



Control Your Video

**VIDEO WALLS VIDEO PROCESSORS
VIDEO MATRIX SWITCHES
EXTENDERS SPLITTERS WIRELESS
CABLES & ACCESSORIES**

PRODUCT MANUAL

Model: XXX-AVXWALL-PLUS



4K Modular Video Wall Processor

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Revision History		
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SECTION I : GETTING STARTED

1.1 IMPORTANT SAFEGUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

Avenview warranty certificate please refer to page #23

Warranty does not include:

- Any product on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 SAFETY GUIDELINES

The **AVXWALL-PLUS**, 4K Modular Video Wall Processor has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AVXWALL+ should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.



- ⚠ Do not dismantle the housing or modify the module.
- ⚠ Dismantling the housing or modifying the module may result in electrical shock or burn.
- ⚠ Refer all servicing to qualified service personnel.
- ⚠ Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards.
- ⚠ Keep the device away from liquids.
- ⚠ Spillage onto the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- ⚠ If the unit appears damaged, have the module checked by a qualified service engineer before using it again.
- ⚠ Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



1.3 REGULATORY NOTICES FEDERAL COMMUNICATIONS COMMISSION (FCC)

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Avenview is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment.

Warning Symbols	Description
	<p>ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAL PARTS. THIS MAY RESULT IN ELECTRICAL SHOCK OR BURN.</p>
	<p>THIS WARNING SYMBOL MEANS DANGER. WHEN THIS SYMBOL IS PLACED, YOU ARE IN AN ENVIRONMENT THAT CAN CAUSE BODILY INJURY.</p>
	<p>DO NOT TAMPER WITH THE UNIT. DOING SO WILL VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.</p>
	<p>THE CIRCUIT BOARDS ARE VERY SENSITIVE TO STATIC DISCHARGE. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIRONMENT.</p>
	<p>WARNING</p> <p>Read & understand user guide before using this device.</p> <p>Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.</p>



2. INTRODUCTION

The **AVXWALL+** 4K Modular Video Wall Processor is the second generation of the Avenview modular video wall series. The modular AVX series hardware-based processors represent a range of FPGA modular chassis, with hot swappable Input /Output cards available in various media connections. Equipped with an advanced set of features such as keyboard, video, audio and mouse (KVM) control, Multi-User management and Multi-screen windowing , the unit provides fast and stable video wall control for any environment. Unlike PC based or software video walls, the AVX series is free from any virus or malware related security issues, making it ideal for high-quality 24/7 performance.

Flexible Input/Output Cards

The AVXWALL+ enables the user to insert the I/O cards into any available slot on the chassis thus offering the flexibility to customize their solution with an efficient, affordable and expandable hardware unit. The chipset on the I/O cards can endure high video bandwidth and process digital audio, resulting in real-time signal processing with no delay or frame loss. This unit can support two types resolutions on the Input /Output cards processing both analog and digital signals. The 4K resolution can distributed via HDMI, Displayport and Dual Link DVI cards. The Full HD resolution is delivered by CVBS, YPbPr, VGA, DVI, HDMI, SDI, DisplayPort, HDBaseT and Optical fiber cards. The AVXWALL+ offers two (2) newly featured input cards: the eight (8) port USB card allowing for KVM control and the IP decode card for decoding an RTP stream up to 1920x1080@60 over the LAN. Lastly, the additional Confidence monitoring output card has two HDMI output ports and RJ45 for RTP/H.264 1080p@60 decoding for recording, reviewing important content or distributing the entire video wall content to other remote locations.

Control Software Included

No in-depth training is required to use our AVX series, PC Control Software or iPad App, now enabled with multi user account creation and password management. This provides secure access for either managing via ADMIN rights or simple control for USER. Our software has comprehensive and user friendly features such as placing up to 16 images per screen, drag n drop image placement, resize, overlay, zoom, scrolling text, uploading large background images and user preset buttons to recall favorites. Our software can also preview the input source directly within the Control Software when connected through LAN network and enable or disable the audio on each output with easy to manage volume control slider function.

