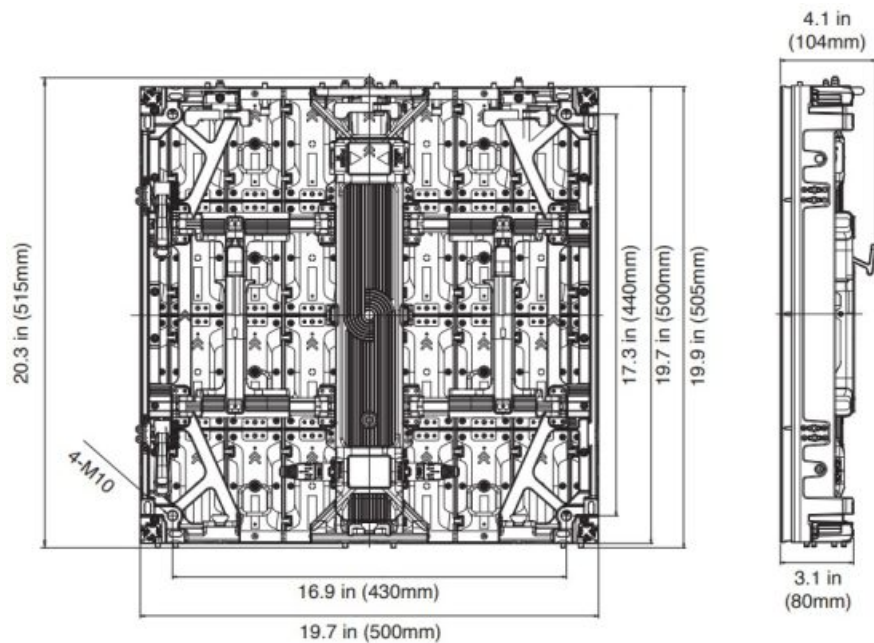
should still be taken to avoid impact damage when handling or transporting them, especially at or near the corners and edges of the devices, which are particularly susceptible to damage during transportation.

- The device should be serviced by a qualified service technician when:
  - A. Objects have fallen onto, or liquid has been spilled into, the device.
  - B. The device has been exposed to rain or water conditions in excess of IP rating parameters for an IP20 device. This includes exposure from the front, rear, or side of the panels.
  - C. The device does not appear to operate normally or exhibits a marked change in performance.
  - D. The device has fallen and/or has been subjected to extreme handling.
- Check each video panel for loose screws and other fasteners.
- If the video panel installation is fixed or displayed for a lengthy time, regularly inspect all rigging and installation equipment, and replace or repair as necessary.
- During long periods of non-use, disconnect the main power to the unit.
- Use necessary ESD (electrostatic discharge) precautions when handling video panels, especially the LED screens, as they are ESD sensitive and easily damaged from ESD exposure.
- The Null Line and Live Line connections from the computer and control system cannot be reversed and should therefore only be connected in original layout order.
- If the GFI (Ground Fault Interrupt) breaker-switch trips often, check the display or replace the power-supply switch.
- When operating the video panels, power up the computer before powering up the video panels. Conversely, when shutting down after operation, turn the video panels off before turning off the computer. If the computer is turned off while the panels are still powered on, a high intensity spike of brightness may occur, resulting in catastrophic damage to the LEDs.
- If a circuit shorts out, a breaker-switch trips, wires burn, and or any other abnormality appears while conducting an electrical test, discontinue testing, and troubleshoot units to find the problem before continuing with any testing or operation.
- To ensure consistent operation, it might be necessary to learn operating parameters for installation, data recovery, backup, controller settings, and basic data preset modification.
- Regularly check computer for any viruses and remove any irrelevant data.
- Only a qualified technician should operate software system.
- Remove any moisture found inside or outside of any video panels before dismantling video installation and returning them to their optional flight cases (sold separately). Ensure flight cases are free of any moisture, using a fan to dry them if necessary, and avoid frictional contact that may result in ESD generation when returning video panels to the flight cases.
- The video panels are designed for indoor use only, within its IP20 rating parameters (front / rear). Limit or remove any unit exposed to moisture, condensation, or humidity, and consider using air conditioning where available.
- When not in use, store video panels in a dry, well ventilated facility.

## **PANEL OVERVIEW**

**DIMENSIONS:** 20.3" x 19.7" x 4.1" (515mm x 500mm x 104mm)



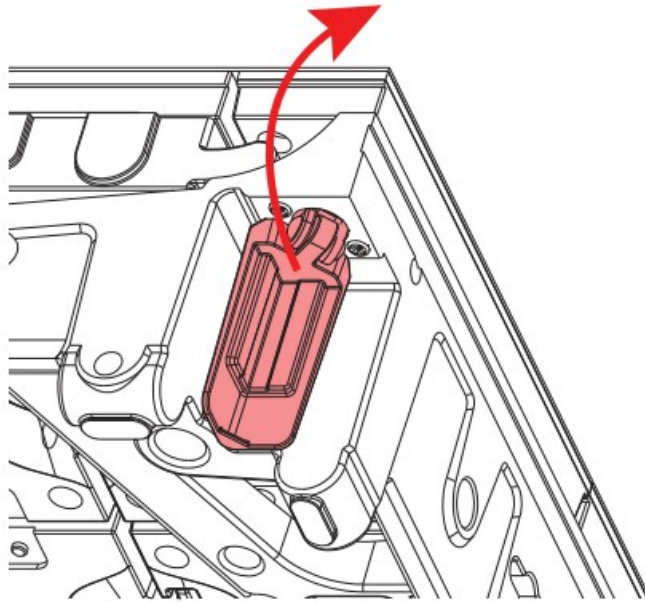


## HANDLING AND TRANSPORTATION

### INTEGRATED CORNER PROTECTORS

The corners of the video panels are susceptible to damage during handling and transportation. When removing the video panels from their respective Flight Cases (sold separately), and before they are installed, exercise extra caution to avoid damaging any of the 4 corners.





The integrated corner protectors rotate out of their respective housing pockets to protect the corners during storage or transportation (below right). During installation, these corner protectors can be rotated back into their housing pockets to allow for the fitment of adjacent panels (below left).

