ANGUSTOS

ANGUSTOS
VIDEO WALL CONTROLLER

2022

AMVC / AMC

MATRIX & VIDEO WALL CONTROLLER

USER MANUAL

ANGUSTOS

About ANGUSTOS

Angustos was founded in 2000 and is now regarded as one of the foremost manufacturers of digital and analogue KVM solutions.

For more than 20 years our customers have been convinced by our core competencies in extending, switching and distributing standardised computer signals.

We are confirmed to established international standards. We can provide customers with complete data center solutions as well as OEM/ODM services. Our products are approved vendor for IBM, Guntermann & Drunck (G&D) and Raritan for more than 7 years, together with customers from fortune 500 corporations.

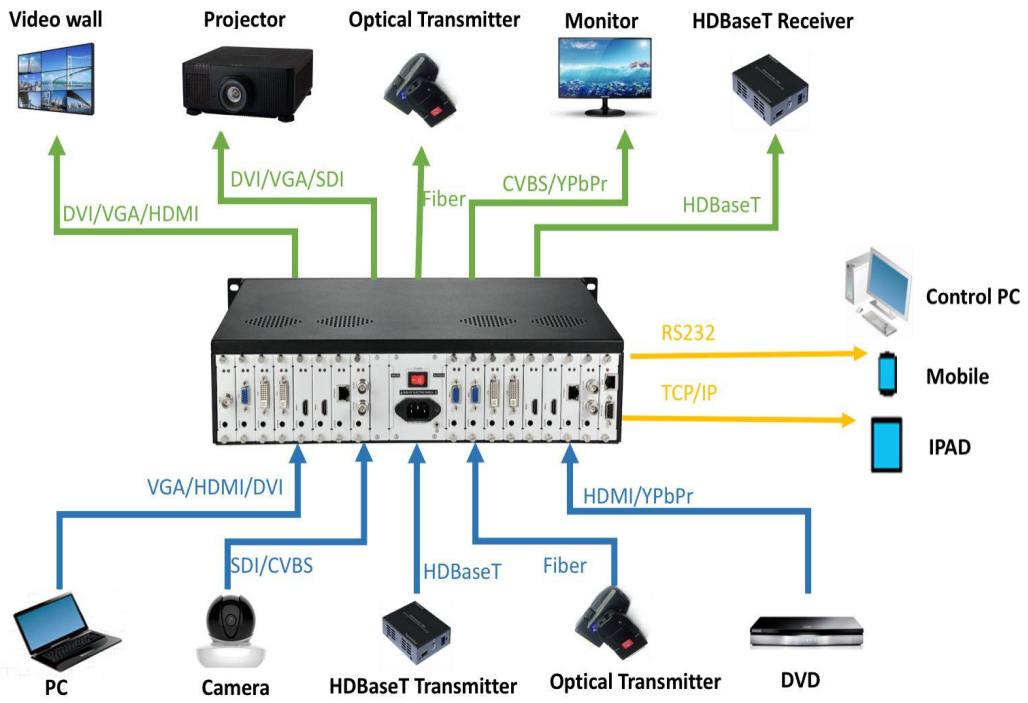
We can cover even from medium to small business, factory and industrial operations, military and government installations, home office and personal use.

1. Overview

AMC is a powerful seamless modular matrix switcher, which integrates video wall processing and matrix switching in a single high performance chassis. With the advanced modular design, it provides options for various video interface combinations. Which provides a variety of I/O boards, including HDMI, DVI, VGA, SDI, HDBaseT, YPbPr, HDBaseT, Fiber Optical etc..