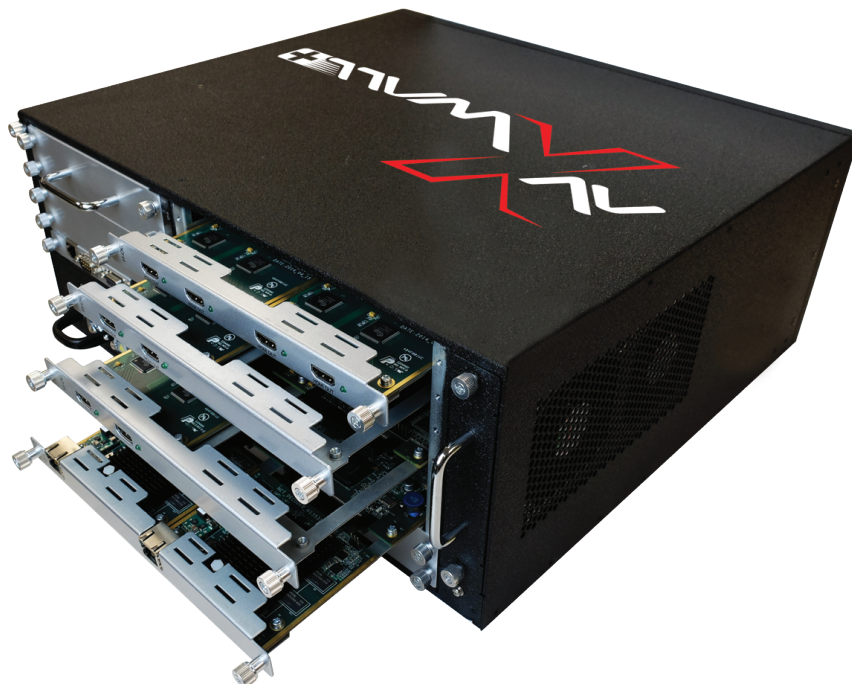
New Features

On Screen Mouse Control- connect a USB/Wireless mouse instead of using the PC software to control the inputs directly. With the mouse control user can: open and close windows, create up to nine windows on a single display, picture in picture (PIP), resize, and overlay. With the keyboard KVM Control feature any device with HID driver can be directly accessed, controlled and modified on the actual video wall with an attached Keyboard and Mouse. With the AVXWALL + you can manage 4 separate video walls simultaneously, recall the inputs and multi layouts on each video wall setup from a single PC or iPad interface. It also supports a 2x2, 3x3, and 4x4 – up to max 156 outputs on our largest 28U chassis.



2.1 FEATURES

- Modular input and output chassis design;
- Supports 4K 30Hz ultra high resolution image and high-quality P2P (Pixel to Pixel) screen resolution;
- High-performance system supports LCD, DLP and LED video wall of any size and layout;
- Users can insert input card, output card, and control card into any card slot;
- Users can control PC sources directly with mouse and keyboard;
- HD dynamic scrolling text function allowing users to define a group of scrolling text with different styles to publish messages and slogans;
- Supports analog/embed audio input and output allowing users to manage audio and video signals synchronically;
- On Screen Control, allows users to control the whole video wall using keyboard and mouse;
Users can open, resize, move and relocate input signals window without the need of any control software;
- Supports output image synchronization without row by row delay;
- Can manage up to 4 video wall groups with different resolution at the same time;
- Supports RS232 serial port and relay control interface for third part device control;
- Supports multi-user function allowing different users to login into the system and operate the processor at same time;
- Allows storage of up to 128 presets;
- Provides 60fps real-time mirroring high resolution video signal of the whole video wall (Confidence Monitoring) over HDMI or IP Stream;
- Supports CVBS, YPbPr, VGA, DVI, HDMI, SDI, DisplayPort, UTP and optical fiber;
- Full screen modes, zoom, image crop and adjustable size & position through software;
- Background Image storage;
- EDID Management;



2.2 PACKAGE CONTENTS

Before you start the installation of the AVXWALL-PLUS, please ensure that the packaging has the listed items below.

#	ITEM	QTY	
1	AVXWALL-PLUS I/O CARDS INSTALLED	x1	
2	RACKMOUNT BRACKETS	x2	
3	POWER CABLE	x1	
4	RJ-45 to DB9 SERIAL CABLE	x1	
5	CAT5e/6 PATCH CABLE	x1	
6	PRODUCT USER MANUAL	x1	

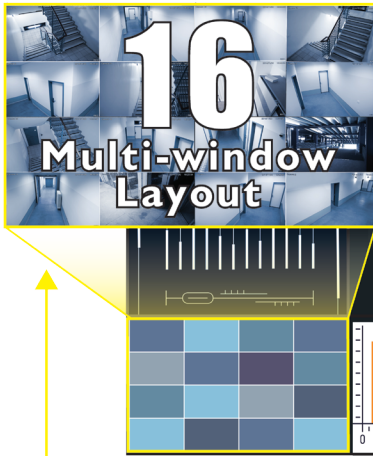
2.3 BEFORE INSTALLATION

ATTENTION

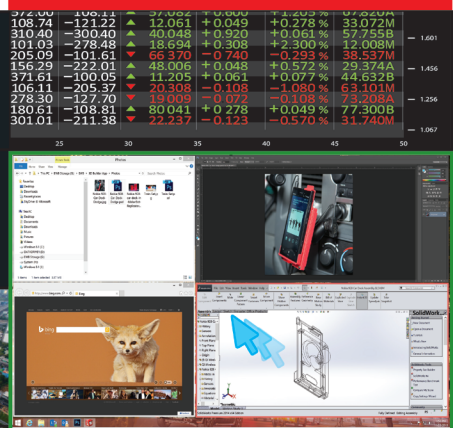
- To prevent airflow restriction, allow clearance around the ventilation openings to be at least: ONE Inch (25.4 mm)
- Take care when connecting units to the electrical power circuit so the maximum rated circuit is not overloaded
- Before you work on any equipment, be aware of the hazards involved with electrical circuitry
- Place the product on an even and stable surface. If the product falls, it may cause an injury to a person or malfunction.
- Do not place the product in high temperatures (over 50°C), or low temperature (under 0°C) or high humidity.
- Do not twist or pull by force ends of the UTP /HDMI cable. It can cause malfunction.
- Installation of the equipment must comply with local and national electrical codes.



