Vision Series
LED Video Panel
User Guide
VS2   VS3   VS5

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FCC STATEMENT
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS
This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:
- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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!
Document Version: An updated version of this document may be available online. Please check www.adj.com for the latest revision/update of this document before beginning installation and use.

<table>
<thead>
<tr>
<th>Date</th>
<th>Document Version</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/25/20</td>
<td>1</td>
<td>Initial Release</td>
</tr>
</tbody>
</table>
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
<td>4</td>
</tr>
<tr>
<td>Limited Warranty (USA Only)</td>
<td>5</td>
</tr>
<tr>
<td>Safety Guidelines</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance Guidelines</td>
<td>8</td>
</tr>
<tr>
<td>Panel Overview</td>
<td>9</td>
</tr>
<tr>
<td>Receiver-Card Module Removal</td>
<td>11</td>
</tr>
<tr>
<td>Handling and Transportation</td>
<td>13</td>
</tr>
<tr>
<td>Installation</td>
<td>15</td>
</tr>
<tr>
<td>Technical Specifications</td>
<td>27</td>
</tr>
<tr>
<td>Optional Components and Accessories</td>
<td>28</td>
</tr>
</tbody>
</table>
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 only 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. Otherwise, all models have 4 individual modules for quick and easy front and rear accessible servicing; are built on the same frame, which allows 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 users to temporarily connect two panels, let go, and then securely latch them on the rear. This allows a single-user to install a full wall of panels.

The VS Vision Series LED Video Panel connections include PowerLock In/Out and DataLock 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 VS 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 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.

CUSTOMER SUPPORT

Contact ADJ Service for any product related service and support needs. Also visit forums.adj.com with questions, comments or suggestions.

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
323-582-2650 | Fax: 323-832-2941 | support@adj.com

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET
+31 45 546 85 60 | Fax: +31 45 546 85 96 | support@adj.eu
LIMITED WARRANTY

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)
LED Products = 2-Year (730 Days) (excluding laser diodes which have a 6-Month Limited Warranty)
Laser 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)
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)

CUSTOMER SUPPORT INFORMATION
Contact ADJ Service for any product related service and support needs.
Also visit forums.adj.com with questions, comments or suggestions.

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SAFETY GUIDELINES

This VS LED Video Panel is a sophisticated piece of electronic equipment. To guarantee a 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 and/or rigging 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, included and/or rigging accessories will void the original manufactures 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 ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS PANEL AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES 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!

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 a panel if any cover is open and/or removed.

DO NOT shake panel, avoid brute force when installing and/or operating panel.

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 panel in extreme hot/humid environments, or handle without ESD precautions.

DO NOT: Exceed an operation temperature of 40°C (104°F), doing so will damage the panel.

DO NOT operate panel 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 with ease. NEVER force a power cord connector into the panel. If the power cord or any of its connectors are damaged, replace it immediately with a new one of similar 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, never pull out the plug by tugging the wire portion of the cord.
SAFETY GUIDELINES

ONLY use the original packaging materials and/or case to transport the panel in for service.

PLEASE recycle shipping boxes and packaging whenever possible.

CAUTION: To avoid physical damage, read the installation instructions carefully before installation.

CAUTION: Panels should only be installed/operated by qualified and trained professionals ONLY.

CAUTION: Always mount panels in a safe and stable manner.

CAUTION: INDOOR / DRY location use ONLY! Outdoor use will void the warranty.

CAUTION: Wear appropriate safety equipment during panel installation.

CAUTION: Turn OFF power to panel, computers, servers, system boxes, and monitors before making any type of power or data connections and performing any maintenance work.

CAUTION: Read user manual carefully to ensure normal operation and lifespan of the panel.

CAUTION: 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.

CAUTION: Panel must be properly grounded before operating. (resistance must be less than 4Ω)

CAUTION: Ensure all power is disconnected from panel before unplugging any data cables from the panel, especially serial line ports.

CAUTION: Route power and data cables so that they are NOT likely to be walked on or pinched.

CAUTION: Air conditioning is required if operating environment temperature exceeds 30°C (86°F).

CAUTION: Test panel for 2-hours per week, if not used regularly or for an extended period of time.

CAUTION: Cases used to transport panel must me properly waterproofed for transportation.
MAINTENANCE GUIDELINES

Careful and regular maintenance is necessary to optimize the potential functional lifespan of the VS LED Video Panels.