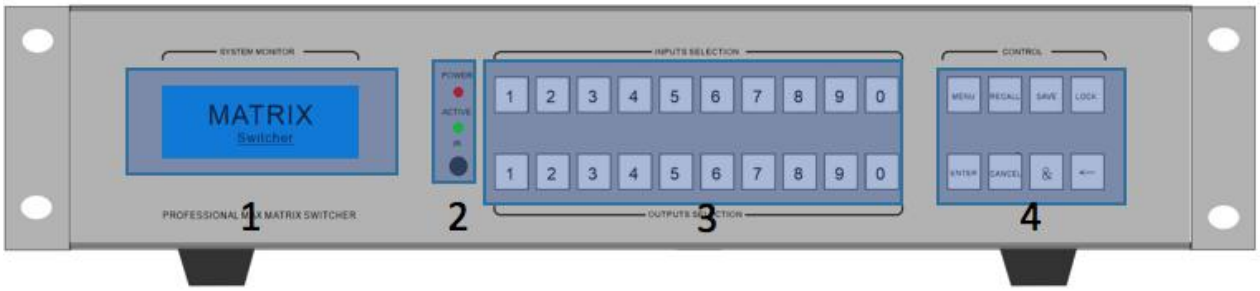
It is idea for application of conference room and control room etc.

2. System Diagram



3. Front and Rear Panels

3.1 Front Panel



2U Chassis front panel

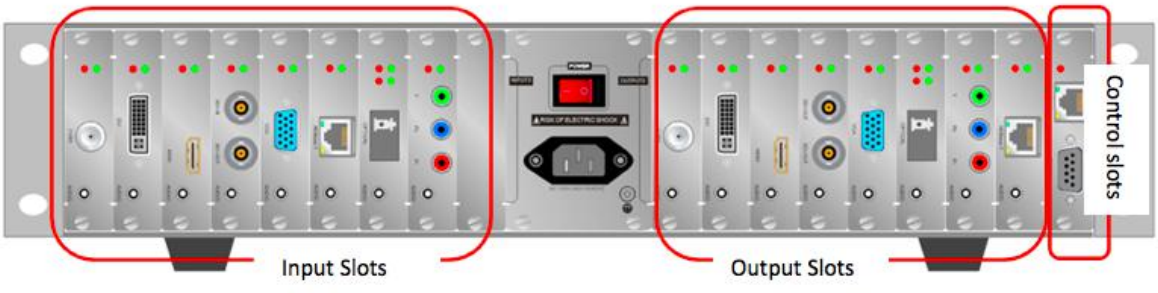
1. LCD display shows operation status.

2. Indicators of device working status
   Power: When the light is on, it means the device is powered on.
   When the light is off, the device is powered off.
   Run: The Run indicator flash indicating the device is working normally.
   IR: The device supports infrared remote control.

3. Number push buttons for inputs and outputs switching
   The first row number push buttons for input signals selection
   The second row number push buttons for output signal selection

4. Function push buttons for system management
   Menu: Menu function selection. The user can the set baud rate, buzzer, IP address and other settings with the coordination of the menu and 1st row numbers button.
   Recall: Recall of the saved scene
   Save: Save current scene
   Lock: Lock or unlock operation. Long-pressed 5 seconds to lock and the button lights will be on. Long-pressed 5 seconds again to unlock and the button lights will be off.
   Enter: Confirm execution button,to work with other function buttons.
   Cancel: Cancel the previous operation and return to main menu.
   &: Output multiple-selection coordination button.For example, switching input 1 to output 3, 4, 8, press the number 1 button in the first row and then the number 3 + & + 4 + & + 8 + Enter in the second row.
   ←: When switching multiple outputs at the same time, the user can cancel the wrong output selection in the previous step and re-select the correct output.

3.2 Real Panel



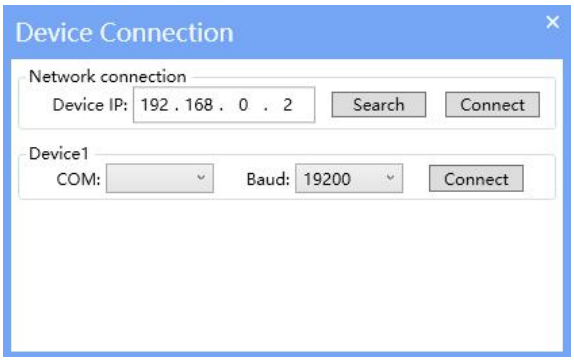
2U Chassis front panel

4. Control Software Operation

4.1 Control Port Connection

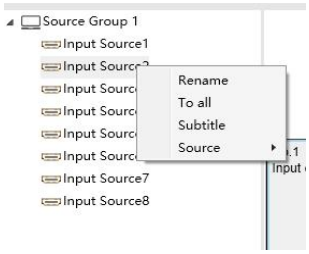
Click the menu **Connect** 

to pop up a dialog box as follows. The default baud rate is 115200. Select the corresponding COM port and click the button **Connect**.



