



# ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller Owner's Manual

[Home](#) » [ANGUSTOS](#) » ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller Owner's Manual



## Contents

- [1 ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 Hardware Based Design](#)
- [5 FPGA Dedicated Chipset](#)
- [6 Module design with Hot Swap](#)
- [7 Features](#)
- [8 SPECIFICATION](#)
- [9 Documents / Resources](#)
  - [9.1 References](#)
- [10 Related Posts](#)



**ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller**



## Product Information

The High-End Video Wall Controller by Angustos is a hardware-based video processing equipment with a high-performance design. It eliminates the need for high-end computer specifications, GPU cards, licenses, and operating system crashes. The controller utilizes a dedicated Field Programmable Gate Array (FPGA) chipset for video processing, providing enhanced performance compared to conventional software or PC controllers. The unit supports up to 92 input x 72 output or 88 input x 60 output configurations. It features a module design with hot swap capability and supports multiple forms of connections including HDMI, DVI, VGA, HDBaseT, and IP streaming.

## Product Features

- High-end 4 Layers Matrix Picture in Picture (MPiPTM) – Cross Screen
- Easy control with Drag & Drop for customizing complex layouts
- Supports Overlap, Roaming, Stretching, Zoom in/out
- Front Panel Touch Screen for scene mode control, profile saving/recalling, and IP setting
- Supports IP Camera Direct Stream (iDirect Stream™)
- Background Image, Scrolling Text, and Scheduling features
- Pure Hardware Structure with FPGA chipset
- Modular Design with Hot Swap capability
- Seamless Switching with Auto EDID
- Bezel Compensation with Scaler
- Supports Signal Preview (Optional)
- Supports Redundant Power Supply

## Product Specifications

- Chassis size: 11U | 440 x 400 x 490 mm
- HDCP EDID Support: 1.3 / 1.4 / 2.2 Auto-Program
- Max. Data Rate: 15.2 Gbps (3.8 Gbps per Lane)
- Resolution Input: 1920 x 1200 @ 60 Hz – 8 Bit RGBA, 4092 x 2160 @ 30Hz – 8 Bit RGBA
- Input Interface Port: 4 – 88
- Output Interface Port: 4 – 72
- Resolution Output: 1920 x 1200 @ 60 Hz – 8 Bit RGBA
- Interface Support: VGA / CVBS / YPbPR / SDI / IP
- Multiple Layers Support: 4 Layers MPiPTM
- HDBaseT / DVI / DP / HDMI Interface Support

- Power Supply: 100 ~ 240V, 50-60 Hz
- Control: IP / RS-232 / Touchscreen (Option)
- Temperature / Humidity: -20°C ~ +70°C / 10% ~ 90%

## Product Usage Instructions

To use the High-End Video Wall Controller by Angustos, follow these steps:

1. Ensure that the power supply is connected and the controller is turned on.
2. Connect the desired input sources (such as HDMI, DVI, VGA, etc.) to the available input interface ports.
3. Connect the output interface ports to the display screens or projectors.
4. If needed, customize the layout by using the Drag & Drop feature. Click on the desired video source and drag it to the desired position on the screen.
5. Use the front panel touch screen for controlling scene modes, saving/recalling profiles, and configuring IP settings.
6. If using IP cameras, ensure that the IP input card is properly connected to the network and configure the settings accordingly.
7. Utilize features such as background image, scrolling text, and scheduling to enhance the video wall display.
8. For advanced settings and control, use IP, RS-232, or touchscreen (if available) interfaces.
9. Ensure proper temperature and humidity conditions for optimal performance.

**Note:** Refer to the user manual for detailed instructions on specific features and configurations.

## Hardware Based Design

High-performance video processing equipment with hardware architecture design.