1. Read the installation and operation instructions for correct operation of the VS LED Video Panels.
2. Although the VS LED Video Panels are designed and built to withstand some impact forces when installed correctly, take care to avoid impact damage when handling or transporting them, especially corners and edges, which are particularly frangible during transportation.
3. The fixture should be serviced by a qualified service technician when:
   A. Objects have fallen, 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 (IP20 front and rear)
   C. The fixture does not appear to operate normally or exhibits a marked change in performance
   D. The fixture has fallen and/or subjected to extreme handling.
4. Check each VS LED Video Panel for loose screws and other fasteners.
5. If the VS LED Video Panel installation is fixed or displayed for a lengthy time, regularly inspect all rigging and installation equipment, and replace or repair it as necessary, and during long periods of non-use, disconnect the main power to the unit.
6. Use necessary ESD (electrostatic discharge) precautions when handling VS LED Video Panels, especially the LED screens, as they are ESD sensitive and easily damaged from ESD exposure.
7. 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.
8. If the GFI (Ground Fault Interrupt) breaker-switch trips often, check the display or replace the power-supply switch.
9. When operating the VS LED Video Panels, power the computer before powering the LED Video Screens; conversely, when shutting down after operation, turn the LED Video Panels off before turning off the computer. If the PC is turned off first, a high intensity brightness might appear, causing catastrophic failure to those LEDs.
10. If while conducting an electrical test a circuit shorts, a breaker-switch trips, wires burn, and or any other abnormality appears, discontinue testing and troubleshoot units to find the problem before continuing with any testing or operation.
11. To ensure consistent operation, it might be necessary to learn operating parameters for installation, data recovery, backup, controller settings, and basic data preset modification.
12. Regularly check computer for any viruses and remove any irrelevant data.
13. Only a qualified technician should operate software system.
14. Remove any moisture found inside or outside of any VS 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 ESD generating friction when returning VS LED Video Panels.
15. The VS 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.
16. When not in use, store VS LED Video Panels in a dry, well ventilated facility.
PANEL OVERVIEW

Dimensions: 19.75” x 19.75” x 3” (500x500x100mm)

- Folding Handle
- Integrated Vertical Locking Panel Connector
- Integrated Horizontal Locking Panel Connector
- Locking RJ45 Ethernet Connect In/Out/RJ45
- Power Output (-)
- Power Input (+)
- ESD Grounding Hole & Connection Plate
- Integrated Corner Protectors
PANEL OVERVIEW
Each VS 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 component is secured with a safety cable.

Note that panels and power supply cover are all attached with safety cables.
RECEIVER-CARD MODULE REMOVAL

A technician can use the optional VSM111 Magnetic Module Removal Tool (sold separately) to safely remove and reinstall any of the four Receiver-Card Modules in the VS 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, and 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 Receiver-Card Module face, which is to prevent the magnet from snapping against the LEDs and damaging them.
**RECEIVER-CARD MODULE REMOVAL**

Note that the Receiver-Card Modules are firmly held to the VS LED Video Panel Frame with strong integrated magnets, and secured with a safety cable should any of the panel modules be accidently knocked free.

Locate the center of quarter panel module and place the O-Ring of the Magnetic Module Removal Tool against its surface.

Turn the knob at the rear of the Magnetic Module Removal Tool to advance the magnet to secure the Receiver-Card Module. When placed against the surface of the Receiver-Card Module (the Magnetic Module Removal Tool magnet is stronger than those that hold the Receiver-Card Module to the VS LED Video Panel frame, which allows it to pull the module from the frame). With it secured, carefully pull the module free from the video panel frame. When finished servicing the Receiver-Card Module, reverse the operation. Be sure to reattach the safety cable to the Receiver-Card Module.
HANDLING AND TRANSPORTATION

The corners of the VS LED Video Panel are susceptible to damage during handling and transportation. When removing VS 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 into their respective pockets for adjacent panel installation, or out of their pockets to protect the corners during transportation or storage.

Because these are ESD sensitive units, use ESD precautions when removing the VS LED Video Panels from their flight case (ESD gloves, protective clothing, wrist straps, etc.). In addition to using standard ESD precautions, 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 VS LED Video Panels.
HANDLING AND TRANSPORTATION

The optional **VSFC8 Flight Case** (sold separately) for the VS LED Video Panels holds 8x VS LED VIDEO PANELs. The flight case features a full foam lining with slots for each unit. The case is robust, so will completely protect a set of panels on the road. Designed specifically for use with VS 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 ONCE A YEAR!

FLAMMABLE MATERIAL WARNING
Keep panel minimum 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 vertically in a curtain.
An unlimited number of panels may be installed horizontally.
(NOTE: Additional processing may be necessary)

USE CAUTION WHEN POWER LINKING MULTIPLE PANELS AS THE POWER CONSUMPTION
OF OTHER PANEL MODELS MAY EXCEED THE MAX POWER OUTPUT ON THIS PANEL.
CHECK SILK SCREEN FOR MAX AMPS.