3. APPLICATION DIAGRAM



AVXWALL+ KEY FEATURES



IP Decode Card (Optional)

Easily decode, capture and stream any RTP media with our IP Card in Full HD on to your active video wall.



KVM Control Card (Optional)

Capable of controlling up to seven (7) USB or HID compatible devices directly from the active video wall with a connected keyboard and mouse.



On Screen Mouse Control

Have the power of controlling the content on the active video wall using an easy click of the mouse - drag, resize, open, close, or arrange the layout.



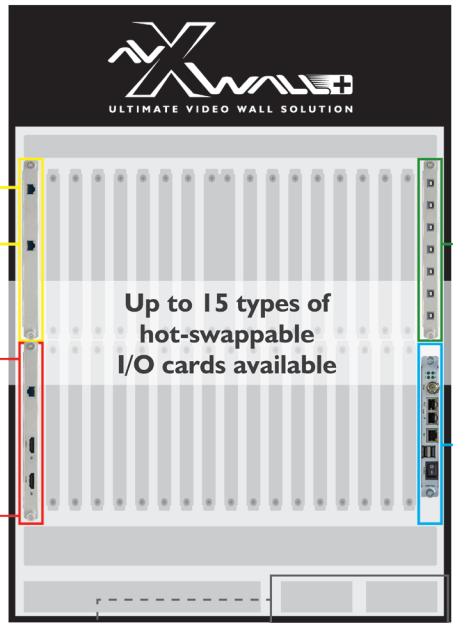
Confidence Card (Optional)

View, record and stream your video wall content via the HDMI connection to the screen or RTP decoder port over the LAN network.



AVXWALL + Software

Powerful software that provides multi user management with different access levels and password protection. Now equipped with the standard feature to preview both the sources and the real-time video content, allowing the user to control any layout remotely over the network.

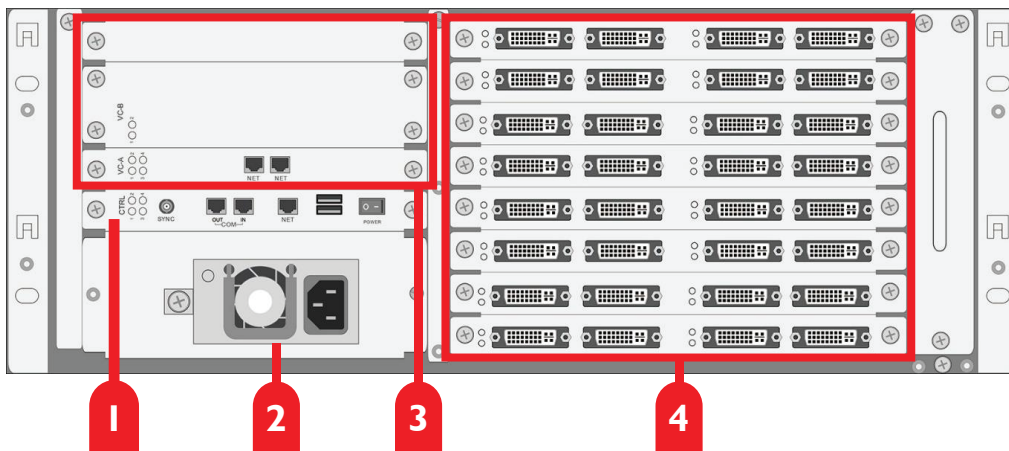


4. AVAILABLE CONFIGURATIONS

Chassis Model	# of I/O Card Slots	Max. # of Output Connections (HD/4K)	Max. # of Input Connections (HD/4K)	Dimensions (WxHxD)	Modular Cards
CH3-10U	9 Input, 8 Output	36 / 18	36 / 18	440 x 442 x 380mm	No
CH3-16U	17 Input, 17 Output	68 / 34	68 / 34	440 x 709 x 380mm	No
CH3-28U	38 Input, 38 Output	152 / 76	152 / 76	440 x 1242 x 380mm	No
CH4-2U	4	12 / 6	12 / 6	440 x 89 x 380mm	Yes
CH4-4U	8	28 / 14	28 / 14	440 x 175 x 380mm	Yes
CH4-10U	17	64 / 22	64 / 22	440 x 442 x 380mm	Yes
CH4-16U	35	133 / 66	133 / 66	441 x 709 x 380mm	Yes

