



VISION SERIES LED VIDEO PANEL

VS2 VS3 VS5



User Manual

©2022 ADJ Products, LLC all rights reserved. Information, specifications, diagrams, images, and instructions herein are subject to change without notice. ADJ Products, LLC logo and identifying product names and numbers herein are trademarks of ADJ Products, LLC. Copyright protection claimed includes all forms and matters of copyrightable materials and information now allowed by statutory or judicial law or hereinafter granted. Product names used in this document may be trademarks or registered trademarks of their respective companies and are hereby acknowledged. All non-ADJ Products, LLC brands and product names are trademarks or registered trademarks of their respective companies.

ADJ Products, LLC and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

DOCUMENT VERSION



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

Please check 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
02/25/2020	1.0	N/A	Not Applicable	Initial Release.
10/12/2020	1.5	N/A	Not Applicable	Update Specifications.
02/04/2022	2.0	N/A	Not Applicable	Update Optional Components and Accessories, update formatting.

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!

TABLE OF CONTENTS

General Information	4
Limited Warranty (USA Only)	6
Safety Guidelines	7
Maintenance Guidelines	9
Panel Overview	10
LED Module Removal Tool	12
LED Module Removal	13
Handling and Transportation	14
Installation	16
Horizontal Panel Assembly	17
Vertical Panel Assembly	18
Rigging Bar	19
Flat Panel Assembly	25
Horizontal Truss Mount	26
Ground Stack	27
Technical Specifications	28
Optional Components and Accessories	29

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.

ADJ's Vision Series LED Video Panels offer the highest quality LED binning using 3-in-1 RGB SMD2121 LEDs, with a brightness of 1000 NITS. The primary difference between models is the pixel pitch: the VS2 has a pixel pitch of 2.97mm, the VS3 has a pixel pitch of 3.91mm, and the VS5 has a pixel pitch of 5.95mm. All models have 4 individual modules for quick and easy front and rear accessible servicing; are built on the same frame, allowing panels with different resolutions to be used together; use the same rigging bar; all fit into the same road case; and all have moveable integrated Corner Protectors that safe-guard the corners when they are not connected. In addition, each Vision Series LED Video Panel model has magnets located at the top and bottom to allow a user to temporarily connect two panels, release his or her grip, and then securely latch them on the rear. This allows a single user to install a full wall of panels.

The Vision Series LED Video Panel connections include Power In/Out and Data In/Out, and feature built-in Novastar A5s receiving card. An optional VSFC8 Flight Case (purchased separately) can carry up to 8x VS LED Video Panels, and an optional VSRB1 Rigging Bar (purchased separately) can hang up to 20 VS LED Video Panels vertically.

ADJ offers full packages with video processors, software, cabling, rigging bars, and flight cases so that you have everything you need to get up and running.

UNPACKING

Every Vision Series LED Video Panel 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 with questions, comments or suggestions.

Parts: To purchase parts online visit:

<http://parts.adj.com> (US)

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

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST

Voice: 800-322-6337 | Fax: 323-582-2941 | support@adj.com

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET

Voice: +31 45 546 85 60 | Fax: +31 45 546 85 96 | support@adj.eu

ADJ PRODUCTS LLC USA

6122 S. Eastern Ave. Los Angeles, CA. 90040

323-582-2650 | Fax 323-532-2941 | www.adj.com | info@adj.com

ADJ SUPPLY Europe B.V

Junostraat 2 6468 EW Kerkrade, The Netherlands

+31 (0)45 546 85 00 | Fax +31 45 546 85 99

www.americandj.eu | info@americandj.eu

ADJ PRODUCTS GROUP Mexico

AV Santa Ana 30 Parque Industrial Lerma, Lerma, Mexico 52000

+52 (728) 282-7070

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 carton 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. 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, Strobes, 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

The Vision Series LED Video Panel 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!
NEVER OPEN THIS PANEL WHILE IN USE!
UNPLUG POWER BEFORE SERVICING PANEL!
NEVER TOUCH FRONT OF PANEL DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM PANEL.**



**INDOOR / DRY LOCATIONS USE ONLY!
DO NOT EXPOSE PANEL TO RAIN AND/OR MOISTURE!
DO NOT SPILL WATER AND/OR LIQUIDS ON OR INTO THE PANEL!**

