



BITVISUS

Shenzhen Bitvisus Technology Limited



PRO AV SOLUTION

Focus on **4K/8K** Image & Video Processing

FPGA & Embedded Software & Hardware Design Services

bitvisus.com

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YouTube



bitvisus.com

H20260119



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Company Profile



Shenzhen Bitvisus Technology Limited is a national high-tech enterprise specializing in 4K/8K image and video processing technologies. As a leading player in the industry, we integrate FPGA and embedded software & hardware design services with full-cycle capabilities covering product development, production, and sales.

Our core product includes:

- 8K Multi-screen expander
- Projector fusion processor
- Video processor
- HDMI matrix
- Multi-viewer
- Network & fiber extender

These solutions are widely applied across diverse fields such as projector fusion systems, video wall splicing, exhibition displays, touch interaction platforms, and advertising & media sectors.

Bitvisus boasts a robust R&D team comprising over 30 seasoned engineers. A significant portion of our core members are alumni of industry giants like Huawei, ZTE, and Xilinx, bringing with them more than 15 years of profound expertise in the Professional Audio-Visual domain.

We are committed to empowering our clients' business success through cutting-edge technology and tailored solutions.

Company Profile



Honor



Development History



2018

- Bitvisus was established.
- Join Shenzhen Chip Industry.
- New product launched, including HDBaseT network extender, HDMI network extender, DVI Fiber Extender and multi-viewer ...



2020

- ADI matrix mass-produced
- The international business team was established, and provide ODM/OEM service.
- Become HDMI International Organization Member.



2019

- New product launched: Programmable central control host, HDMI matrix.
- Become the best-selling splitter solution provider in China.



2022

- Become HDCP International Organization member.
- Changsha R&D Center established
- Offices in Beijing, Shanghai, Guangzhou and Chongqing are being established.



2021

- Become Alibaba SKA merchants.
- Become an HDBaseT alliance member.



2025

- Launched the single-port 8K multi-screen expander, which is the world's leading, supports vertical screen and supports customization.



2023

- Established Dongguan Manufacturing Center
- Reach deep cooperation with Lattice, ADI, I-Chips and other international chip makers, and continue to provide 4K/8K high-end video processing equipment and differentiated products.

BIT-MSE-8K60D-104Pro

8K60 multi-screen expander



Input 8K60



Output 4K60



Pixel to Pixel



Multi-Screen Splicing



Kintex UltraScale +



EDID Management

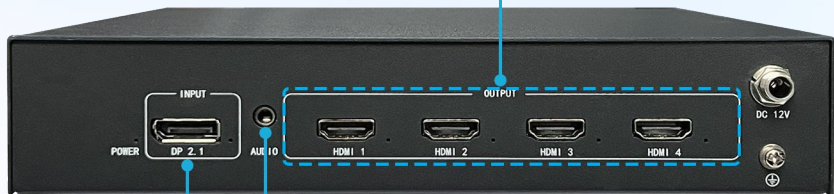
FEATURES

Input Interfaces	DP2.1×1
Input Resolution	7680×4320@60Hz or 7680×4800@60Hz
Output Interfaces	HDMI 2.0×4
Output Resolution	3840×2160@60Hz or 3840×2400@60Hz
Control Method	DIP switch control, Web GUI control