4.1 PANEL DESCRIPTION

4.1.1 I/O PANEL (CH4-2/4/10/16U, AVXWALL+)

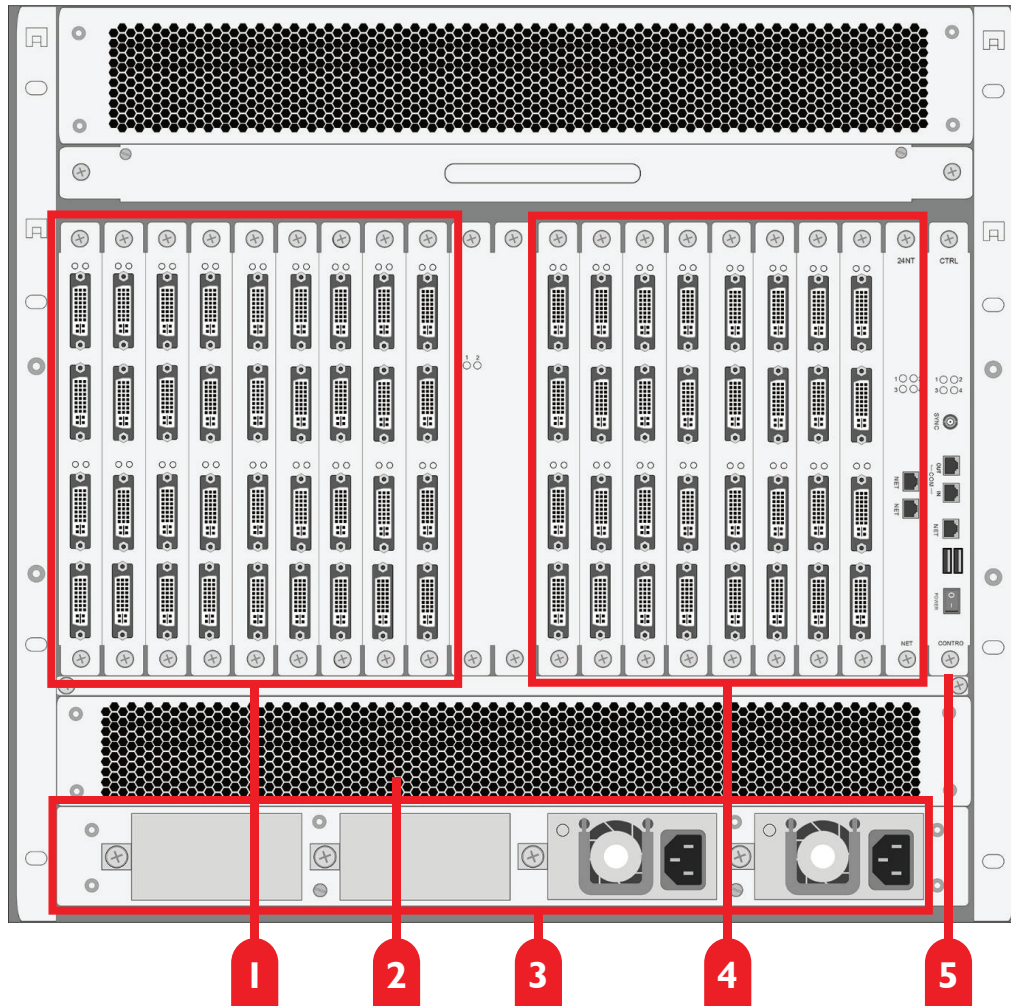


<p>1. Control Card: Power switch, USB, network control, RS232 in and out</p>	<p>1. Power Supply: Replaceable</p>
<p>3. Add-In Cards: IP Decode, KVM</p>	<p>4. Input/Output Cards: HDMI, Display-Port, DVI, VGA, SDI, CVBS, Optical Fiber, VPbPr, HDBaseT, KVM, Confidence Monitor, IP Decode (RTP),</p>



4.1 PANEL DESCRIPTION (CONT)

4.1.2 I/O PANEL (CH3-10/16/28U, AVXWALL+)



<p>1. Input Cards: 4K HDMI, DisplayPort, DVI, VGA, SDI, CVBS, Optical Fiber, VPbPr, HDBaseT, IP Decode (RTSP), KVM</p>	<p>2. Fan Exhaust: Fan ventilation grating. Keep clear of obstructions</p>
<p>3. Redundant Power Supply: Hot-swappable power delivery with fail-over protection</p>	<p>4. Output Cards: 4K HDMI, DisplayPort, DVI, VGA, SDI, CVBS, Optical Fiber, VPbPr, HDBaseT, Confidence Monitor</p>
<p>5. Control Card: Power switch, USB, network control, RS232 in and out</p>	



4.2 INPUT CARDS

4.2.1- HDM-AVXWALLPLUS-4IN | HDMI 1.3



Signal Format	HDMI 1.3
Port Type	4x HDMI Type A
Audio Support	Embedded HDMI Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
HDCP	1.4
EDID Support	Read and Write
Maximum Data Rate	4.95Gbps

4.2.2- HDM4K-AVXWALLPLUS-2IN | HDMI 1.4a



Signal Format	HDMI 1.4a
Port Type	2x HDMI Type A
Audio Support	Embedded HDMI Audio
Supported Resolutions	4096x2160@30Hz, 3840x2400@25Hz, 3840x2160@30Hz, 3840x2160@25Hz, 2560x1600@60, 1920x2160@60, 1920x2160@50, And lesser resolutions
HDCP	1.4
EDID Support	Read and Write
Maximum Data Rate	10.2Gbps

4.2.3- DVI-AVXWALLPLUS-4IN | DVI SINGLE-LINK



Signal Format	DVI 1.0
Port Type	4x DVI-I
Audio Support	3.5mm Jack (via Adapter Cable)
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
Color Depth	32bits/pixel
Impedance	50Ω