SAFETY GUIDELINES

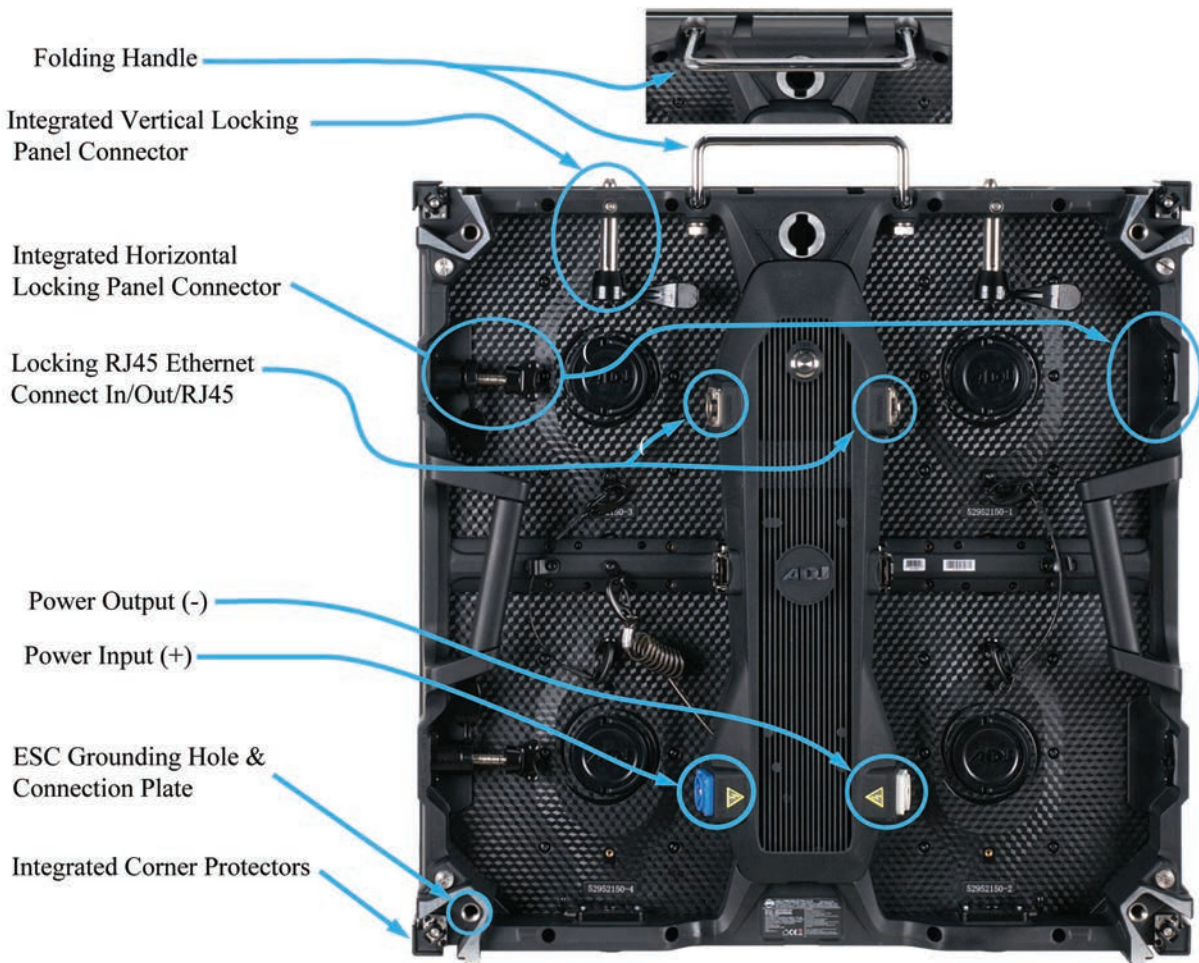
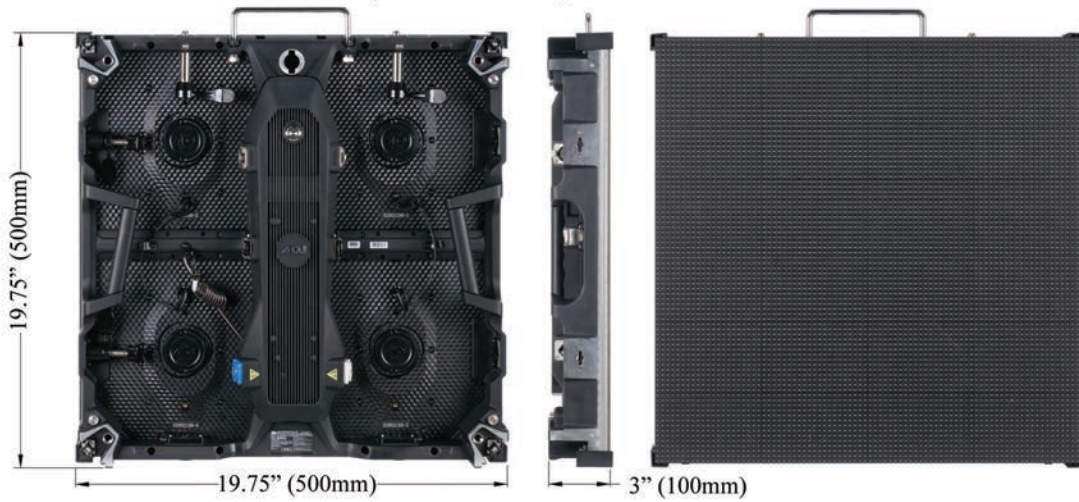
- DO NOT touch panel housing during operation. Turn OFF power and allow approximately 15 minutes for panel to cool down before servicing.
- DO NOT operate devices with covers open and/or removed.
- DO NOT shake panel, and avoid brute force when installing and/or operating.
- DO NOT expose any part of 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.
- DO NOT exceed an operation temperature of 40°C (104°F), as doing so will result in damage to the device.
- 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 Vision Series Series LED Video Panels.
- Read the installation and operation instructions for correct operation of the Vision Series LED Video Panels.
- Although the Vision Series LED 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 fixture should be serviced by a qualified service technician when:
 - A. Objects have fallen onto, or liquid has been spilled into, the fixture
 - B. The fixture 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 fixture does not appear to operate normally or exhibits a marked change in performance.
 - D. The fixture has fallen and/or has been subjected to extreme handling.
- Check each Vision Series LED Video Panel for loose screws and other fasteners.
- If the Vision Series LED 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 Vision Series LED 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 Vision Series LED Video Panels, power up the computer before powering up the LED Video Panels. Conversely, when shutting down after operation, turn the LED 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 Vision Series LED 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 Vision Series LED Video Panels to the flight cases.
- The Vision Series LED 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 Vision Series LED Video Panels in a dry, well ventilated facility.

PANEL OVERVIEW

DIMENSIONS: 19.75" x 19.75" x 3" (500mm x 500mm x 100mm)



PANEL OVERVIEW

Each Vision Series LED Video Panel includes a quick-release power supply with 4X LED Modules, allowing for easy serviceability and simple repairs whilst out on the road, and each is held safely in place with frame integrated magnets. The cover of the power supply box can be secured to protect all internal accessories and components. All detachable components are secured with a safety cable.



Note that panels and power supply cover are all attached with safety cables.



LED MODULE REMOVAL TOOL

A technician can use the optional **VSM111 Magnetic Module Removal Tool** (sold separately) to safely remove and reinstall any of the four LED Modules in the Vision Series LED Video Panel, and minimize potential damage from mishandling, ESD exposure, or other issues.



The perceived “Magnetic Force” is relative to the distance the magnet is from the surface. Turning the knob clockwise, in the “+” direction, advances the magnet, moving it closer to the front; turning it counterclockwise, in the “-” direction, retracts the magnet, moving it away from the front.