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<thead>
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<th>Input Power</th>
<th>AC 100-240VAC, 50/60HZ, 16A Max</th>
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<tr>
<td>Output Power</td>
<td>AC 100-240VAC, 50/60Hz, 14A Max</td>
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<tr>
<td>Max Power Consumption</td>
<td>170W Max, 68W Average</td>
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</table>

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, or away from areas were
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 amongst
others calculating working load limits, installation material being used, and periodic safety inspection of all
installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself.
Improper installation can result in bodily injury and property damage.
INSTALLATION – ASSEMBLY

Horizontal Panel Assembly

The horizontal tab-keyed connector is spring loaded.

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

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

Rotate handle down (counterclockwise) to cinch horizontal tab-keyed connector.

To unlock, rotate handle (clockwise), releasing tension of horizontal tab-keyed connector cinching mechanism.
INSTALLATION - ASSEMBLY

Vertical Panel Assembly

Align the vertical positional posts with their corresponding alignment holes.

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

Release latch to hold the vertical connector. To lock, twist vertical connector lever to the left.
INSTALLATION – RIGGING BAR

The VS 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 hang of up to 20 VS LED Video Panels, allowing them 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.
INSTALLATION – RIGGING BAR, VERTICAL HANG & STACK

VERTICAL HANG

VERTICAL STACK

Dimensions:
- 9.8 [250.0]
- 4.7 [120.0]
- 19.6 [498.0]
- 3.3 [83.0]
- 18.6 [472.2]
- 3.0 [76.0]
INSTALLATION – RIGGING BAR & VERTICAL HANG

Align the vertical positional posts with their corresponding alignment holes and insert them. Press spring-loaded locking latch to the left while pressing vertical connector up into locking-latch.

Release latch to hold the vertical connector. To lock, twist vertical connector lever to the left.

To unlock the vertical connector, rotate lever to the right (counter-clockwise), then press spring-loaded locking latch inward. The vertical connector will drop open.
INSTALLATION – RIGGING BAR & VERTICAL HANG

Vertical Panel Assembly with integrated magnets for solo technician
The VS LED Video Panels have built-in magnets to assist in vertical hanging for a solo installation.

⚠️ THE MAGNETS ARE NOT STRONG ENOUGH TO HOLD A PANEL WITHOUT ASSISTENCE. HOLD ONE LIFTING HANDLE AT ALL TIMES (WHILE MAINTAINING UPWARD PRESSURE), UNTIL PANEL IS LOCKED IN PLACE, STARTING WITH OPPOSITE VERTICAL LOCK.
INSTALLATION – RIGGING BAR, VERTICAL STACK

Align the vertical positional posts with their corresponding alignment holes and insert them.

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

Release latch to hold the vertical connector. To lock, twist vertical connector lever to the left.

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

**USE CAUTION WHEN INSTALLING THE VIDEO PANELS USING THE RIGGING BAR FOR STACKED ASSEMBLIES. IT IS NOT DESIGNED AS A FREESTANDING ASSEMBLY AND IS INHERENTLY UNSTABLE. STACKED LED VIDEO PANEL ASSEMBLIES MUST BE SECURELY INSTALLED BY QUALIFIED TECHNICIANS ONLY!**
INSTALLATION – FLAT PANEL ASSEMBLY

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

The optional VSR210 Horizontal Truss Mounting Bracket (sold separately) allows for the horizontal (ceiling) installation of the VS LED Video Panels.
INSTALLATION – GROUND STACK (OPTIONAL)

The optional VSRB1 Single Panel Rigging / Ground Stack Bar is a free-standing stack mounting option for the Vision (VS) Series LED Video Panels.

Use (2x) integrated Vertical Connectors to secure VS Series LED Video Panel to VSRB1 Single Panel Rigging Bar

The Back Plate can be loaded with sandbags to stabilize the stacked VS Series LED Video Panel structure
# TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>VS2</th>
<th>VS3</th>
<th>VS4</th>
<th>VS5</th>
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<td>168(H)x168(V)</td>
<td>128(H)x128(V)</td>
<td>104(H)x104(V)</td>
<td>84(H)x84(V)</td>
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<td>Pixel Pitch</td>
<td>2.97mm(0.12”)</td>
<td>3.91mm(0.15”)</td>
<td>4.81mm(0.19”)</td>
<td>5.95mm(0.23”)</td>
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<td>LED Configuration</td>
<td>SMD212</td>
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<td>Pixel Density</td>
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<td>65536 pixels/m²</td>
<td>43264 pixels/m²</td>
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<tr>
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<td>Module Quantity</td>
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</table>