- No more computer high-end specifications.
- No more high-end Graphic Processing Unit (GPU Card).
- No more licenses.
- No more blue-screen OS crash.
- No more viruses and black screen.
- No more ransomware lost data.
- Support up to 92 input x 72 output or 88 input x 60 output

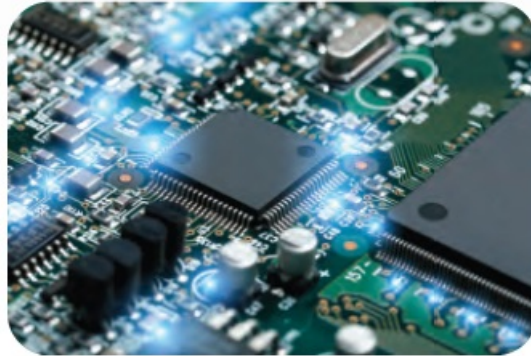
## FPGA Dedicated Chipset

- Dedicated Field Programmable Gate Array (FPGA) chipset is a combination of processing unit that dedicated in video processing. This eliminated the limitation of a CPU or a GPU from conventional Software or PC controller.
- Without the use of PCI – Express card, the unit can work flawlessly when adding or editing the total layout of the videowall set up. As each of the FPGA chip is working independently, user can replace or add new input / output card without turning off the whole chassis.



## Module design with Hot Swap

Multiple forms of connections for clients to custom fit their system. The client can now combine HDMI – DVI – VGA – HDBaseT – IP Streaming in one total solution, maximizing system integration.



- Reduce the total cost of investment in both pre & post-phase of expansion.
- Chassis also support control of multiple video walls, further simplifying the complexity of connections and management.

## Features



- High-end 4 Layers MPiP™ – Cross Screen  
Support up to 4 Layers Matrix Picture in Picture (MPiP™) in each screen

- Easy control with Drag & Drop  
Customize complex layout with simple Click – Drag – Drop
- High-end Video Wall Control  
Support Overlap, Roaming, Stretching, Zoom in / out.
- Front Panel Touch Screen  
Control scene mode, save / recall profile, IP setting with just a touch
- IP Camera Direct Stream (iDirect Stream™)  
IP input Card can support streaming video feed direct from IP CCTV Cameras.
- Background Image – Scrolling Text – Scheduling  
Support Static Background Image and Scrolling Text for Bank and Stock house Video Wall  
Support scene mode Scheduling – Cycle for advertising – digital signage Video Wall

#### **VIDEO WALL CONTROLLER 76 x 72 / 88 x 60 Cross Screens Video Wall**



- Pure Hardware Structure – FPGA
- Modular Design – Hot swap
- Seamless Switching – Auto EDID
- Bezel Compensation with Scaler
- Scrolling Text (Optional)
- Character Superimposition
- Ultra HD Background Image
- Multiple video wall management
- Signal preview (Optional)
- Support Redundant Power Supply

SPECIFICATION

Chassis size	11U   440 x400 x 490 mm
Max. Data Rate	15.2 Gbps (3.8Gbps per Lane)
Input Interface Port	4 - 88
Output Interface Port	4 - 72
Interface Support	VGA / CVBS / YPbPR / SDI / IP
	HDBaseT / DVI / DP / HDMI
Control	IP / RS-232 / Touchscreen (Option)

HDCP	Support 1.3 / 1.4 / 2.2
EDID	Auto - Program
Resolution Input	1920 x 1200 @ 60 Hz -8 Bit RGBA
	4092 x 2160 @ 30Hz-8 Bit RGBA
Resolution Output	1920 x 1200 @ 60 Hz-8 Bit RGBA
Multiple Layers	Support - 4 Layers MPiP™
Power Supply	100 ~ 240V, 50-60 Hz
Temp / Humid	-20°C ~ + 70°C / 10% ~ 90%

### HYBRID I/O SLOT

Advance FPGA chip allow Angustos Video Wall Controller chassis to set up flexible input/output slot. Hybrid I/O Slot can be both Input or Output slot