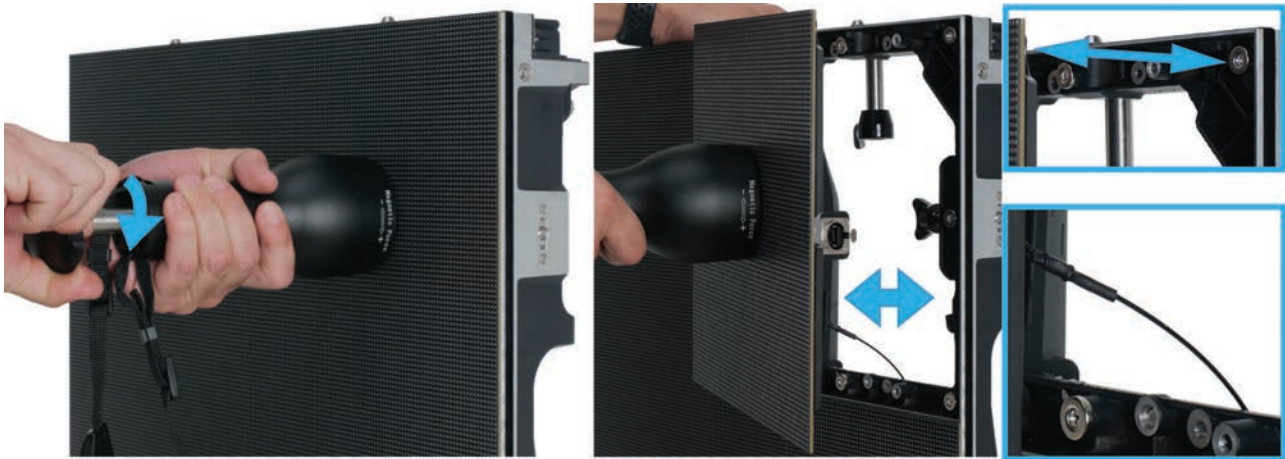
The magnet must be fully retracted in the Magnet Module Removal Tool before placing it against the LED Module face. This prevents the magnet from snapping against the LEDs and damaging them.

LED MODULE REMOVAL

Note that the (4x) LED Modules are firmly held to the Vision Series LED Video Panel Frame with strong integrated magnets, and secured with a safety cable should any of the LED modules be accidentally knocked free.



Locate the center of selected LED module to be removed (1 of 4), and place the O-Ring of the Magnetic Module Removal Tool against the surface of the module.

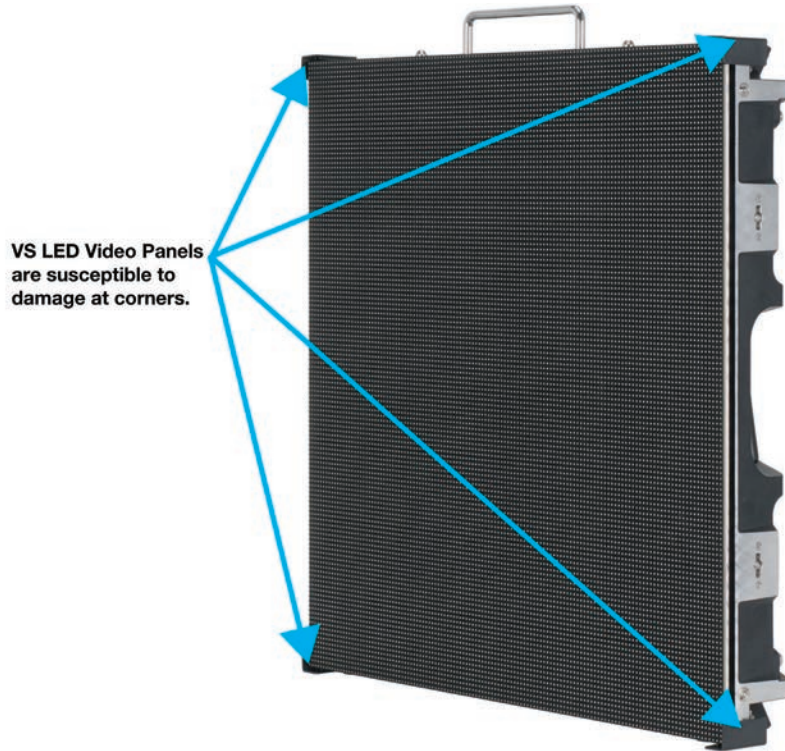


Turn the knob at the rear of the Magnetic Module Removal Tool to advance the magnet and secure the LED Module. The Magnetic Module Removal Tool magnet is stronger than the magnets that hold the LED Module to the Vision Series LED Video Panel frame, allowing the tool to pull the module from the frame. With the tool secured to the LED module, carefully pull the module free from the video panel frame. When finished servicing the LED Module, reverse the operation. Be sure to reattach the safety cable to the LED Module.

HANDLING AND TRANSPORTATION

INTEGRATED CORNER PROTECTORS

The corners of the Vision Series LED Video Panels are susceptible to damage during handling and transportation. When removing Vision Series LED Video Panels from their respective Flight Cases (VSFC8 sold separately), and before they are installed, take care 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).



HANDLING AND TRANSPORTATION

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Because these are ESD sensitive units, ESD precautions must be observed when removing the Vision Series LED 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 on Vision Series LED Video Panels.

FLIGHT CASE

The optional **VSFC8 Flight Case** (sold separately) for the Vision Series LED Video Panels holds eight (8) individual Vision Series LED 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 Vision Series LED 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



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 installations.



A MAXIMUM OF 20 PANELS may be suspended from 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.

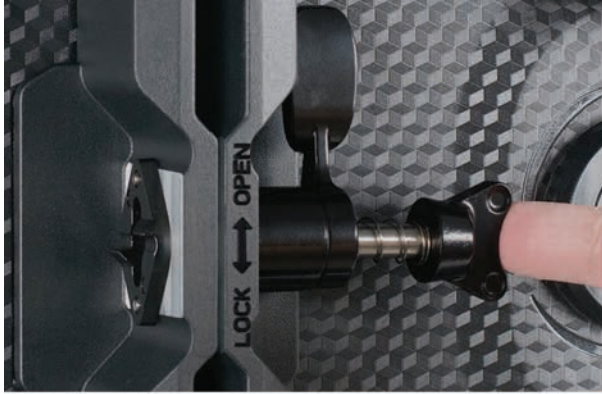


USE CAUTION WHEN POWER LINKING PANELS OF DIFFERENT MODEL TYPES, AS POWER CONSUMPTION CAN VARY WITH MODEL TYPE, AND MAY EXCEED THE MAX POWER OUTPUT OF THIS PANEL. CONSULT THE SILK SCREEN FOR MAX CURRENT RATING.