*All resolutions have a framerate of 60Hz unless otherwise noted



4.2 INPUT CARDS (CONT)

4.2.4- DVIDL-AVXWALLPLUS-2IN | DVI DUAL-LINK



Signal Format	DVI 1.0
Port Type	2x DVI-I Dual-Link
Audio Support	3.5mm Jack
Supported Resolutions	4096x2160@30Hz, 3840x2400@30Hz, 3840x2160@30Hz, 2560x1600@60Hz, And lesser resolutions
Color Depth	32bits/pixel
Impedance	50Ω

4.2.5- DP-AVXWALLPLUS-2IN | DISPLAYPORT 1.1a



Signal Format	DisplayPort 1.1a
Port Type	2x DisplayPort
Audio Support	Embedded DisplayPort Audio
Supported Resolutions	4096x2160@30Hz, 3840x2400@30Hz, 3840x2160@30Hz, 2560x1600@60Hz, And lesser resolutions
HDCP	1.4
Maximum Data Rate	6.18Gbps

4.2.6- HBT-AVXWALLPLUS-4IN | HDBaseT



Signal Format	HDBaseT Video & Audio
Port Type	4x RJ-45
Audio Support	Embedded HDBaseT Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
Maximum Data Rate	10.2Gbps



4.2 INPUT CARDS (CONT)

4.2.7- VGA-AVXWALLPLUS-4IN | VGA



Signal Format	RGBHV
Port Type	4x DE-15 (VGA)
Audio Support	3.5mm Jack
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200

4.2.8- COMP-AVXWALLPLUS-4IN | YPbPr



Signal Format	YPbPr
Port Type	4x 3-way RCA Jacks (via Adapter Cable)
Audio Support	3.5mm Jack
Supported Resolutions	720x480i@60Hz, 720x576i@50Hz, 720x480p@60Hz, 720x576p@60Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1920x1080i@60Hz, 1920x1080i@50Hz, 1920x1080p@25Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@60Hz

4.2.9- FOSC-AVXWALLPLUS-4IN | SC OPTICAL FIBER



Signal Format	SC Optical Fiber
Port Type	SC Fiber
Audio Support	Embedded Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200



4.2 INPUT CARDS (CONT)

4.2.10- FODL-AVXWALLPLUS-2IN | LC OPTICAL FIBER



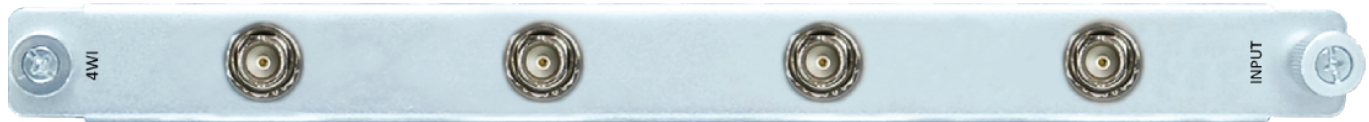
Signal Format	LC Optical Fiber
Port Type	LC Fiber
Audio Support	Embedded Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200

4.2.11- SDI-AVXWALLPLUS-4IN | HD-SDI



Signal Format	3G SDI
Port Type	BNC
Audio Support	Embedded Audio
Supported Resolutions	720x480i@60Hz, 720x576i@50Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1920x1080p@24Hz, 1920x1080p@25Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@60Hz, 1920x1080i@50Hz, 1920x1080i@60Hz

4.2.12- CVBS-AVXWALLPLUS-4IN | CVBS



Signal Format	Composite Video
Port Type	BNC
Audio Support	3.5mm Jack
Supported Resolutions	720x480i@60(NTSC), 720x576i@50(PAL)



4.2 INPUT CARDS (CONT)

4.2.13- IP-AVXWALLPLUS-2IN | IP DECODE



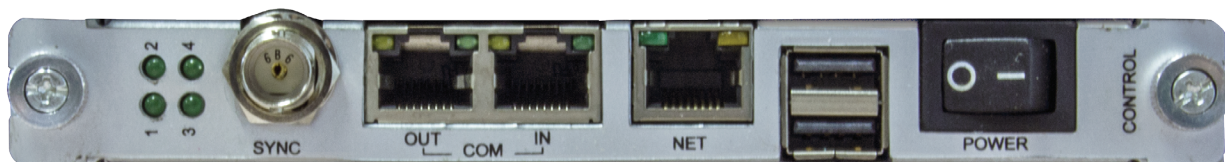
Signal Format	RTSP Stream
Port Type	RJ-45
Audio Support	Embedded Audio
Supported Resolutions	DI, 1280x720p@30, 1280x960p@30, 1920x1080p@30, 1920x1080p@60

4.2.14- OPT-AVXWALLPLUS-KVM | KVM SWITCH



Signal Format	USB KVM
Port Type	USB Type B
Features	Keyboard and Mouse Control
Supported OS	Windows, macOS, Linux

4.2.15- AVXWALL+ CONTROL CARD



Signal Format	SYNC, RS232, TELNET, TCP/IP, USB, POWER
Port Type	BNC, 3x RJ-45, 2x USB Type A
Features	RS232 In & Out, Telnet &, Mouse and Keyboard Control
Supported OS	Windows, macOS, Linux