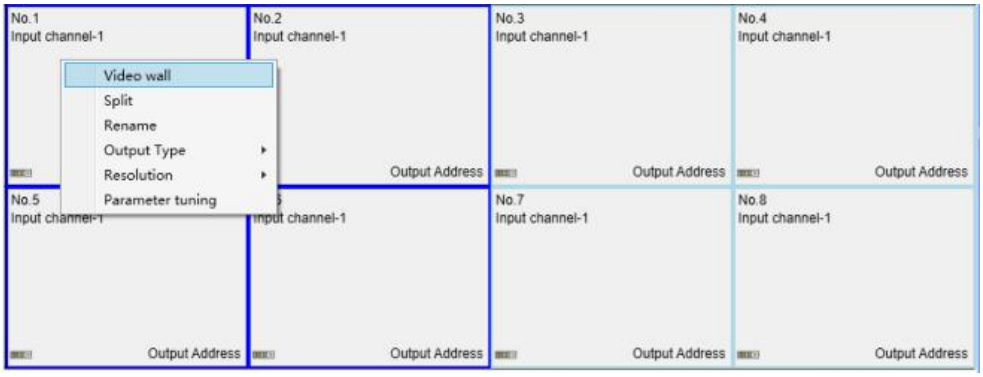
4.2 Input Source Setting

All input sources are put in the left side of the software interface. Right-click the corresponding input source to pop up the following interface:



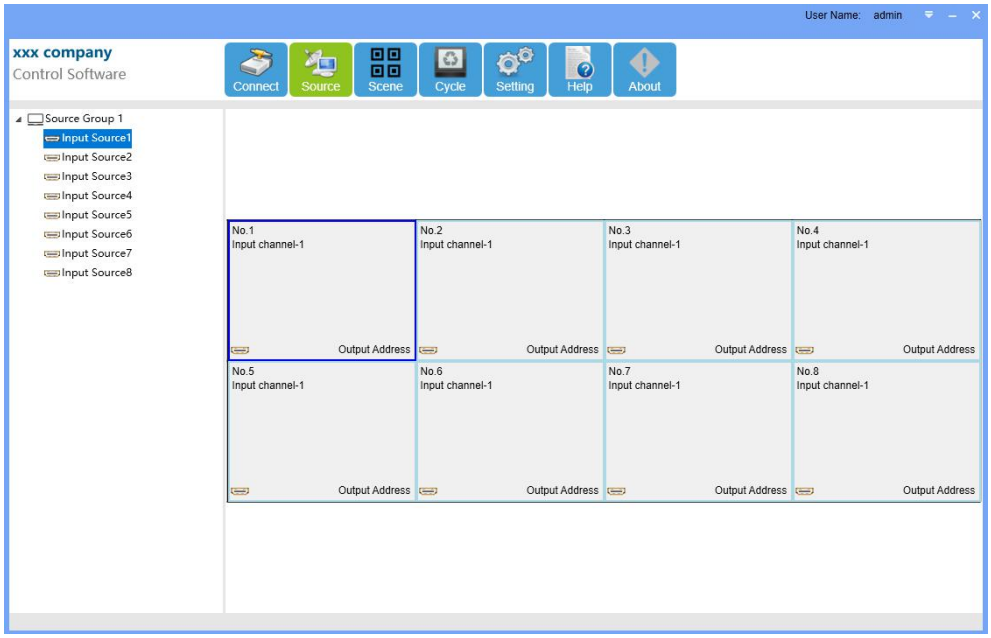
Rename: Set current input source name
To all: One-click to switch the current input source to all outputs
Subtitles: Text over the input source. The text color and position are adjustable.
Source: Set current input signal interface type
Resolution: Set current input signal resolution