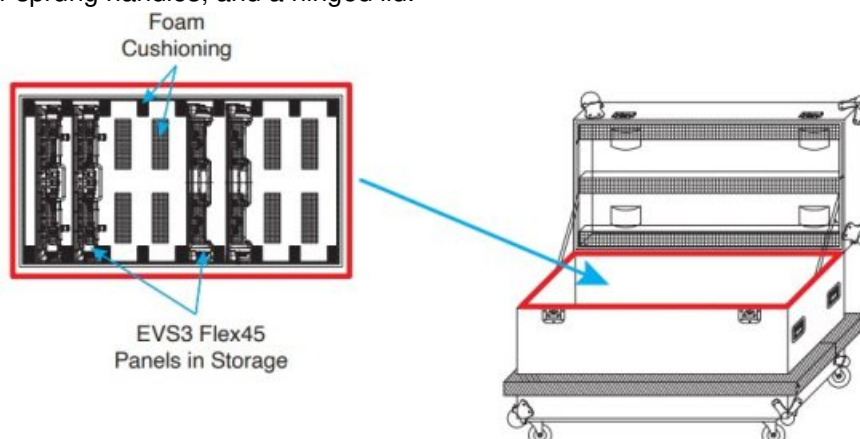


## ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Because these are ESD sensitive units, ESD precautions must be observed when removing the video panels from their flight case (ESD gloves, protective clothing, wrist straps, etc.). In addition to using standard ESD precautions, in order to reduce static building friction, take care to lift the panels without rubbing the LED panel surface along the foam-covered slots, which can generate static electricity that can damage LEDs.

## FLIGHT CASE

The optional VSFC8 Flight Case (sold separately) holds eight (8) individual video panels. The flight case features a full foam lining with slots for each unit. The case is robust, offering complete protection for a set of panels on the road. Designed specifically for use with these video panels, it is constructed from 9mm plywood and fitted with steel ball corners, aluminum edging, large swivel castors, professional butterfly latches, four sprung handles, and a hinged lid.



## INSTALLATION GUIDELINES



**DO NOT INSTALL THE PANEL IF YOU ARE NOT QUALIFIED TO DO SO!**

**INSTALLATION BY QUALIFIED TECHNICIANS ONLY!**

**INSTALLATIONS SHOULD BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE A YEAR!**



### **FLAMMABLE MATERIAL WARNING**

Keep panel(s) a minimum of 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



### **ELECTRICAL CONNECTIONS**

A qualified electrician should be used for all electrical connections and/or installatons.



**A MAXIMUM OF 6 PANELS** may be suspended from/stacked upon each other in a vertical column. There is no limit on the number of panels that may be installed in a single horizontal row. Note that additional processing power may be necessary to operate larger quantities of panels.



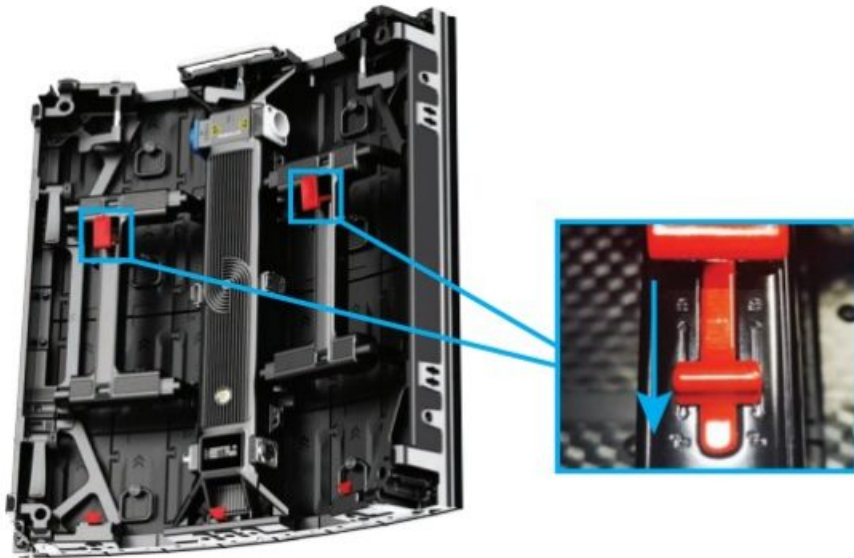
**USE CAUTION WHEN POWER LINKING PANELS OF DIFFERENT MODEL TYPES, AS POWER CONSUMPTION CAN VARY WITH MODEL TYPE, AND MAY EXCEED THE MAX POWER OUTPUT OF THIS PANEL. CONSULT THE SILK SCREEN FOR MAX CURRENT RATING.**

|                       |                                  |
|-----------------------|----------------------------------|
| Input Power           | AC 100-240VAC, 50/60 Hz, 16A Max |
| Output Power          | AC 100-240VAC, 50/60 Hz, 14A Max |
| Max Power Consumption | 120W Max, 48W Average            |

- **WARNING!** The safety and suitability of any lifting equipment, installation location/platform, anchoring/rigging/mounting method and hardware, and electrical installation is the sole responsibility of the installer.
- Panel(s) and all panel accessories and all anchoring/rigging/mounting hardware **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Before rigging/mounting a single panel or multiple interconnected panels to any metal truss/structure, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the panels(s), clamps, cables, and all accessories.
- Inspect metal truss/structure visually to ensure it does not flex and/or become deformed due to the weight of the panel(s). Damage caused to panel(s) by mechanical stress is not covered by warranty.
- Panel(s) should be installed in areas outside walking paths, seating areas, and areas where unauthorized personnel might reach the panel(s) by hand. Access under work area must be blocked.
- **NEVER** stand directly below the panel(s) when rigging, removing, or servicing.
- **OVERHEAD RIGGING:** Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable. Overhead rigging requires extensive experience, including calculating working load limits, knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture itself, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury and property damage.