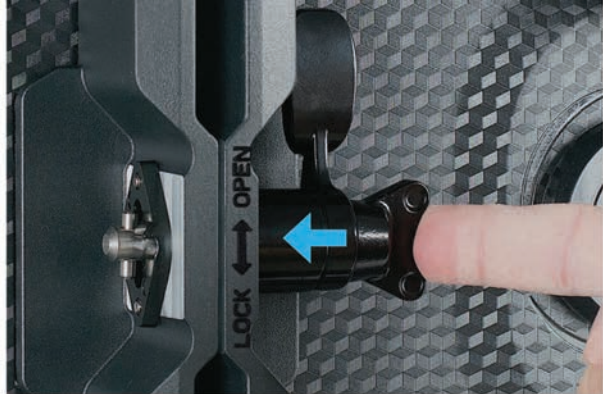
Input Power	AC 100-240VAC, 50/60Hz, 16A Max
Output Power	AC 100-240VAC, 50/60Hz, 14A Max
Max Power Consumption	170W Max, 68W Average

- **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.

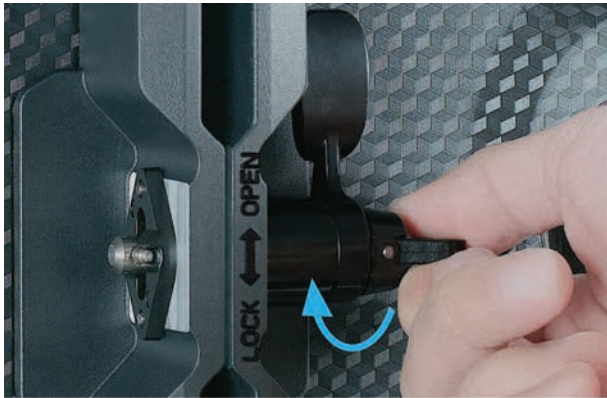
HORIZONTAL PANEL ASSEMBLY



1. The horizontal tab-keyed connector is spring loaded.



2. Press the horizontal tab-keyed connector until the tab-key passes through the tab-keyed socket.



3. Rotate the handle to the right (clockwise) to hold the horizontal tab-keyed connector in place.

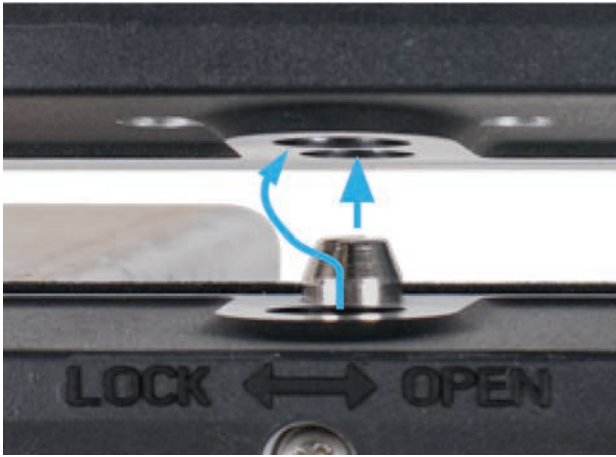


4. Rotate handle downward (counter-clockwise) to cinch the horizontal tab-keyed connector.



5. To unlock, rotate handle clockwise, releasing the tension of the horizontal tab-keyed connector cinching mechanism.

VERTICAL PANEL ASSEMBLY



1. Align the vertical positional posts with their corresponding alignment holes.



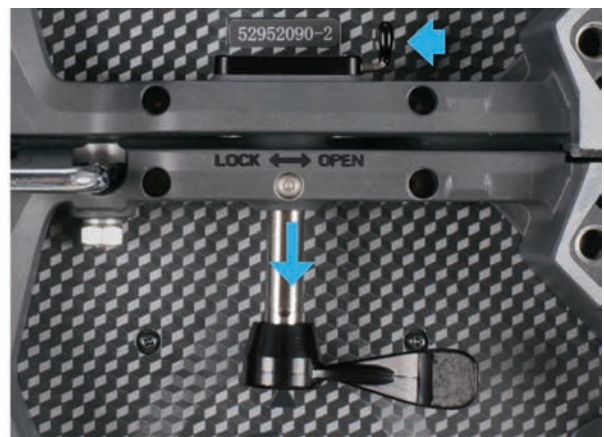
2. Press the spring-loaded locking latch toward the left while pressing the vertical connector upwards into the locking latch.



3. Release the latch, then lock the panel in place by twisting the vertical connector lever to the left, towards the direction marked "LOCKED".



4. To unlock, twist the vertical connector lever to the right, towards the direction marked "OPEN". The locking post will then drop out of place.

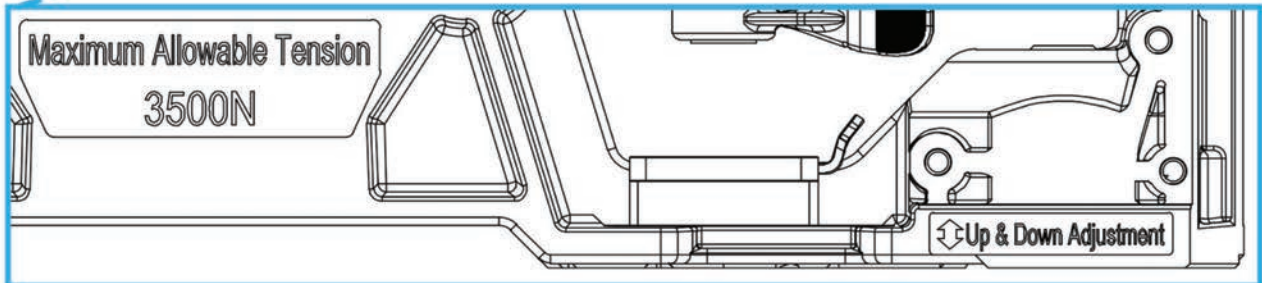


RIGGING BAR

The Vision Series LED Video Panel is compatible with ADJ's **VSRB1** Rigging Bar (sold separately), which easily and securely locks to the top of the first panel in a vertical column of up to 20 Vision Series LED Video Panels, allowing them to hang from a truss, hoist, or lintel beam. **A qualified technician or trained professional is required to fly the VSRB1 Rigging Bar/VS LED Video Panel assembly.**



Note the integrated Vertical Connectors and Vertical Tab-Keyed Sockets.