4.3 OUTPUT CARDS

4.3.1- HDM-AVXWALLPLUS-4OUT | HDMI 1.3



Signal Format	HDMI 1.3
Port Type	4x HDMI Type A
Audio Support	Embedded HDMI Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
HDCP	1.4
EDID Support	Read and Write
Maximum Data Rate	4.95Gbps

4.3.2- HDM4K-AVXWALLPLUS-2OUT | HDMI 1.4a



Signal Format	HDMI 1.4a
Port Type	2x HDMI Type A
Audio Support	Embedded HDMI Audio
Supported Resolutions	4096x2160@30Hz, 3840x2400@25Hz, 3840x2160@30Hz, 3840x2160@25Hz, 2560x1600@60, 1920x2160@60, 1920x2160@50, And lesser resolutions
HDCP	1.4
EDID Support	Read and Write
Maximum Data Rate	10.2Gbps

4.3.3- DVI-AVXWALLPLUS-4OUT | DVI SINGLE-LINK



Signal Format	DVI 1.0
Port Type	4x DVI-I
Audio Support	3.5mm Jack (via Adapter Cable)
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
Color Depth	32bits/pixel
Impedance	50Ω



4.3 OUTPUT CARDS (CONT)

4.3.4- DVIDL-AVXWALLPLUS-2OUT | DVI DUAL-LINK



Signal Format	DVI 1.0
Port Type	2x DVI-I Dual-Link
Audio Support	3.5mm Jack
Supported Resolutions	4096x2160@30Hz, 3840x2400@30Hz, 3840x2160@30Hz, 2560x1600@60Hz, And lesser resolutions
Color Depth	32bits/pixel
Impedance	50Ω

4.3.5- DP-AVXWALLPLUS-2OUT | DISPLAYPORT 1.1a



Signal Format	DisplayPort 1.1a
Port Type	2x DisplayPort
Audio Support	Embedded DisplayPort Audio
Supported Resolutions	4096x2160@30Hz, 3840x2400@30Hz, 3840x2160@30Hz, 2560x1600@60Hz, And lesser resolutions
HDCP	1.4
Maximum Data Rate	6.18Gbps

4.3.6- HBT-AVXWALLPLUS-4OUT | HDBaseT



Signal Format	HDBaseT Video & Audio
Port Type	4x RJ-45
Audio Support	Embedded HDBaseT Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200
Maximum Data Rate	10.2Gbps



4.3 OUTPUT CARDS (CONT)

4.3.7- VGA-AVXWALLPLUS-4OUT | VGA



Signal Format	RGBHV
Port Type	4x DE-15 (VGA)
Audio Support	3.5mm Jack
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200

4.3.8- COMP-AVXWALLPLUS-4OUT | YPbPr



Signal Format	YPbPr
Port Type	4x 3-way RCA Jacks (via Adapter Cable)
Audio Support	3.5mm Jack
Supported Resolutions	720x480i@60Hz, 720x576i@50Hz, 720x480p@60Hz, 720x576p@60Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1920x1080i@60Hz, 1920x1080i@50Hz, 1920x1080p@25Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@60Hz

4.3.9- FOSC-AVXWALLPLUS-4OUT | SC OPTICAL FIBER



Signal Format	SC Optical Fiber
Port Type	SC Fiber
Audio Support	Embedded Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200



4.3 OUTPUT CARDS (CONT)

4.2.10- FODL-AVXWALLPLUS-2OUT | LC OPTICAL FIBER



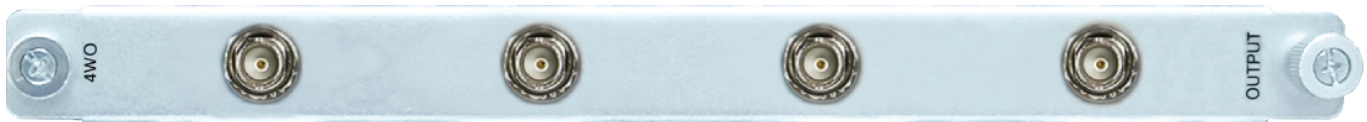
Signal Format	LC Optical Fiber
Port Type	LC Fiber
Audio Support	Embedded Audio
Supported Resolutions	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200

4.2.11- SDI-AVXWALLPLUS-4OUT | HD-SDI



Signal Format	3G SDI
Port Type	BNC
Audio Support	Embedded Audio
Supported Resolutions	720x480i@60Hz, 720x576i@50Hz, 1280x720p@50Hz, 1280x720p@60Hz, 1920x1080p@24Hz, 1920x1080p@25Hz, 1920x1080p@30Hz, 1920x1080p@50Hz, 1920x1080p@60Hz, 1920x1080i@50Hz, 1920x1080i@60Hz

4.2.12- CVBS-AVXWALLPLUS-4OUT | CVBS



Signal Format	Composite Video
Port Type	BNC
Audio Support	3.5mm Jack
Supported Resolutions	720x480i@60(NTSC), 720x576i@50(PAL)



4.3 OUTPUT CARDS (CONT)

4.2.13- OPT-AVXWALLPLUS-CONF | CONFIDANCE MONITO



Signal Format	H.264 RTP, HDMI 1.3
Port Type	1 x RJ-45, 2x HDMI Type A
Audio Support	Embedded Audio
Supported Resolutions	HDMI: 1920x1080p@60Hz Main stream: RTP/ES/H.264, 1080p@60, 10Mbps; Sub stream: RTP/ES/H.264, D1 (704x576p@60Hz), 4Mbps;