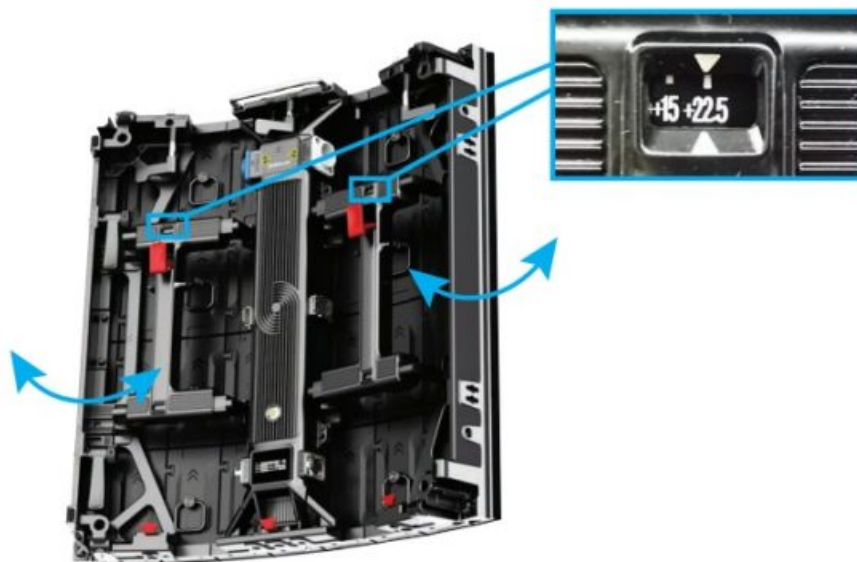
## PANEL SHAPE ADJUSTMENT

The shape of the panel can be adjusted as desired. Each panel is composed of three segments, and their relative angles to each other can be independently adjusted. First, locate the two (2) red angle locks at the panel junctions, near the Power In/Power Out connectors, and move the locks to the unlocked position.



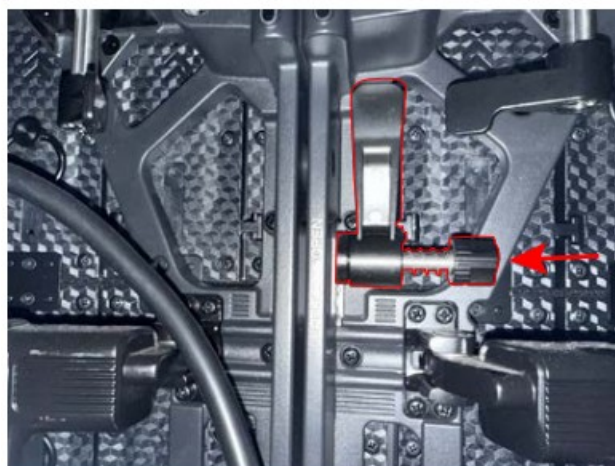
Manually angle the segments as desired, using the readouts above the angle locks to determine the angle. Each segment can be adjusted to angles of 0°, + 2.5°, + 5°, + 7.5°, + 15°, or + 22.5° (where positive values indicate the segments are bent towards the rear of the panel, and negative values indicate the segments are bent towards the front).

Move the locks back to the locked position to fix the panel shape.



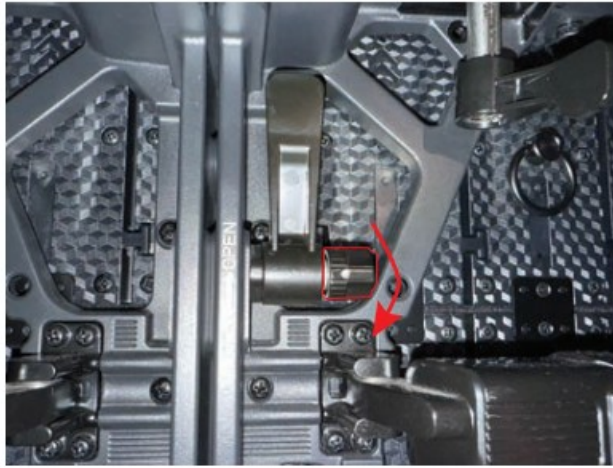
## HORIZONTAL PANEL CONNECTORS

1. Press the spring loaded tab-keyed connector until the tab-key passes through the matching socket.



2. Twist the tab-keyed connector until the tab is in the horizontal position to secure it in place.



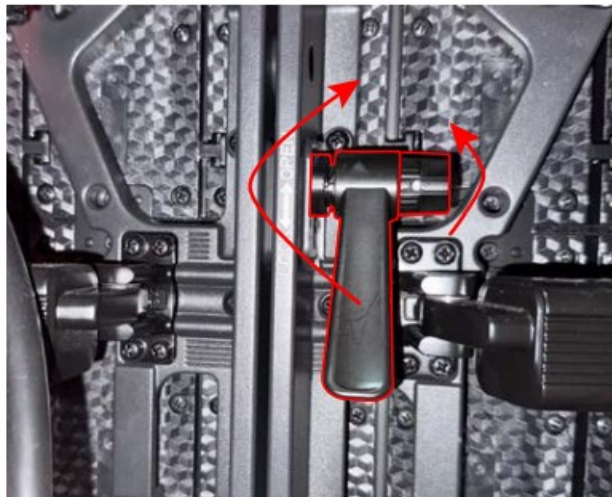


3. Rotate the lock handle downward to lock the tab-keyed connector in position.



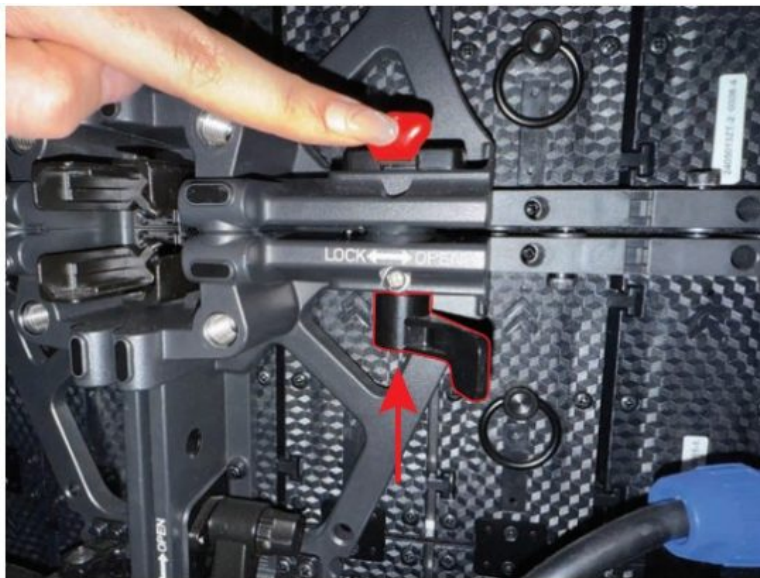
4. To unlock, rotate the lock handle upwards, then twist the tab-keyed connector until the tab is in the vertical position.

Doing so will release the tab-keyed connector due to spring tension.