4.3 Output Port Setting



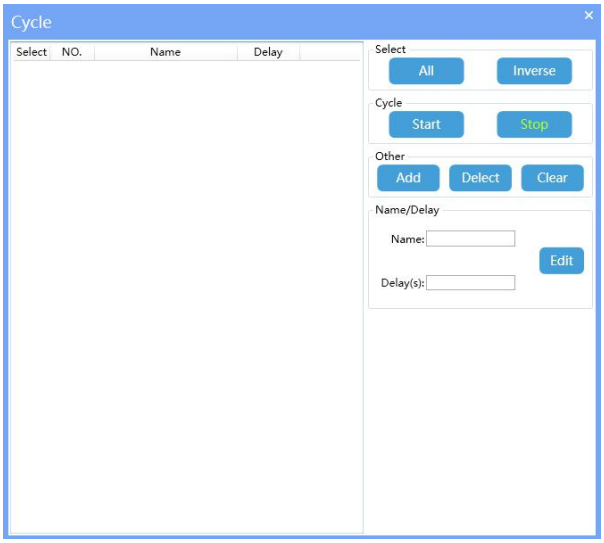
Video wall: Select some adjacent screens and right-click the menu for video wall display.
Split: Select a video wall display area and right-click the menu to back to single display.
Rename: Modify the output name
Output Type: Choose the output port type according to the device configuration.
Resolution: Set the output resolution
Parameter tuning: Modify the output brightness, contrast, color etc..

4.4 Scene management



Manage: Manage current saved scenes, such as modify scene name, cycle etc.
Save: Save current scene
Recall: Recall saved scene

4.5 Scene Cycle

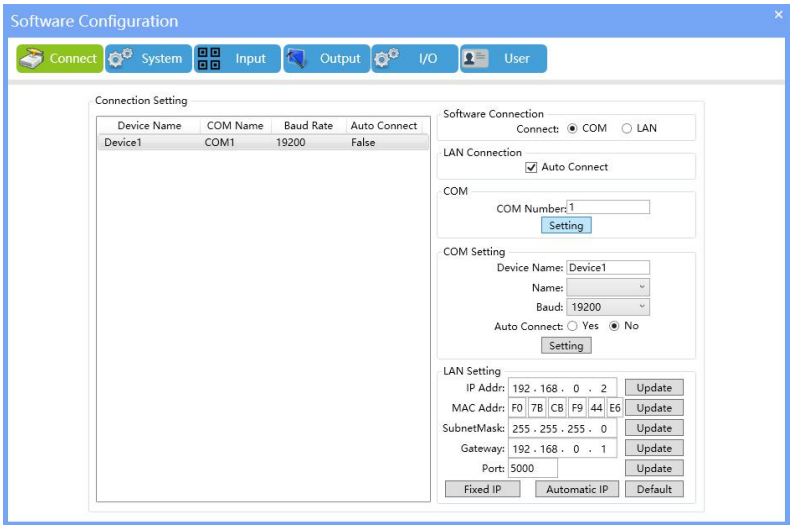


4.6 Software Function Setting

Click the menu **Setting**  to enter the software functions setting.

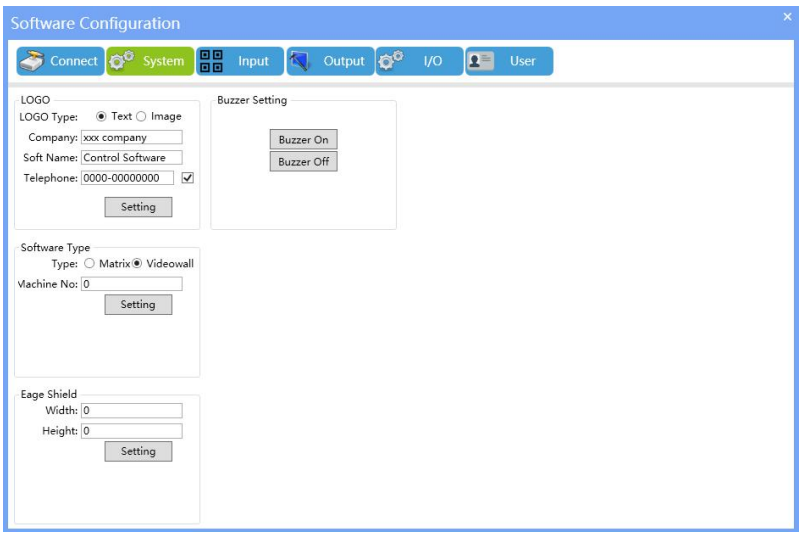
This function requires administrator right.