5. INITIAL SETUP

To setup Avenview XXX-AVXWALL-PLUS follow the steps outlined below:


1. Premium quality DVI, HDMI, VGA, Composite, S-Video cables and adapters are recommended.
2. Make sure XXX-AVXWALL-PLUS is turned off.
3. Connect displays (or projectors, TV or other display devices) to output cards.
4. Connect the Source devices (such as, PC, DVD player, or Media player etc.) to input cards.
5. Connect a Windows based laptop or desktop (that will used to configure the AVXWALL) to XXX-AVXWALL-PLUS using a CAT5e/6 Ethernet cable or RS-232 to USB Adapter cord.
6. Power ON XXX-AVXWALL-PLUS.
7. Turn ON all devices connected to AVXWALL and then setup the AVXWALL from the system through the AWWALL-PLUS software or TELNET.

DO NOT block the air vents of this device or stack another device on the top or bottom of the AVXWALL+. Blocking the air vents of the AVXWALL+ will cause the unit to overheat and will cause damage to your unit not covered under warranty



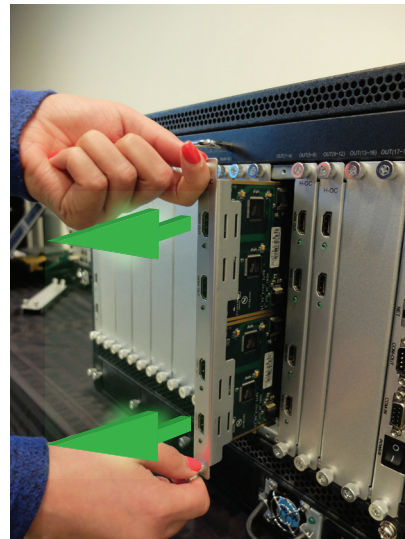
5.1 INPUT/OUTPUT CARD INSTALLATION

To remove an I/O card or the control card, follow these steps:

1. Obtain a Philips head screwdriver 
2. Insert the screwdriver into the screw head as shown in the images below
3. Rotate the screwdriver in an anti-clockwise direction to loosen the screw



4. With both screws loose, gently pull away from the unit
5. The card will start sliding out of the chassis as shown in the photos below



6. To install an I/O card, perform the previous steps in reverse.

Note: Screws are attached to the card and can not be removed



5.2 CONFIGURATION

5.2.1- AVXWALL+ Controller Software

All features of the AVXWALL+ can be controlled through the AVXWALL+ Controller software. Your Windows-based computer connects to the unit through its RJ-45 network port either directly or through a network switch. More details on the AVXWALL+ Controller Software can be found in the Software Guide available [HERE](#)

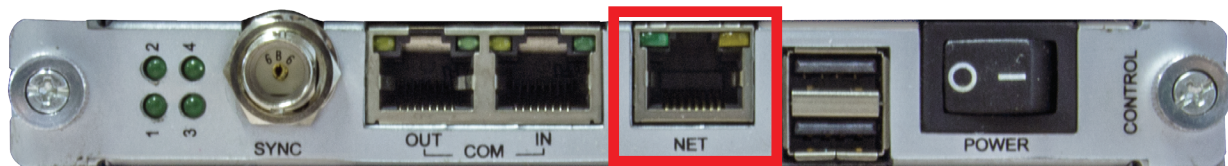
Default IP Settings

IP Address: 192.168.1.65

Subnet: 255.255.255.0

Gateway: 192.168.1.1

Port: 2000



5.2.2- TELNET Control

All features of the AVXWALL+ can be controlled through the AVXWALL+ Telnet Command Line Interface. Your Windows-based computer connects to the unit through its RJ-45 network port either directly or through a network switch. More details on the AVXWALL+ Telnet Command Line can be found in the API Guide available [HERE](#)

5.2.3- RS232 Serial Control

All features of the AVXWALL+ can be controlled through the AVXWALL+ RS232 Serial Interface. Any serial enabled device can connect to the unit through the RJ-45 serial port. More details on the AVXWALL+ Serial Interface can be found in the API Guide available [HERE](#)