TOPOLOGY



4×HDMI 2.0



DP 2.1

Audio



Laptop



Apple box



PC



Graphics Card

SPLICING



1×2 7680×2160@60Hz



1×4 15360×2160@30Hz



2×2 7680×4320@60Hz



3×1,3840×6480@60Hz



4×2,7680×8640@60Hz

BIT-MSE-8K60Y-104Pro

8K60 multi-screen expander



HDMI 2.1

DP 1.4

4K60 OUTPUT

IMPORTED FPGA

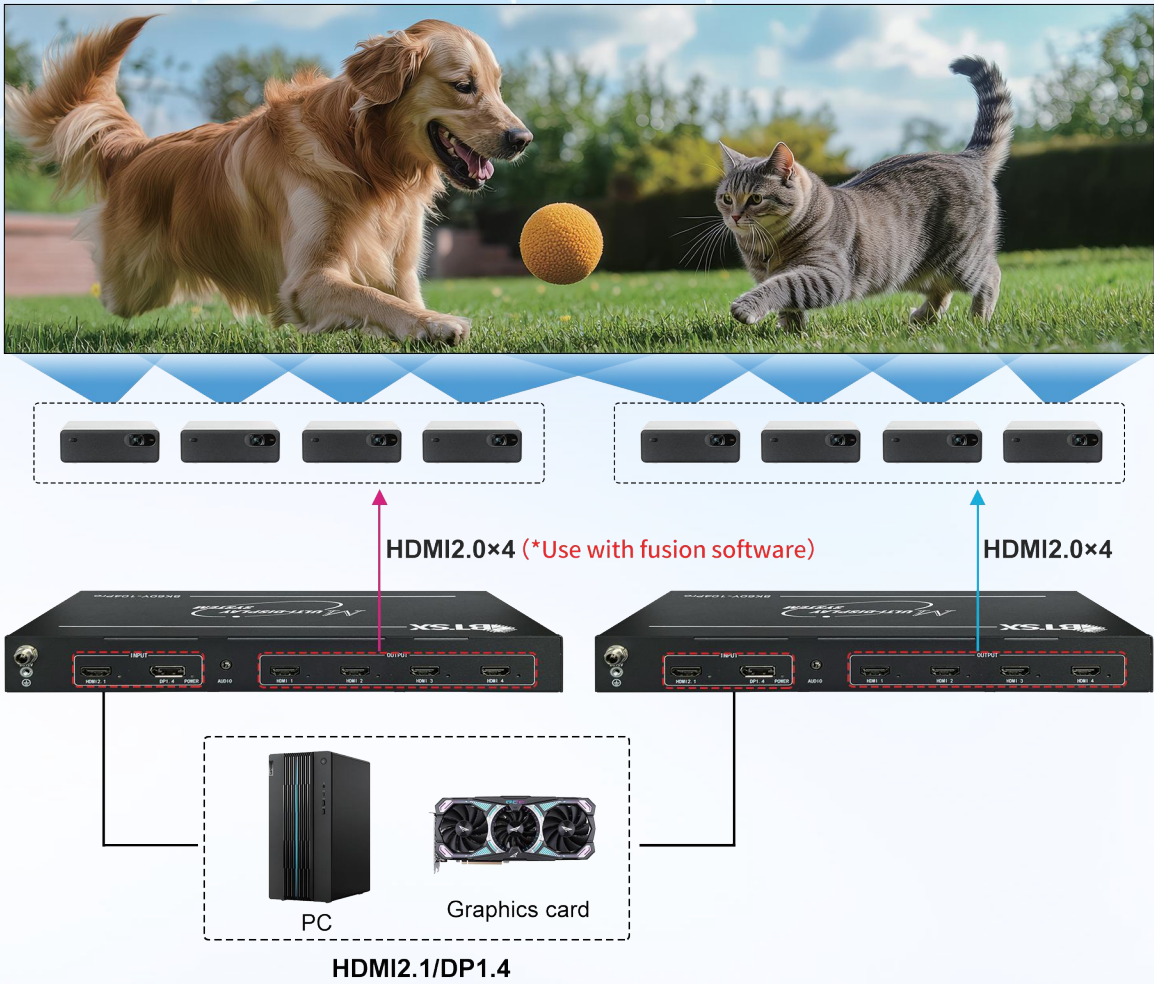
DIP SWITCH

UPGRADING SOFTWARE

FEATURES

Input Interfaces	DP1.4×1 or HDMI2.1×1
Input Resolution	7680×4320@60Hz YUV420 or 7680×4800@60Hz YUV420
Output Interfaces	HDMI 2.0×4
Output Resolution	3840×2160@60Hz, 3840×2400@60Hz 1920×1080@120Hz, 1920×1200@120Hz, etc.
Control Method	DIP switch control