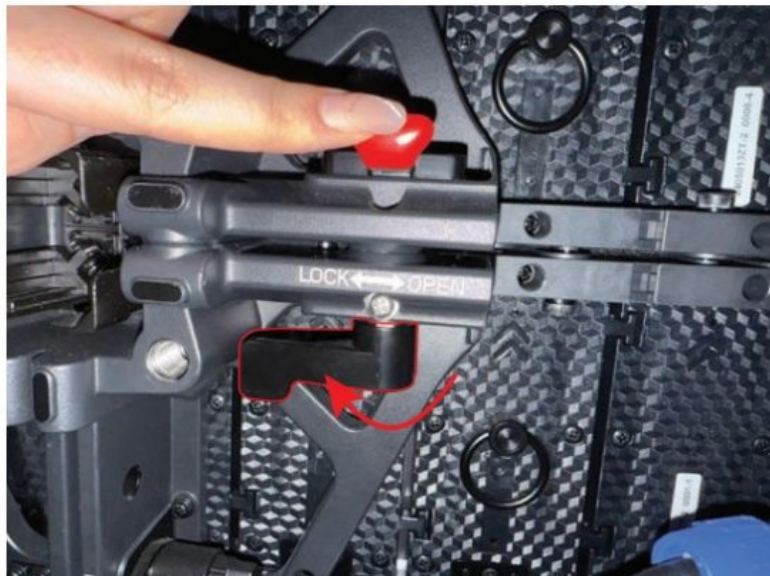


## VERTICAL PANEL CONNECTORS

The maximum number of panels that can be hung/stacked vertically is 6 panels.



1. Make sure the connector is in the open position. Then press and hold the red latch button, and push the connector upwards into the connector socket.

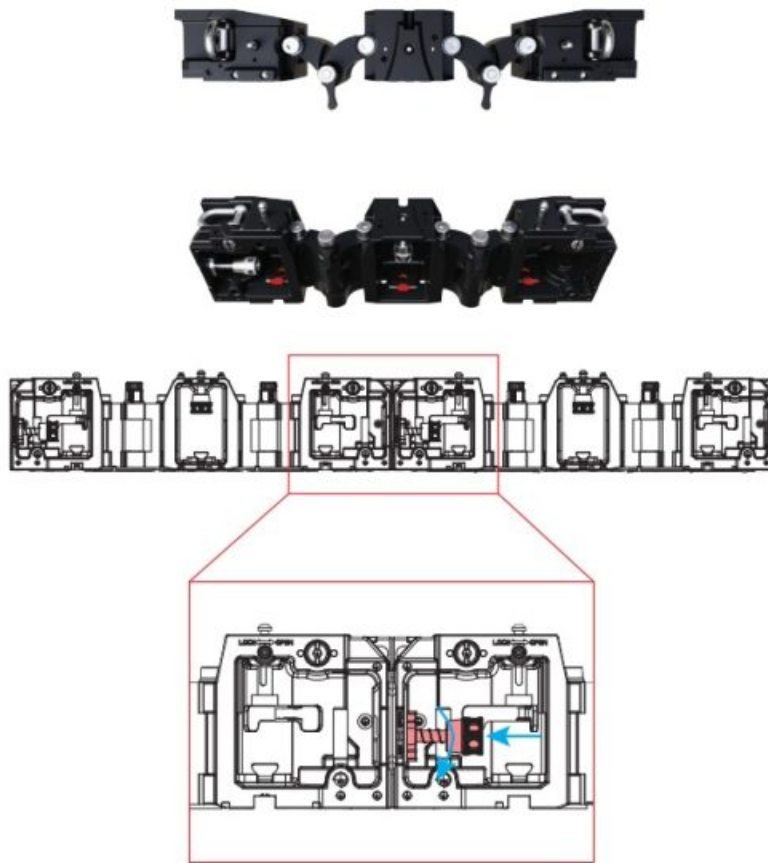


2. Twist the connector into the locked position to secure in place, then release the latch button.
3. To unlock, twist the vertical connector lever to the right, towards the direction marked "OPEN". The locking post will then drop out of place. Press the latch button if needed to help release the locking post.

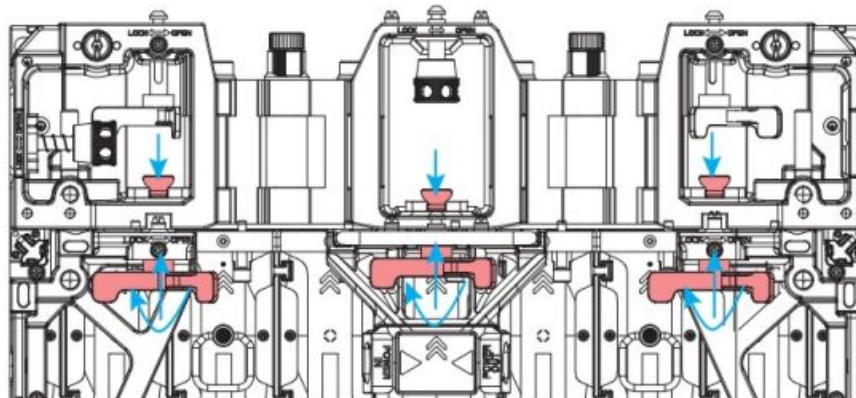
## HANGING INSTALLATION

The video panel is compatible with ADJ's FLEX45RB Rigging Bar (sold separately), which easily and securely locks to the top of the first panel in a vertical column of up to 20 video panels, allowing them hang from a truss, hoist, or lintel beam.

A qualified technician or trained professional is required to fly the FLEX45RB Rigging Bar/ Video Panel assembly.

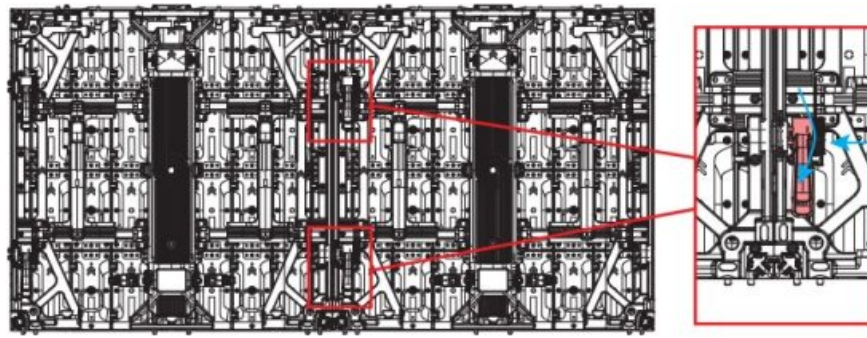


1. If your planned setup includes multiple vertical columns of panels, begin by linking the Rigging Bars together, using one Rigging Bar for each vertical column. Use the connectors located on each end of the Rigging Bars to link them together, as shown above. Place the Rigging Bars side by side, then push the spring-loaded connector of one Rigging Bar through the matching connector slot of the Rigging Bar beside it. Twist the connector to lock it into position.