4.6.1 Connect Setting



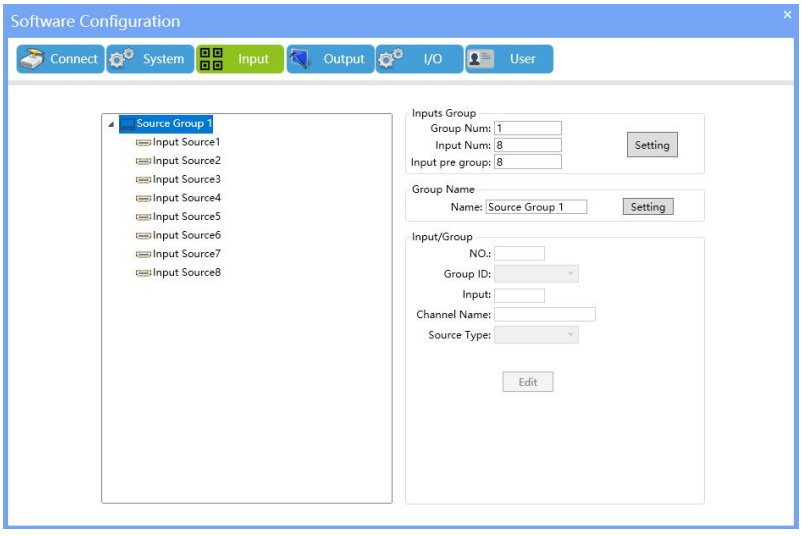
COM: Set current device COM ports numbers.
COM Setting:Set the device name, baud rate and auto connect.
LAN Setting: Set the current IP in fixed or automatic.For the fixed IP, the IP address, MAC address, subnet mask, default gateway, and port number are adjustable.

4.6.2 System Setting



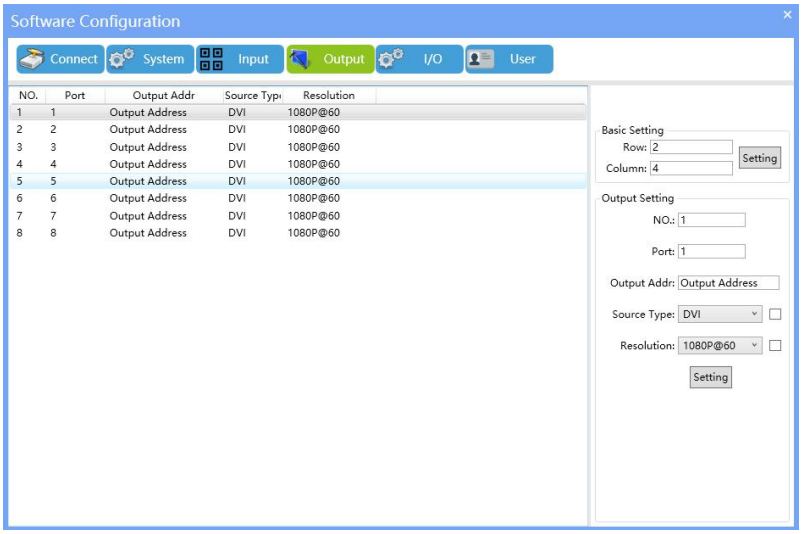
LOGO: Select LOGO type in text or in picture and add information of company, and software name. Then click the **Setting** button and re-open the software.
Software Type: Select matrix switcher or video wall software mode.
Edge Shield: Image pixel adjustment in the video wall mode.
Buzzer Setting: Buzzer on/off. In buzzer off status, there is no sound when the user operate the machine.