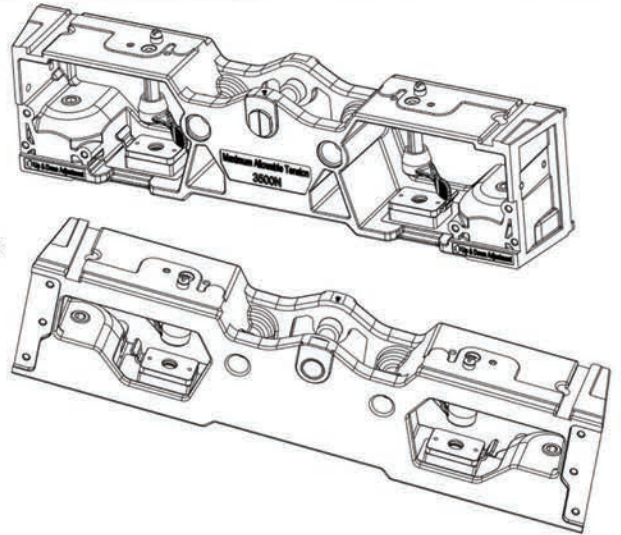
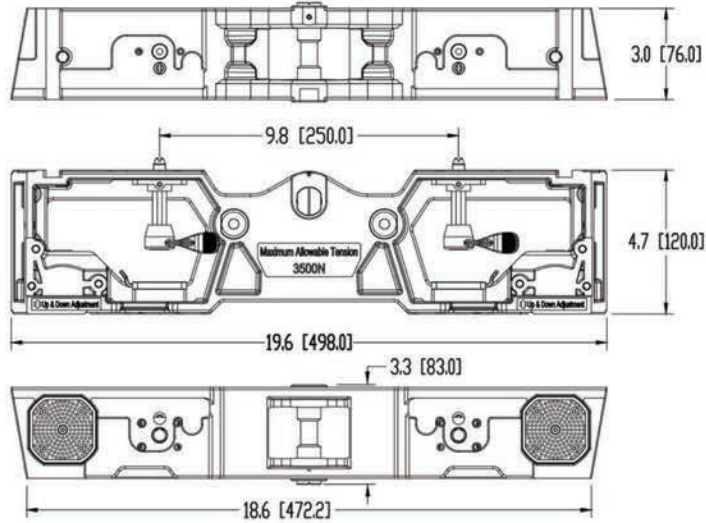
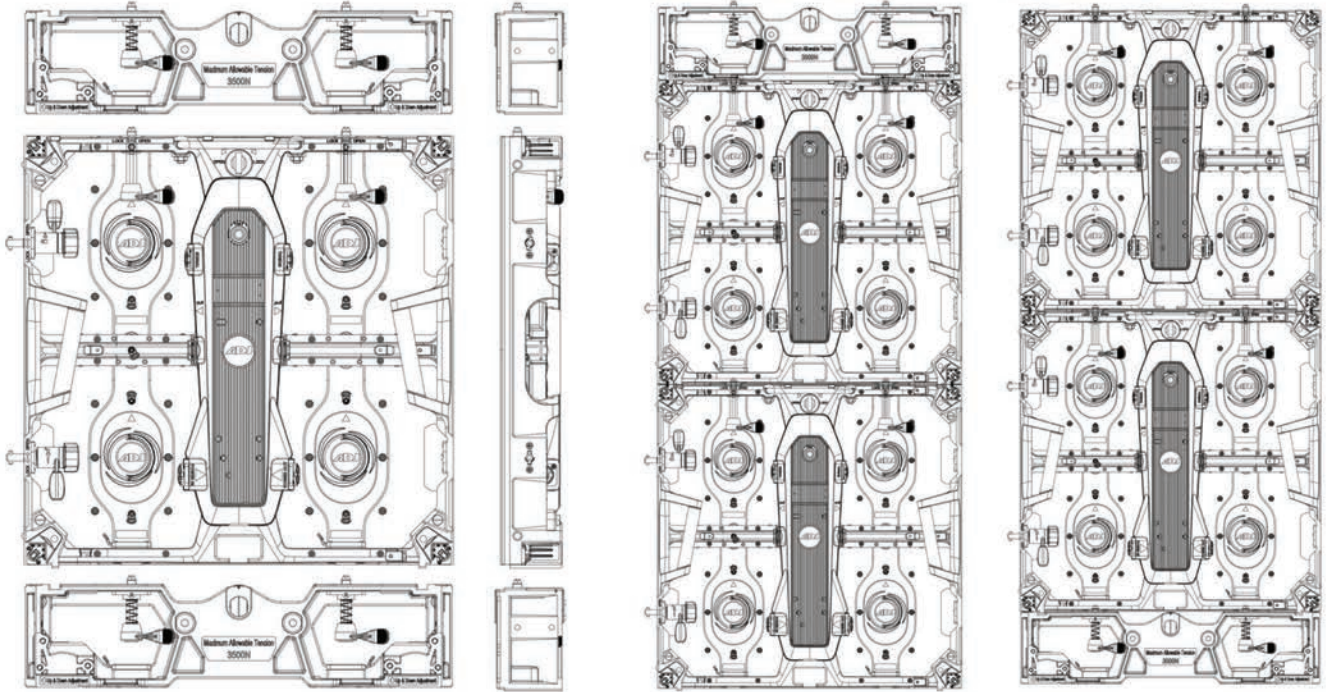
RIGGING BAR

Vertical “hang” and “stack” configurations are illustrated below with the rigging bar.