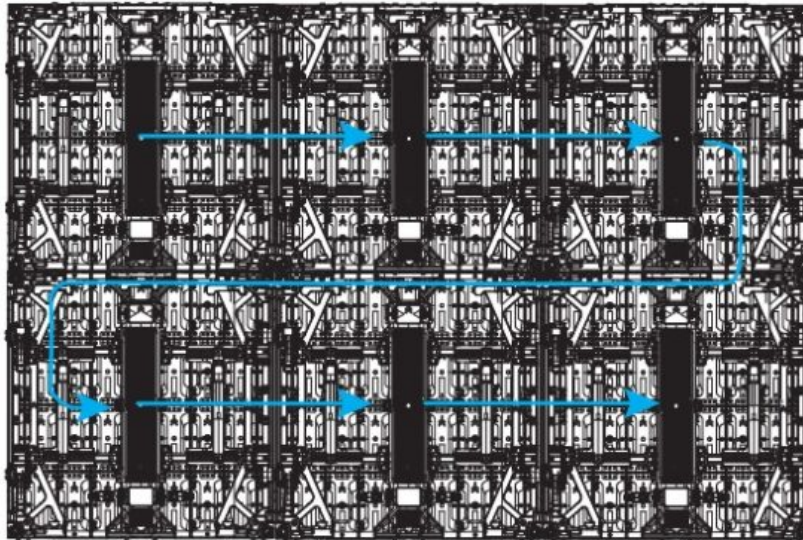


2. Attach the first panel of the top row of panels to the Rigging Bar. Press and hold the red latch button on the Rigging Bar, then push the vertical panel connectors on the panel upward until they are fully inserted into the connector slots on the Rigging Bar. Twist the connector into the locked position, then release the latch button on the Rigging Bar to secure in place. Repeat for all three (3) connectors.

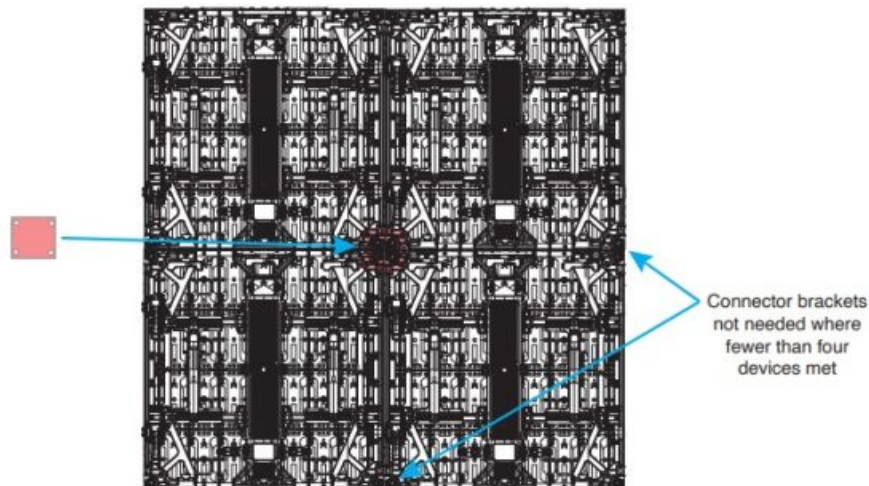




3. Secure the next panel in the top row by connecting the vertical panel connectors to the next Rigging Bar in the same way as described in step 2. Then use the horizontal panel connectors to link the two adjacent panels together. Press the horizontal connectors until they pass through the matching connector slot, then turn the tab into the horizontal position. Rotate the lock handle into the locked position to secure in place.



4. Continue connecting panels in this way. Complete each horizontal row of panels before moving down to the next row.



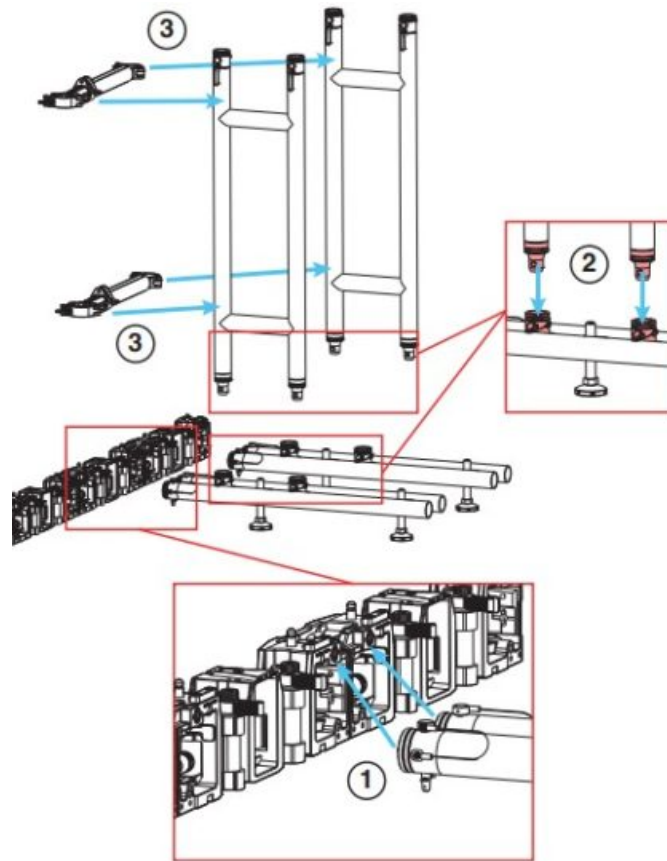
5. Lastly, install a connector bracket at each corner junction between panels or rigging bars, and secure each connector bracket with four (4) fasteners. Please note that connector brackets only need to be fitted at junctions where four devices (either panels or rigging bars) meet. Junctions where fewer than four devices meet, such as along the edges of the panel assembly, should NOT be secured with connector brackets.