4.6.3 Input Sources Setting



Inputs group: Set input source group management, each group source numbers are user-defined.
Inputs group name: Set the input source group name.
Inputs/groups parameter setting: Set the input source serial number,group ID, channel name and source type.

4.6.4 Output Sources Setting



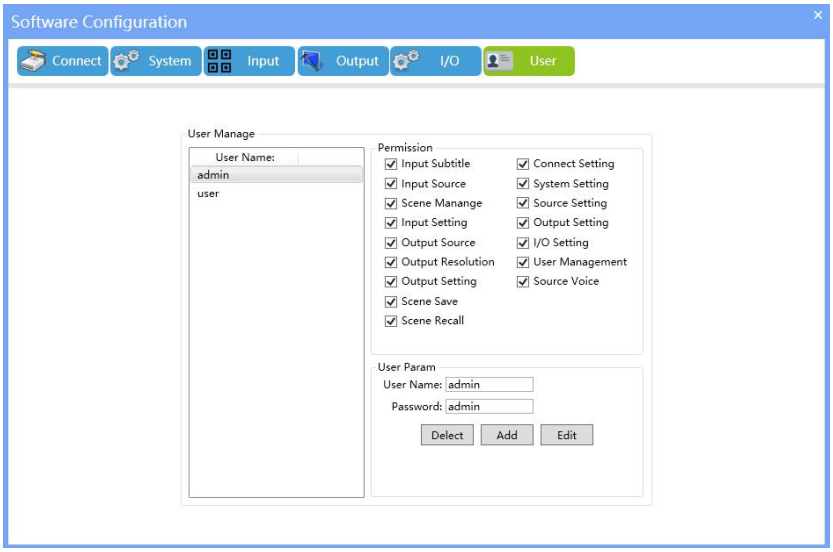
Basic Setting: Set current display unit layout
Output Setting: Set corresponding output port number, address name,source type etc..

4.6.5 I/O Setting

Set the modular input and output cards numbers combination.

4. 6. 6 User Management

The administrator can add different user login names according to the actual situation and give them different operation permissions for hierarchical management.



4.7 Help

Click the Help menu 

for software operation guide.

4.8 About

Check the **About** menu 

for software version information.

5. RS232 Protocols

COM port protocols Baud rate: 115200 preset Data bit: 8bits Stop bit: 1bit Check Digit: None			
Switching Protocols			
Single Channel Switching			
PC to Matrix	Function	Matrix to PC	Example
[X1]V[Y1].	Single input [X1] to output [Y1]	V:[X1]->[Y1]!	1V1.
Multiple Channels Switching			

PC to Matrix	Function	Matrix to PC	Example
[X1]V[Y1],[Y2].	Input [X1] to [Y1],[Y2]	V:[X1]->[Y1],[Y2] !	1V1,2,3.
[X1]All.	Input [X1] to All	[X1]A/V TO All!	1All.
All#.	All inputs to corresponding outputs	All A/V Through!	All#.
Close Single Output			
PC to Matrix	Function	Matrix to PC	Example
0V[Y1].	Close output [Y1]	V:OFF->[Y1]!	0V1.
Close Multiple Outputs			
PC to Matrix	Function	Matrix to PC	Example
[Y1], [Y2]V$.	Close outputs [Y1] and [Y2]	V:OFF->[X1],[X2]!	1,2,3V$.
All$.	Close all outputs	All A/V Closed!	All$.
Scene Protocols			
PC to Matrix	Function	Matrix to PC	Example
Save[N].	Save the Scene N	Save To F[N]!	Save1.
Recall[N].	Recall the Scene N	Recall From F[N]!	Recall1.
Clear[N].	Delete the Scene N	Clear F[N]!	Clear1.
Query protocols			
Channels connection query protocols			
PC to Matrix	Function	Matrix to PC	Example
Status[Y1].	Query one output connection status.	V:[X1]->[X2]! A:[X1]->[X2]!	Status1.
Status.	Query all outputs connection status.	V:[X1]->[X2]! A:[X1]->[X2]! ……	Status.
Setting Protocols			
PC to Matrix	Function	Matrix to PC	Example
/:BellOff;	Turn off the buzzer	Bell Off!	/:BellOff;
/:BellOn;	Turn on the buzzer	Bell On!	/:BellOn;
/:BR[X4];	Set the baud rate	Baudrate: 9600!	/:BR9600;