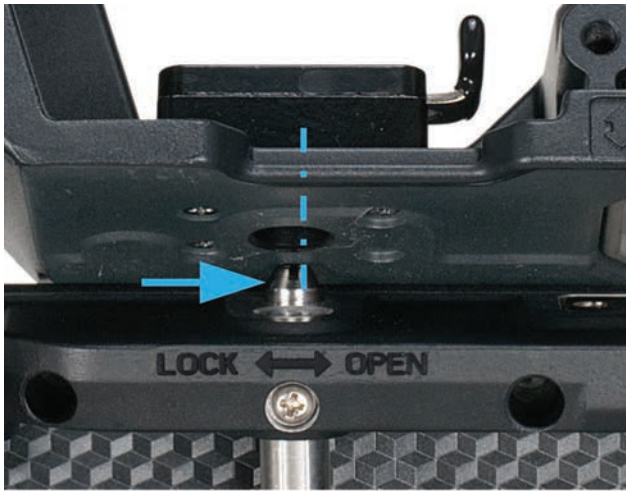
VERTICAL HANG

VERTICAL STACK

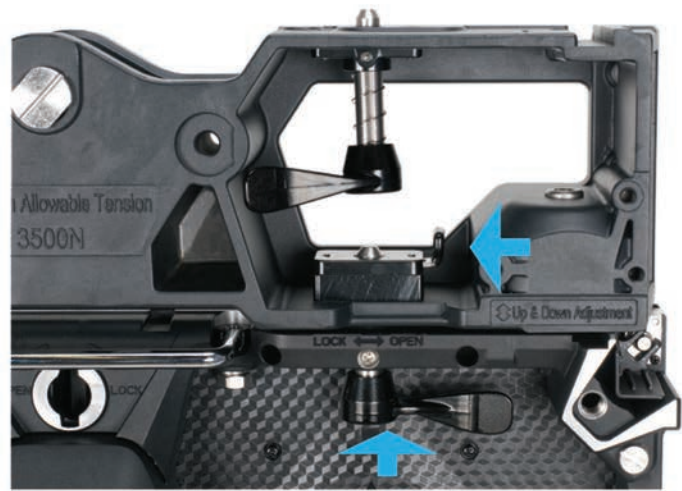


RIGGING BAR

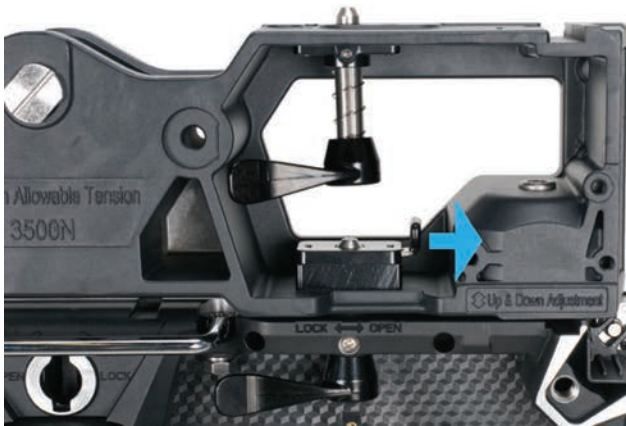
VERTICAL HANG CONFIGURATION



1. Align the vertical positional posts with their corresponding alignment holes.



2. Press spring-loaded locking latch to the left while pressing vertical connector up into locking latch.



3. Release latch to hold the vertical connector, and twist vertical connector the left to lock.



4. To unlock the vertical connector, rotate the lever to the right (counter-clockwise), then press the spring-loaded locking latch inward. The vertical connector will then drop open.

RIGGING BAR

VERTICAL HANG CONFIGURATION FOR SINGLE INSTALLER

The Vision Series LED Video Panels feature built-in magnets to assist in vertical hanging for a single installation technician.



THE MAGNETS ARE NOT STRONG ENOUGH TO HOLD A PANEL WITHOUT ASSISTANCE. ALWAYS SUPPORT THE PANEL BY HOLDING AND MAINTAINING UPWARD PRESSURE ON AT LEAST ONE LIFTING HANDLE AT ALL TIMES UNTIL THE PANEL IS LOCKED IN PLACE, STARTING WITH THE OPPOSITE VERTICAL LOCK.



RIGGING BAR

VERTICAL HANG CONFIGURATION FOR SINGLE INSTALLER



RIGGING BAR

VERTICAL STACK CONFIGURATION



1. Align the vertical positional posts with their corresponding alignment holes, then insert the posts into the holes.
2. Press spring-loaded locking latch to the left while pressing vertical connector upwards into locking latch.