## Mechanical Ratings
- Surface Flatness: Gap≤0.5mm
- Optical Ratings
  - Brightness: 1000 cd/m²
  - View Angle: 160°/140°
  - View Distance: 3m, 4m, 3m, 6m
  - Gray Scale: ≥14bits
  - Display COLOR: 256
  - Contrast Ratio: 5000:1
  - Brightness Adjustment: 0~100% 100 levels

## Power Supply
- Operation Power: 100~240V 50-60Hz
- Max. Power Consumption: 600 w/m²
- Average Power Consumption: 240 w/m²
- Max. Panel Power Consumption: 170w/per panel
- Ave. Panel Power Consumption: 68w/per panel

## Control Systems
- Control Mode: Constant Current Driving
- Frame Update Frequency: 50-75Hz
- Scan Mode: 1/21 duty, 1/16 duty, 1/13 duty, 1/7 duty
- Refresh Rate: 3840Hz
- Support Input: Composite, S-Video, Component, VGA, DVI, HDMI, HD_SDI
- Control Distance: Ethernet cable≤120m or Fiber Optic >120m
- Support VGA Mode: 1024x768, 1280x1024, 1600x1200, 1920x1280
- Brightness Correction: Supports

## Environmental
- Operating Temperature: -20° ~ +40°
- Operating Humidity: 10~90% RH No condensation
- Operating Life: 50000hours
- MTBF: 5000hours
- Protection Level: IP20
- Out of Control Rate: ≤0.02%
- Curve Angle: n/a

Specifications subject to change without any prior written notice.
### OPTIONAL COMPONENTS & ACCESSORIES

<table>
<thead>
<tr>
<th>SKU</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>VSFC8</td>
<td>Flight Case - fits 8 VS LED VIDEO PANEL</td>
</tr>
<tr>
<td>VSRB1</td>
<td>Single Panel Rigging/Stack Bar for VS LED Video Panels</td>
</tr>
<tr>
<td>VS1RSB</td>
<td>Rear Support Bracket FOR VS LED Video Panels</td>
</tr>
<tr>
<td>VSR210 (VSRQR)</td>
<td>Quick Rig for VS LED Video Panels</td>
</tr>
<tr>
<td>VSS225 (VSSCSB)</td>
<td>Single Column Support Base for VS LED Video Panels</td>
</tr>
<tr>
<td>VSM111 (VSMRT)</td>
<td>Magnetic Module Removal Tool for VS LED Video Panels</td>
</tr>
<tr>
<td>VSR210</td>
<td>Horizontal Truss Mounting Bracket</td>
</tr>
<tr>
<td>VX4001</td>
<td>Novastar VX4S Video Processor</td>
</tr>
<tr>
<td>MCT300</td>
<td>Novastar MCTRL-300 Video Processor</td>
</tr>
<tr>
<td>MED500</td>
<td>ArKaos Media Master Express Video Software</td>
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<tr>
<td>MED552</td>
<td>ArKaos Media Master Pro 5 (License)</td>
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<tr>
<td>MED223</td>
<td>ArKaos Studio Server</td>
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<tr>
<td>MED234</td>
<td>ArKaos Stadium Server</td>
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<tr>
<td>MED245</td>
<td>ArKaos 4K Server</td>
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<tr>
<td>MED212</td>
<td>ArKaos Stage Server Pro</td>
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<tr>
<td>MED201</td>
<td>ArKaos Stage Server Express</td>
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<tr>
<td>MPC010</td>
<td>Main Power Cables (Locking Power Connector In/Out to Edison)</td>
</tr>
<tr>
<td>MPC015 (15ft.)</td>
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<tr>
<td>MPC025 (25ft.)</td>
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<td>MPC050 (50ft.)</td>
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<tr>
<td>PLC1 (1ft.)</td>
<td>Panel to Panel Power Link Cables (Locking Power Connector In/Out to Edison)</td>
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<tr>
<td>PLC3 (3ft.)</td>
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<tr>
<td>PLC6 (6ft.)</td>
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<tr>
<td>PLC10 (9.84ft.)</td>
<td>Main Data Cables, Bare RJ45 to Locking RJ45 Ethernet Connect In/Out</td>
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<tr>
<td>PLC15 (15ft.)</td>
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<tr>
<td>PLC25 (25ft.)</td>
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<tr>
<td>CAT6PRO5 (5ft.)</td>
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<td>CAT6PRO10 (9.84ft.)</td>
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<td>CAT6PRO15 (15ft.)</td>
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<td>CAT6PRO50 (50ft.)</td>
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<td>CAT6PRO100 (100ft.)</td>
<td>Panel to Panel Data Link Cables (Locking RJ45 Ethernet Connect In/Out</td>
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<tr>
<td>CAT6PRO25FC (25ft.)</td>
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<tr>
<td>CAT6PRO50FC (50ft.)</td>
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<tr>
<td>CAT6PRO100FC (100ft.)</td>
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