INPUT PORT

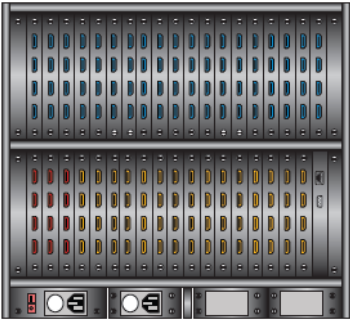
OUTPUT PORT

HYBRID I/O PORT

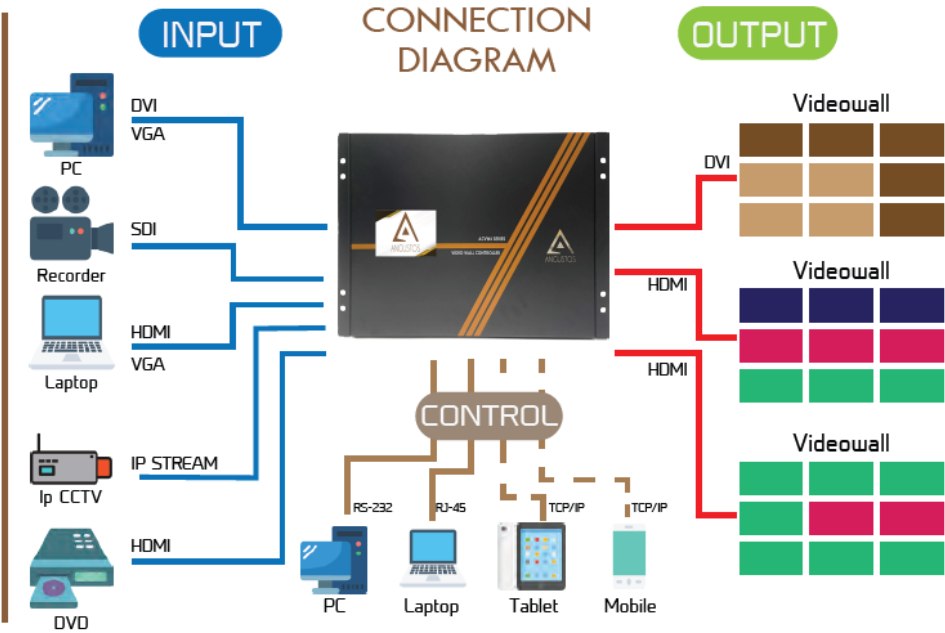
POWER MODULE

ETHERNET PORT

RS-232 PORT



ACVW4-3636	MAX INPUT	MAX OUTPUT
INPUT PORT	88	76
OUTPUT PORT	60	72



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Documents / Resources

	<p><a href="#">ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller</a> [pdf] Owner's Manual</p> <p>ACVW4-8872, ACVW4 Series Multiple Layers FPGA Video Wall Controller, ACVW4 Series, Multiple Layers FPGA Video Wall Controller, FPGA Video Wall Controller, Video Wall Controller, Wall Controller, Controller</p>
	<p><a href="#">ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller</a> [pdf] Owner's Manual</p> <p>ACVW4 Series Multiple Layers FPGA Video Wall Controller, ACVW4 Series, Multiple Layers FPGA Video Wall Controller, FPGA Video Wall Controller, Video Wall Controller, Wall Controller, Wall Controller</p>
	<p><a href="#">ANGUSTOS ACVW4 Series Multiple Layers FPGA Video Wall Controller</a> [pdf] Owner's Manual</p> <p>ACVW4-3636, ACVW4 Series Multiple Layers FPGA Video Wall Controller, ACVW4 Series, Multiple Layers FPGA Video Wall Controller, FPGA Video Wall Controller, Video Wall Controller, Wall Controller, Controller</p>

## References

-  [ANGUSTOS - The Best Selling IT & Pro AV in USA Market!](#)

Manuals+.