3. Release latch to hold the vertical connector. Lock in place by twisting the vertical connector to the left.



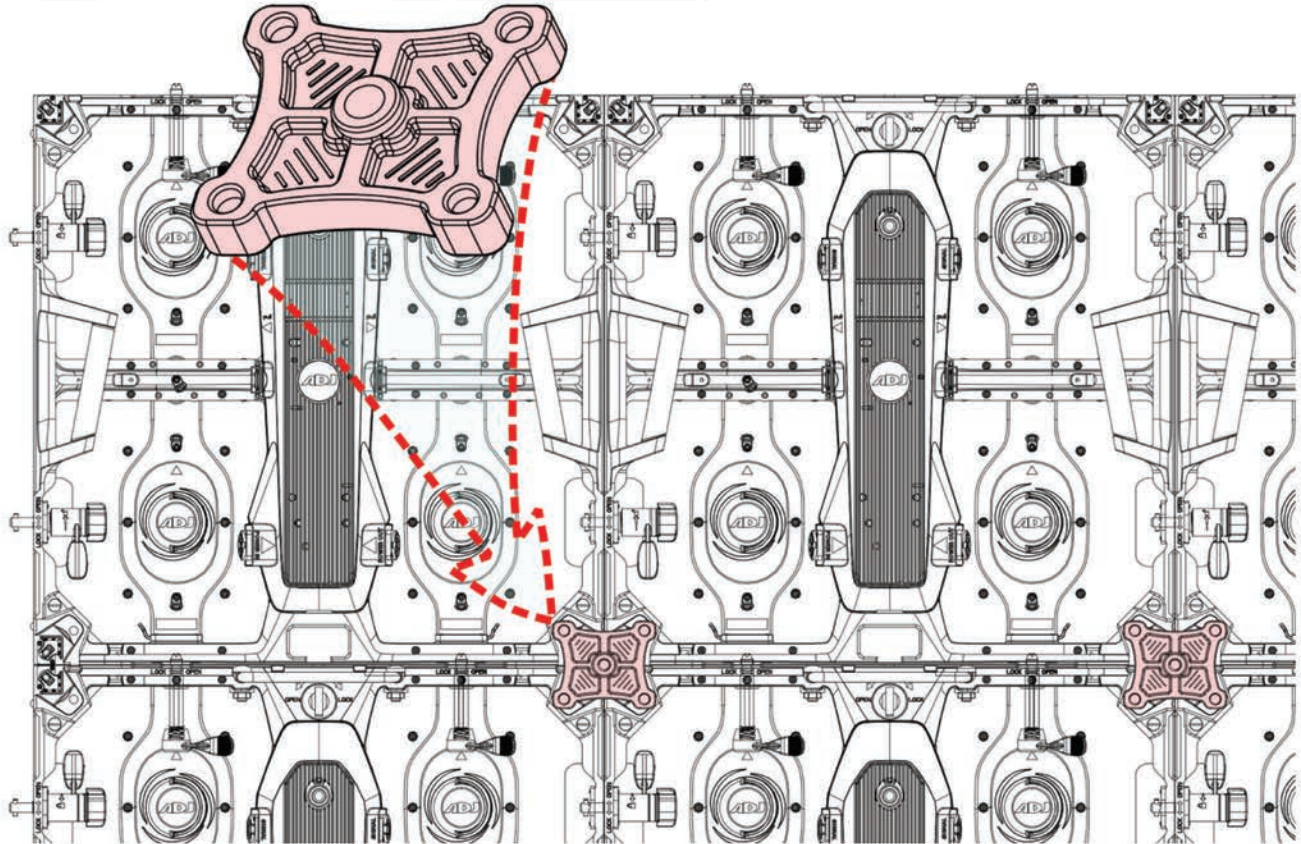
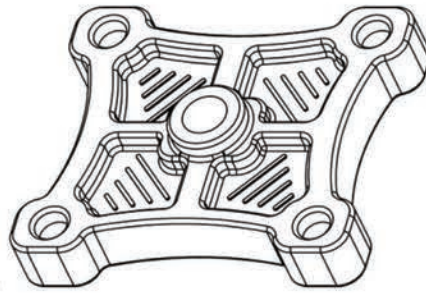
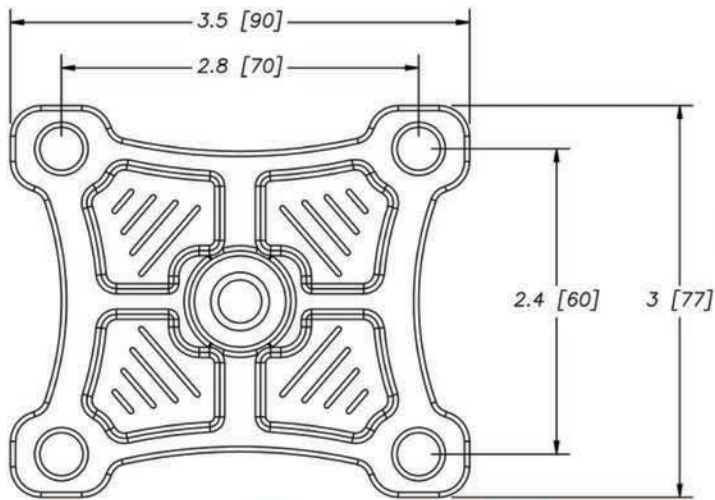
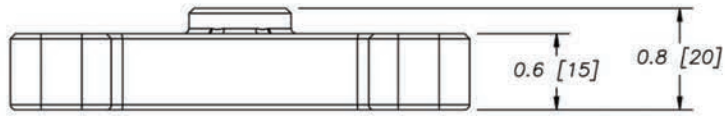
4. To unlock the vertical connector, rotate the lever to the right (counter-clockwise), then press the spring-loaded locking latch inward. The vertical connector will drop open.



USE CAUTIONS WHEN INSTALLING VIDEO PANELS USING THE RIGGING BAR FOR STACKED ASSEMBLIES. THESE DEVICES ARE NOT INTENDED FOR USE AS A FREE-STANDING ASSEMBLY, AND ARE INHERENTLY UNSTABLE. STACKED VIDEO PANEL ASSEMBLIES MUST BE SECURELY INSTALLED BY A QUALIFIED TECHNICIAN ONLY!

FLAT PANEL ASSEMBLY

Rear Support Bracket: Use an **VS1RSB** Rear Support Bracket (sold separately) when connecting multiple panels for a larger display design, in order to strengthen the structural integrity of the screen, improve consistent flatness, and improve overall screen continuity.