## GROUND STACK INSTALLATION

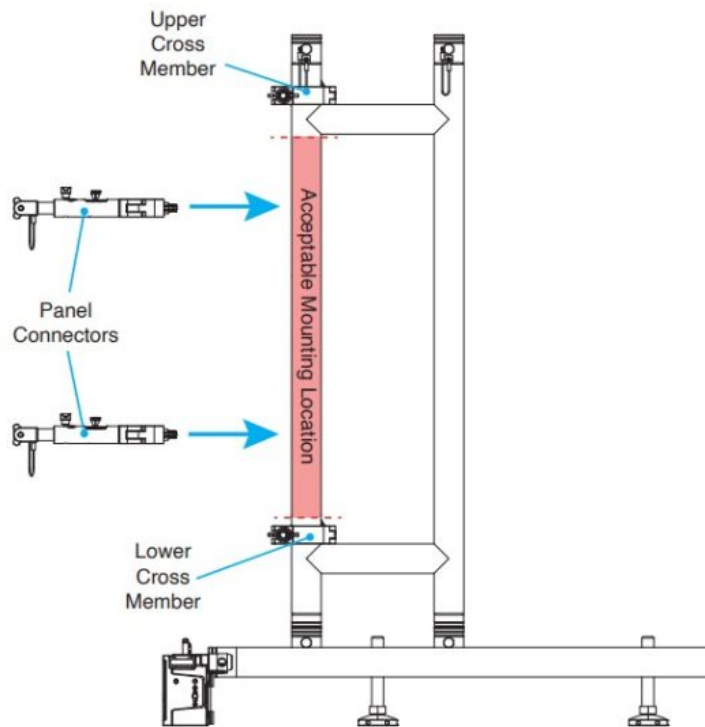
The ADJ FLEX45RB Rigging Bar (sold separately) can also be used in conjunction with a ground stack frame to create a free-standing display with a maximum vertical height of 6 panels.



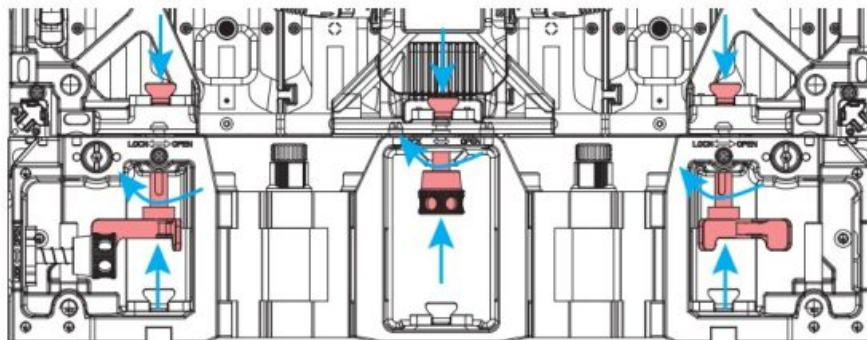
A qualified technician or trained professional is required to assemble the FLEX45RB Rigging Bar/Video Panel ground stack assembly.



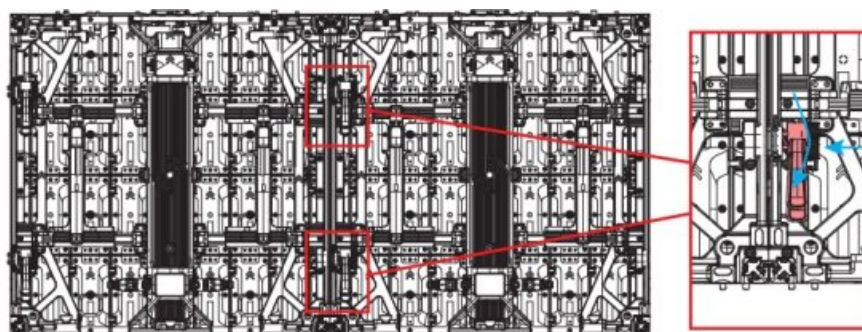
1. Link the Rigging Bars together, then connect the Chassis Supports to the Rigging Bars using the mounting holes on the back side of the Rigging Bars. The two beams of the Chassis Support should span the connection between two neighboring Rigging Bars, so that each individual beam is connected to a different Rigging Bar.
2. Insert the Vertical Posts into the post collars in the middle of the Chassis Supports, then use the locking pins to secure in place.
3. Use the Cross Members to link the front beams of the Vertical Posts. The Cross Members should attach to the Vertical Posts just above each short horizontal beam on the Vertical Posts. The length of the Cross Members can be adjusted to account for the desired curvature of the Rigging Bar and display panel.



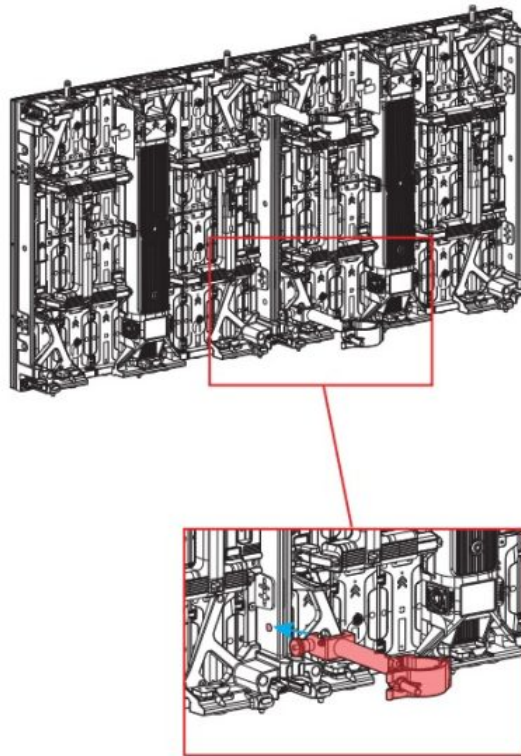
4. Attach the Panel Connectors loosely to the front beam of each Vertical Post. They should be mounted somewhere along the span between the top horizontal beam and the lower Cross Member.  
Do not tighten the Panel Connectors yet, as their position may need to be adjusted to align with the mounting points the display panels.
5. A single ground stack frame can support a maximum of 2 vertically stacked rows of panels. Additional rows can be added by inserting the bottom connector of another Vertical Post into the top connector of the first Vertical Post, along with another set of Cross Members and Panel Connectors.  
Do not exceed a maximum overall height of 3 meters (6 horizontal rows of panels).