Switching protocols in hexadecimal:
0 to 9 corresponding 30 to 39
A: 41 V: 56 I: 6C . : 2E
For example:
1V1. hexadecimal : 31 56 31 2E
2V5. hexadecimal: 32 56 35 2E
6V12. hexadecimal: 36 56 31 32 2E
15VAll. hexadecimal : 31 35 56 41 6C 6C 2E

6. Specifications

Model	AMC-04	AMC-08 AMC-0808S	AMC-16	AMC-36	AMC-72
Product Name	4X4 Modular Matrix	8X8 Modular Matrix	16X16 Modular Matrix	36X36 Modular Matrix	72X72 Modular Matrix
Interface	4 Input /4 Output	8 Input /8 Output	16 Input /16 Output	36 Input/36 Output	72 Input/72 Output
Input Interface	One interface in one input board includes DVI, GA, CVBS, HDMI, HDMI-4K, 3G-SDI, YPbPr, HDBaseT, Fiber Optic etc.				
Output Interface	One interface in one output board includes DVI, GA, CVBS, HDMI, HDMI-4K, 3G-SDI, YPbPr, HDBaseT, Fiber Optic etc.				
Resolution	640x480~4096x2160@60Hz (VESA standard)　480i~2160@60hz (HDTV standard)				
Protocol Standard	Support DVI1.0 and HDMI1.3, HDMI1.4, HDMI 2.0, HDCP protocol and EDID management compliance.				
Transmission Distance	25m (Digital cable), 30m (Analog cable), 100m (SUTP) 300m (Multi-core fiber), 1.5~20Km (Single core fiber)				
Control	Front panel push buttons, IR Infrared, RS232 and LAN etc.				
Temperature/Humidity	Temperature：-20℃ ~ +70℃　Humidity：10%~90%				
Power Consumption	100~260V 50/60Hz				
Power Consumption	50W	100W	200W	450W	1000W
Product Dimension	440X350X45mm (1U))	440X350X99mm (2.5U)	440X350X223mm (4.5U)	440X400X490m (11U)	440X400X890m (20 U)
Product Weight	7Kg	12.5Kg	21Kg	35Kg	65Kg

Model	AMC-17H	AMC-36H
Product Name	17 I/0 Hybrid Matrix	36 I/0 Hybrid Matrix
Interface	17 Input and Output	36 Input and Output
Input Interface	One interface in one input board includes DVI, GA, CVBS, HDMI, HDMI-4K, 3G-SDI, YPbPr, HDBaseT, Fiber	
Output Interface	One interface in one output board includes DVI, GA, CVBS, HDMI, HDMI-4K, 3G-SDI, YPbPr, HDBaseT,	
Resolution	640x480~4096x2160@60Hz (VESA standard)　480i~2160@60hz (HDTV standard)	
Protocol Standard	Support DVI1.0 and HDMI1.3, HDMI1.4, HDMI 2.0, HDCP protocol and EDID management compliance.	
Transmission Distance	25m (Digital cable), 30m (Analog cable), 100m (SUTP), 300m (Multi-core fiber), 1.5~20Km (Single core fiber)	
Control	Front panel push buttons, IR Infrared, RS232 and LAN etc.	
Temperature/Humidity	Temperature：-20℃ ~ +70℃　Humidity：10%~90%	
Power Consumption	100~260V 50/60Hz	
Power Consumption	100W	200W
Product Dimension	440X350X99mm　(2.5U)	440X350X223mm　(5U)
Product Weight	12.5Kg	21Kg