Default Serial Settings

Serial Line: <Your COM number>

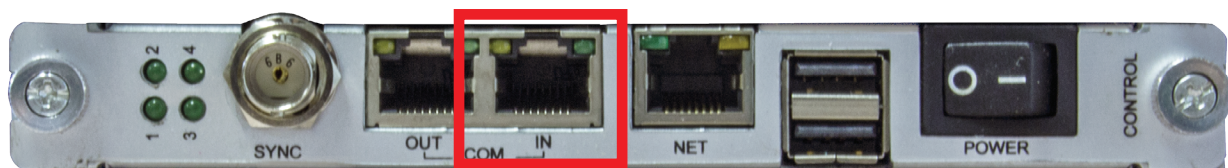
Speed: 9600

Data bits: 8

Stop bits: 1

Parity: None

Flow Control: None



6. SPECIFICATIONS

CHASSIS		
CHASSIS		2U, 4U, 10U, 16U, 28U
WEIGHT		According to size
POWER		According to size, redundant power support
SHOCKPROOF		ISTA 1A
COOLING		Multi-Fan
INSTALLATION		19-inch cabinet with mounting accessories
OPERATING TEMPERATURE		0°~40° - 32°F~104°F)
STORAGE TEMPERATURE		-10°~60°(14°F~140°F)
INPUT/OUTPUT		
INPUT	DVI	Single-link DVI 1920x1200@60Hz; Dual-link DVI 3840x2400@30Hz,
	DISPLAYPORT	3840x2400@30Hz, 2560x1600@60Hz; downward compatibility;
	HDMI 4K	Resolution of HDMI 1.4 up to 3840x2160@30Hz;Embed audio
	HDMI	Resolution of HDMI 1.3 up to 1920x1080@60Hz; Embed audio
	VGA	Up to 1920x1200@60Hz; Audio interface 3.5mm
	YPBPR	Up to 1920x1080@60Hz; Audio interface 3.5mm
	SDI	Up to 1920x1080@60Hz; Support embed audio
	IP	Up to 1920x1080@60Hz; Support embed audio
	CVBS	PAL / NTSC; Audio interface 5 pin, unbalanced
	HDBT	Up to 1920x1200@60Hz; Support embed audio
	FIBER	Up to 1920x1200@60Hz; Support embed audio
OUTPUT	INTERFACE	DVI
		VGA(via DVI-I)
		HDBaseT
		Fiber
		CVBS
		SDI
		IP Stream
MIRRORING	Supported (Confidence Monitoring)	
RESOLUTION	800x600, 1024x768, 1280x720, 1280x800, 1280x1024, 1360x768, 1366x768, 1440x900, 1440x1050, 1600x1200, 1680x1050, 1920x1080, 1920x1200, 2048x1080, 3840x2160, and Other Customized Resolutions	
AUDIO	Supported on Select Cards	
SCALE	INPUT SCALE	Up to 152 ports (1080p)
	OUTPUT SCALE	Up to 152 ports
	SWITCHED BANDWIDTH	160~1560 Gbps



7. TROUBLESHOOTING TIPS

PROBLEM	CORRECTIVE ACTION
NO IMAGE	<ul style="list-style-type: none"> • Check that the source is on and outputting a signal • Make sure that each output and input is correctly connected to the corresponding device • Use Premium Quality HDMI and DisplayPort cables • Check output cards using test image in the AVXWALL+ Controller Software See Software Guide for more details • Check output cable for damage or if its length exceeds specifications
INCORRECT COLOR IN IMAGE	<ul style="list-style-type: none"> • Check if the cable is connected properly • Check if cable is damaged • Check software color adjustment • Check display color adjustment • Check if cables are securely connected • Adjust the color balance of the display
SHAKING OR NOISY IMAGE	<ul style="list-style-type: none"> • Check cable length does not exceed specification • Check cable quality
DARK EDGE IN DISPLAY IMAGE	<ul style="list-style-type: none"> • Check if video signal has been cropped by the display • Check if incorrect adjustment of the video has been made in the Controller software • Reset AVXWALL+ to default settings using Controller software, then reconfigure



Avenview Warranty Certificate

AVENVIEW CORP ("Avenview") warrants Avenview-branded product(s) contained in the original packaging against defects in materials and workmanship when used normally in accordance with Avenview's enclosed manual guidelines for a period of THREE (3) YEARS from the date of original retail purchase - Warranty Period. Avenview's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

LABOR: During the Warranty Period of THREE (3) YEARS, Avenview will repair or replace the product(s) at no cost using new or used parts equivalent to novel performance and reliability if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Labor applicable to product(s) after Warranty Period. For labor costs, please contact support@avenview.com.

PARTS: During the Warranty Period of THREE (3) YEARS, Avenview will supply new or rebuilt replacements in exchange for defective parts of the product(s) at no cost if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Parts applicable to product(s) after Warranty Period. For part(s) costs, please contact support@avenview.com.

To obtain Warranty: (a) proof of purchase in the form of a bill of sale or receipted invoice reflecting that the registered product(s) is within warranty period must be presented to obtain warranty service; (b) product(s) must be registered at time of purchase. Failure to do so will result in applicable parts and labor charges. Returning product(s) must be shipped in Avenview's original packaging or in packaging pertaining equal degree of protection to Avenview's products. Both Avenview and purchaser are responsible for freight charges and brokerage fees when shipping the product(s) to the receiver.

NOT COVERED BY THIS WARRANTY

This warranty does not apply to any non-Avenview branded product(s); non-registered Avenview product(s). This warranty does not apply: (a) to cosmetic damage, including but not limited to scratches, dents and broken cords; (b) to damage caused by use with another product; (c) to damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external cause; (d) to damage caused by operating the Avenview product(s) outside Avenview's manuals or guidelines; (e) to damage caused by service performed by anyone who is not a representative of Avenview or an Avenview authorized personnel; (f) to defects caused by normal wear and tear or otherwise due to the normal aging of the Avenview product(s); or (g) if any serial number or void stickers has been removed or defaced from the Avenview product(s).

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TECHNICAL SUPPORT

CONTACT US



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