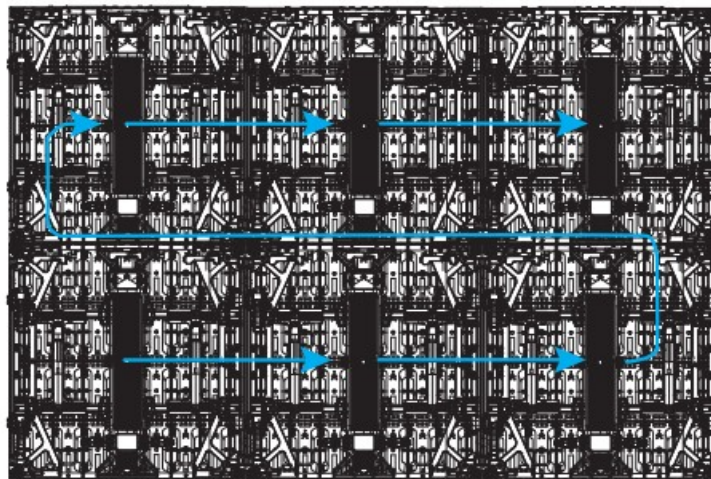
6. Once your ground stack frame has been assembled, set the first panel in the bottom horizontal row in place atop the first Rigging Bar. Press and hold the red latch button on the panel, then push the vertical panel connectors on the Rigging Bar upward until they are fully inserted into the connector slots on the panel. Twist the connector into the locked position, then release the latch button on the panel to secure in place. Repeat for all three (3) connectors.



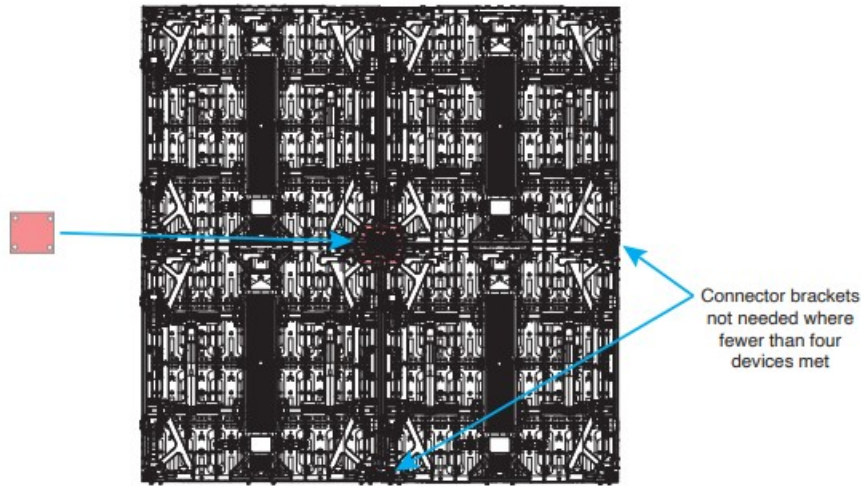
7. Secure the next panel in the bottom row by connecting the vertical panel connectors to the next Rigging Bar in the same way as described in step 5. Then use the horizontal panel connectors to link the two adjacent panels together. Press the horizontal connectors until they pass through the matching connector slot, then turn the tab into the horizontal position. Rotate the lock handle into the locked position to secure in place.



8. Once the panels have been secured together, locate the mounting holes for attaching the ground stack frame to the panels. These should be located just above and below the horizontal panel connectors. Insert the claw-shaped end of the ground stack frame's Panel Connector over the mounting hole, making sure that the claw-shaped end is fitted over the edges of BOTH adjacent panels. Secure in place with the locking pin. Make sure to secure the panels at both the upper and lower mounting points.



9. Continue connecting panels in this way. Complete each horizontal row of panels before moving up to the next row.



10. Lastly, install a connector bracket at each corner junction between panels or rigging bars, and secure each connector bracket with four (4) fasteners. Please note that connector brackets only need to be fitted at junctions where four devices (either panels or rigging bars) meet. Junctions where fewer than four devices meet, such as along the edges of the panel assembly, should NOT be secured with connector brackets.

## SPECIFICATIONS

### General Specifications

- Pixel Pitch: 3.91mm (0.15")
- LED: Kinglight Copper, 3-in-1 SMD 2121
- Drive IC: ICN2153AP
- Pixel Density: 65536 per square meter
- Size: 19.68" x 19.68" x 2.96" / 500 x 500 x 75mm
- Module Quantity: 4
- Module Resolution: 128x32 pixels
- Panel Resolution: 128x128 pixels
- Weight: 15.6 lbs. / 7.06kg

### Features:

- Memory on Module (MOM): Enhanced functionality for seamless operation.
- Corner Protectors: Safeguards corners during transport, setup, and teardown.
- Rear Serviceable: Easily replaceable video modules ensure continuous performance.

### Mechanical Ratings:

- Surface Flatness: Gaps<0.5mm for a smooth visual experience.

### Optical Ratings:

- Brightness: 800 NITS for vivid, clear visuals.
- View Angle: Horizontal 160°/Vertical 140° @ 9.75 ft. (3m) for wide coverage.
- Gray Scale: ≥14-bit for precise color representation.

- Display Color: 256 for vibrant images.
- Brightness Adjustment: 0~100% with 100 Levels for customizable viewing.
- Contrast Ratio: 5000:1 for enhanced contrast.
- Processing: 16-bit ensures seamless performance.
- Operating Life / MTBF: 50,000 Hours / 5,000 Hours for long-lasting usage.

#### **Power Supply:**

- Operation Power: 100~240V 50-60Hz for global compatibility.
- Max. Power Consumption: 120W/per panel, conserving energy.
- Ave. Power Consumption: 48W/per panel for efficient operation.
- Connections Power/Data: Power-Power Lock In/Out; Data Lock In/Out for easy setup.

#### **Control System:**

- Control Mode: Nova Star Synchronous System with Control via DVI for intuitive control.
- Frame Update Frequency: 50-75Hz for smooth play- back.
- Scan Mode: 1/16 for seamless scanning.
- Refresh Rate: 3840Hz ensures flicker-free visuals.
- Support Input: Composite, S-Video, Component, VGA, DVI, HDMI, HD\_SDI for versatile connectivity.
- Control Distance: Ethernet Cable <120m or Fiber Optic>120m for flexible setups.
- Support VGA Mode: Various resolutions supported for compatibility.
- Brightness Correction: Pixel, Module, Cabinet for precise adjustment.

#### **Environmental:**

- Operating Temperature: -4° to 104°F (-20° to +40°C) for reliable performance in diverse conditions.
- Operating Humidity: 10 – 90% (No Condensation) ensures stable operation.
- Storage Temperature: -40° to 176°F (-40° to +80°C) for safe storage.
- Storage Humidity: 10-90% (No Condensation) for longterm preservation.