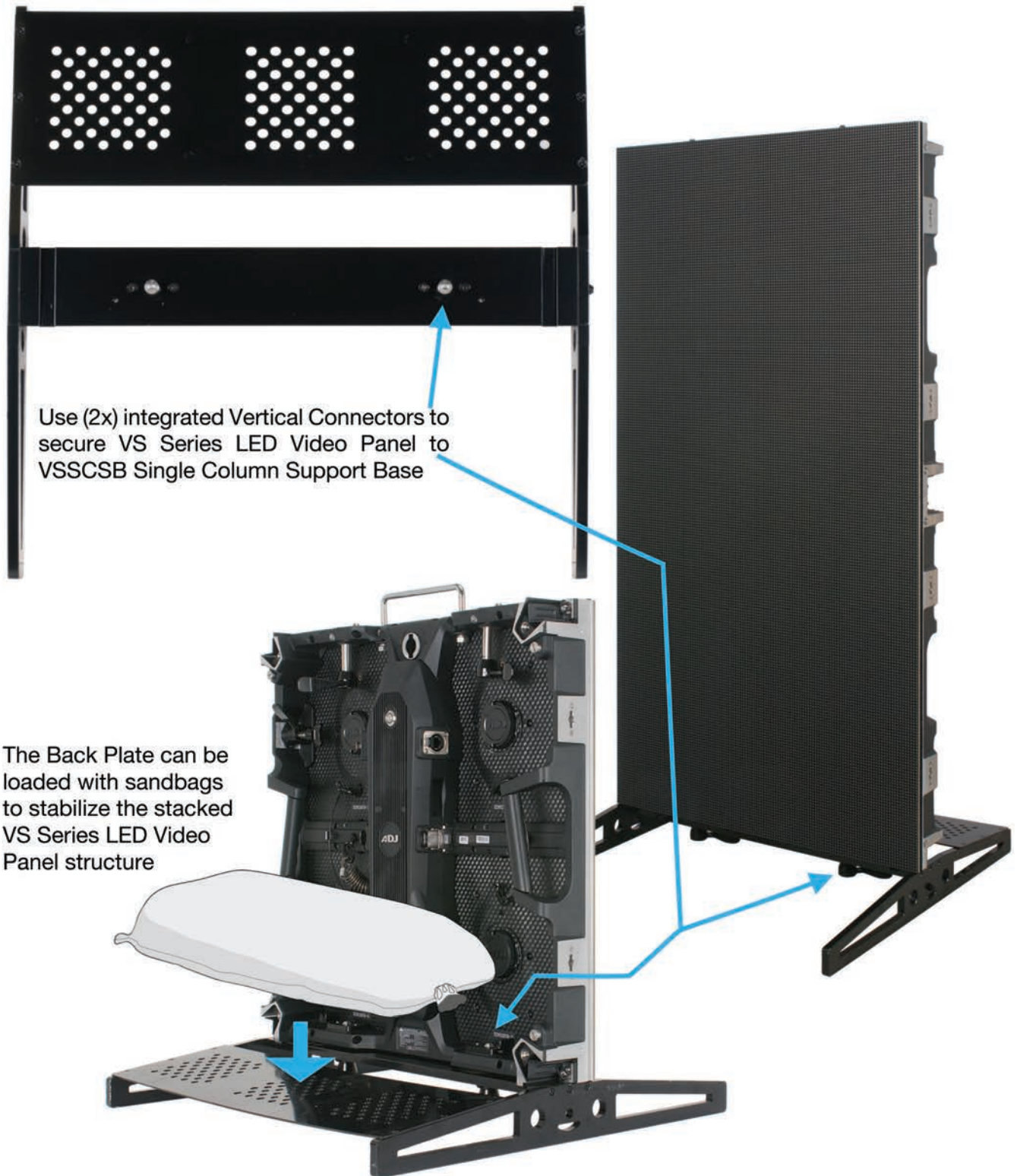
HORIZONTAL TRUSS MOUNT

The optional **VSR210** Horizontal Truss Mounting Bracket (sold separately) allows for the horizontal (ceiling) installation of the VS LED Video Panels.



GROUND STACK

The optional VSSCSB single panel rigging / ground stack bar is a free-standing stack mounting options for the Vision Series LED Video Panels.



TECHNICAL SPECIFICATIONS

GENERAL

Resolution

- VS2: 168(H) x 168(V)
- VS3: 128(H) x 128(V)
- VS5: 84(H) x 84(V)

Pixel Pitch:

- VS2: 2.97mm (0.12")
- VS3: 3.91mm (0.15")
- VS5: 5.95mm (0.23")

LED Configuration: SMD212

Pixel Density:

- VS2: 112896 pixels/m²
- VS3: 65536 pixels/m²
- VS5: 28224 pixels/m²

Size:

- 19.68" x 19.68" x 2.74"
- (500mm x 500mm x 69.6mm)

Module Quantity: 4

Weight: 17.0 lbs (7.7 kgs)

MECHANICAL RATINGS

Surface Flatness: Gap \leq 0.5mm

OPTICAL RATINGS

Brightness: 1000 cd/m²

Viewing Angle: 160° / 140°

Viewing Distance:

- VS2: 3m
- VS3: 4m
- VS5: 6m

Gray Scale: \geq 14bits

Display Colors: 256

Contrast Ratio: 5000:1

Brightness Adjustment: 0~100%, 100 levels

POWER SUPPLY

Operation Power: 100~240V 50~60Hz

Max Power Consumption: 170W per panel

Average Power Consumption:

- VS2: 68W per panel
- VS3: 101W per panel
- VS5: 94W per panel

Power/Data Connections:

- Power In/Out
- Data In/Out

CONTROL SYSTEMS

Control Mode: Constant Current Driving

Frame Update Frequency: 50~75Hz

Scan Mode:

- VS2: 1/21 duty
- VS3: 1/16 duty
- VS5: 1/7 duty

Refresh Rate: 3840 Hz

Support Input: RJ45

Control Distance:

- Ethernet Cable \leq 120m
- Fiber Optoc $>$ 120m

Support VGA Mode:

- 1024x768
- 1280x1024
- 1600x1200
- 1920x1280

Brightness Correction:

- Pixel
- Module
- Cabinet

ENVIRONMENTAL

Operating Temp: -20° ~ +40° C / -4° ~ +104° F

Operating Humidity: 10~90% RH, no condensation

Operating Life: 50,000 hours

MTBF: 5000 hours

Protection Level: IP20

Out of Control Rate: \leq 0.02%

Curve Angle: n/a

Specifications subject to change without any prior written notice.

OPTIONAL COMPONENTS AND ACCESSORIES

SKU NUMBER	DESCRIPTION
VSFC8	Flight Case - fits 8 Vision Series LED Video Panels
VSRB1	Single Panel Rigging/Stack Bar
VS1RSB	Rear Support Bracket
VSS225 (VSSCSB)	Single Column Support Base
VSGSB	Ground Support Base
VSGSCSB	Clamp Support Bar
VSGSLT	Ground Support Ladder Truss
VSM111 (VSMRT)	Magnetic Module Removal Tool
VSR210	Horizontal Truss Mounting Bracket
VX4001	Novastar VX4S Video Processor
MCT300	Novastar MCTRL-3000 Video Processor
MED500	ArKaos Media Master Express Video Software
MED552	ArKaos Media Master Pro 5 (License)
MED223	ArKaos Studio Server
MED234	ArKaos Stadium Server
MED245	ArKaos 4K Server
MED212	ArKaos Stage Server Pro
MED201	ArKaos Stage Server Express
MPC010 (10 ft)	Main Power Cables - Locking Power Connector In/Out to Edison
MPC015 (15 ft)	
MPC025 (25 ft)	
MPC050 (50 ft)	
PLC1 (1 ft)	Panel to Panel Power Link Cable - Locking Power Connector In/Out to Locking Power Connector In/Out
PLC3 (3 ft)	
PLC6 (6 ft)	
PLC10 (10 ft)	
PLC15 (15 ft)	
PLC25 (25 ft)	
CAT6PRO5 (5 ft)	Main Data Cable - Bare RJ45 to Locking RJ45 Ethernet Connection In/Out
CAT6PRO10 (10 ft)	
CAT6PRO15 (15 ft)	
CAT6PRO25 (25 ft)	
CAT6PRO50 (50 ft)	
CAT6PRO100 (100 ft)	
CAT6PRO150 (150 ft)	
CAT6PRO25FC (25 ft)	Panel to Panel Data Link Cable - Locking RJ45 Ethernet Connection In/Out to Locking RJ45 Ethernet Connection In/Out
CAT6PRO50FC (50 ft)	
CAT6PRO100FC (100 ft)	