#### **Optional Accessories:**

- VSFC8 (VS8100): Flight Case – Fits 8 EVS3 Flex45 Video Panels for secure transportation.
- FLEX45RB: Rigging Bar – Hang up to 20 EVS3 Flex45 Video Panels vertically for versatile setups.

#### **Processors and Playback Software:**

- Novastar VX4S, Novastar MCTRL-300, Novastar Nova Pro HD: Video Processors.
- Arkaos Media Master, Arkaos GrandVJ 2.0: Video Software.

#### **Cables:**

- Cabinet to Cabinet Data Link Cables, Indoor Power



Locking Link Cables, Indoor Power Locking Main Power Cables for efficient connectivity.

Certifications:

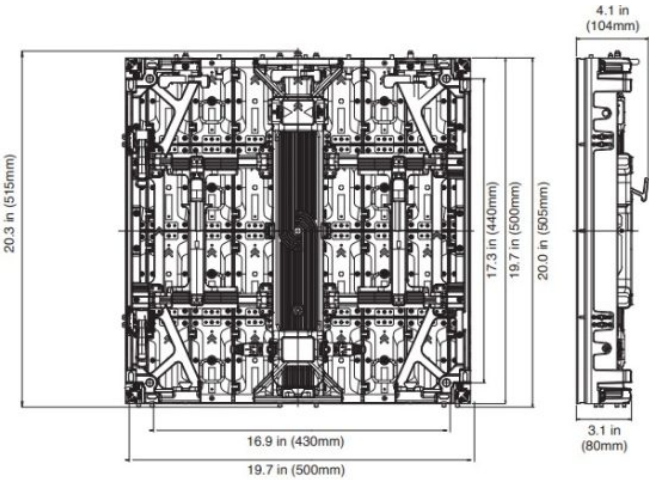
- cETLus (PENDING) ensures compliance with safety standards.

IP Rating:

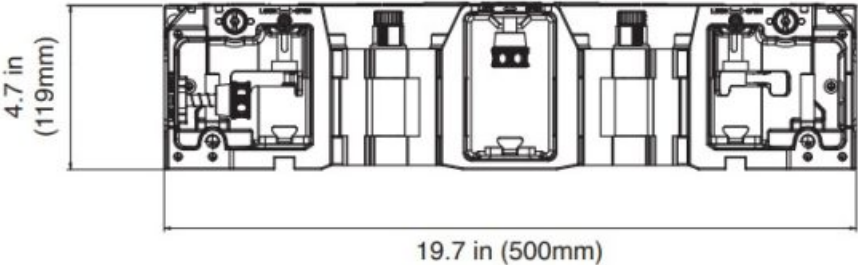
- Protection Level: IP20 (Front and Back) for reliable performance in indoor environments.

DIMENSIONAL DRAWINGS

PANEL



RIGGING BAR



ORDERING INFORMATION

| SKU (US) | SKU (EU)       | DESCRIPTION                              |
|----------|----------------|--|
| EVS345   | N/A 1226300154 | ADJ EVS3 Flex45 Flexible LED Video Panel |
| EVS111   | N/A 1226300067 | VSFC8 Flight Case                        |
| FLEX45RB | 1226300034     | Rigging Bar                              |
| VX4001   | N/A            | Novastar VX4S Video Processor            |
| MCT300   | N/A            | Novastar MCTRL-300 Video Processor       |
| NOV001   | N/A            | Novastar Nova Pro HD Video Processor     |
| NVX111   | N/A            | Novastar VX1000 Video Processor          |

|            |            |   |
|------------|------------|---|
| VX4014     | N/A        | Novastar VX4s Video Processor   |
| NMX300     | N/A        | Novastar MX30 Video Processor   |
| NMX200     | 1310000171 | Novastar MX20 Video Processor   |
| MED500     | N/A        | ArKaos Media Master Express Video Software  |
| GRA200     | N/A        | ArKaos GrandVJ 2.0 Video Software   |
| MED552     | N/A        | ArKaos Media Master Pro 5 License   |
| MPC010     | N/A        | Main Power Cable – Locking Power Connector In/Out to Edison, 10ft   |
| MPC015     | N/A        | Main Power Cable – Locking Power Connector In/Out to Edison, 15ft   |
| MPC025     | 1621000061 | Main Power Cable – Locking Power Connector In/Out to Edison, 25ft   |
| MPC050     | 1621000101 | Main Power Cable – Locking Power Connector In/Out to Edison, 50ft   |
| PLC1       | 1621000028 | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 1 ft  |
| PLC3       | 1621000102 | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 3 ft  |
| PLC6       | 1621000103 | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 6 ft  |
| PLC10      | 1621000062 | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 10 ft |
| PLC15      | N/A        | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 15 ft |
| PLC25      | N/A        | Panel to Panel Power Link Cable – Locking Power Connector In/Out to Locking Power Connector In/Out, 25 ft |
| CAT6PRO5   | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 5 ft                              |
| CAT6PRO10  | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 10 ft                             |
| CAT6PRO15  | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 15 ft                             |
| CAT6PRO25  | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 25 ft                             |
| CAT6PRO50  | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 50 ft                             |
| CAT6PRO100 | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 100 ft                            |
| CAT6PRO150 | N/A        | Main Data Cable – Bare RJ45 to Locking RJ45 Ethernet Connection In/Out, 150 ft                            |



|              |     |  |
|--------------|-----|--|
| CAT6PRO25FC  | N/A | Panel to Panel Data Link Cable – Locking RJ45 Ethernet Connection In/Out to Locking RJ45 Ethernet Connection In/Out, 25 ft |
| CAT6PRO50FC  |     | Panel to Panel Data Link Cable – Locking RJ45 Ethernet Connection In/Out to Locking RJ45 Ethernet Connection In/Out, 25 ft |
| CAT6PRO100FC |     | Panel to Panel Data Link Cable – Locking RJ45 Ethernet Connection In/Out to Locking RJ45 Ethernet Connection In/Out, 25 ft |

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## Documents / Resources

|                                     |  |
|-------------------------------------|--|
| <p>EV53 FLEX 45<br/>User Manual</p> | <p><a href="#">ADJ EVS3 Video Panel</a> [pdf] User Manual<br/>EVS3 Video Panel, EVS3, Video Panel, Panel</p> |
|-------------------------------------|--|

## References

- [Topics | ADJ Forums](#)
- [ADJ Product Parts - Lighting Online Parts Store](#)
- [Home](#)
- [Home page](#)
- [ADJ Lighting Europe – Stage Lighting & Audio Equipment](#)
- [User Manual](#)

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