TOPOLOGY



SPLICING

2×2, 7680×4320P60, 7680×4800P60

3×1, 3840×6480P60

2×4, 15360×4320P60

4×2, 7680×8640P60

BIT-MSE-209Pro

2 input 9 output multi-screen expander

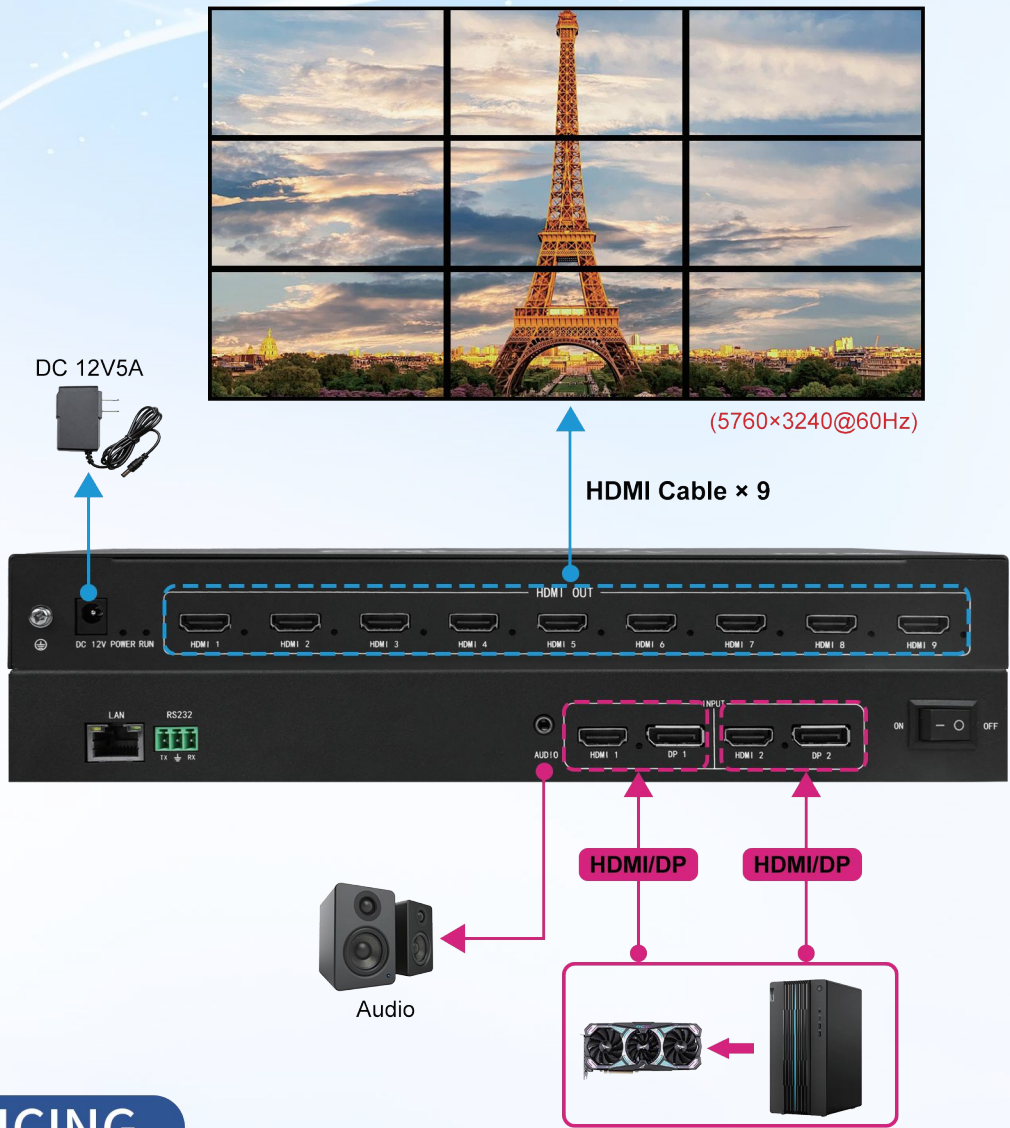


- 3840×2160
- EDID management
- Audio out with HDMI
- 9 splicing modes
- Pixel to Pixel

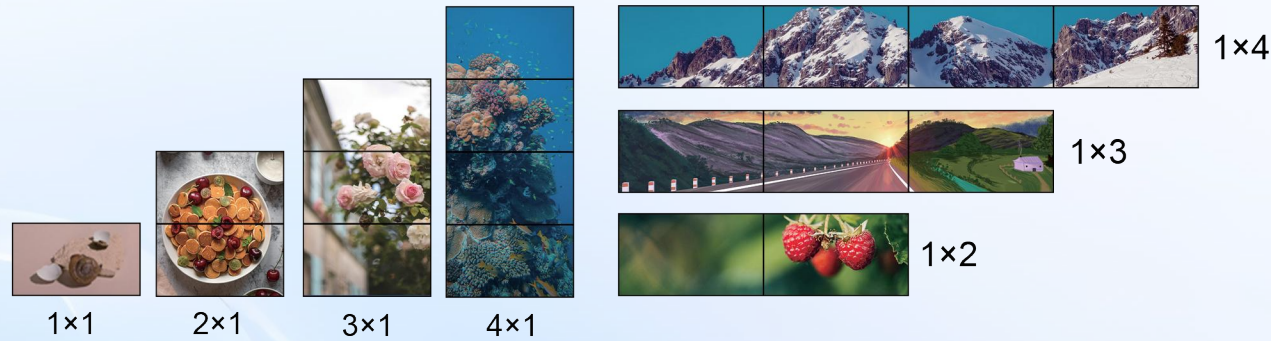
FEATURES

Input Interfaces	HDMI2.0×2/DP1.2×2
Output Interfaces	HDMI1.3×9
Max Pixel Clock Frequency	2×600MHz
Layout	1×9,9×1,3×3, 2×4,etc.
Typical Resolutions	7680×2160@60Hz,5760×3240@60Hz

TOPOLOGY



SPLICING



BIT-MSE-HDBT-4K60-104Pro

4K60 HDBaseT multi-screen expander




4K60


pixel to pixel

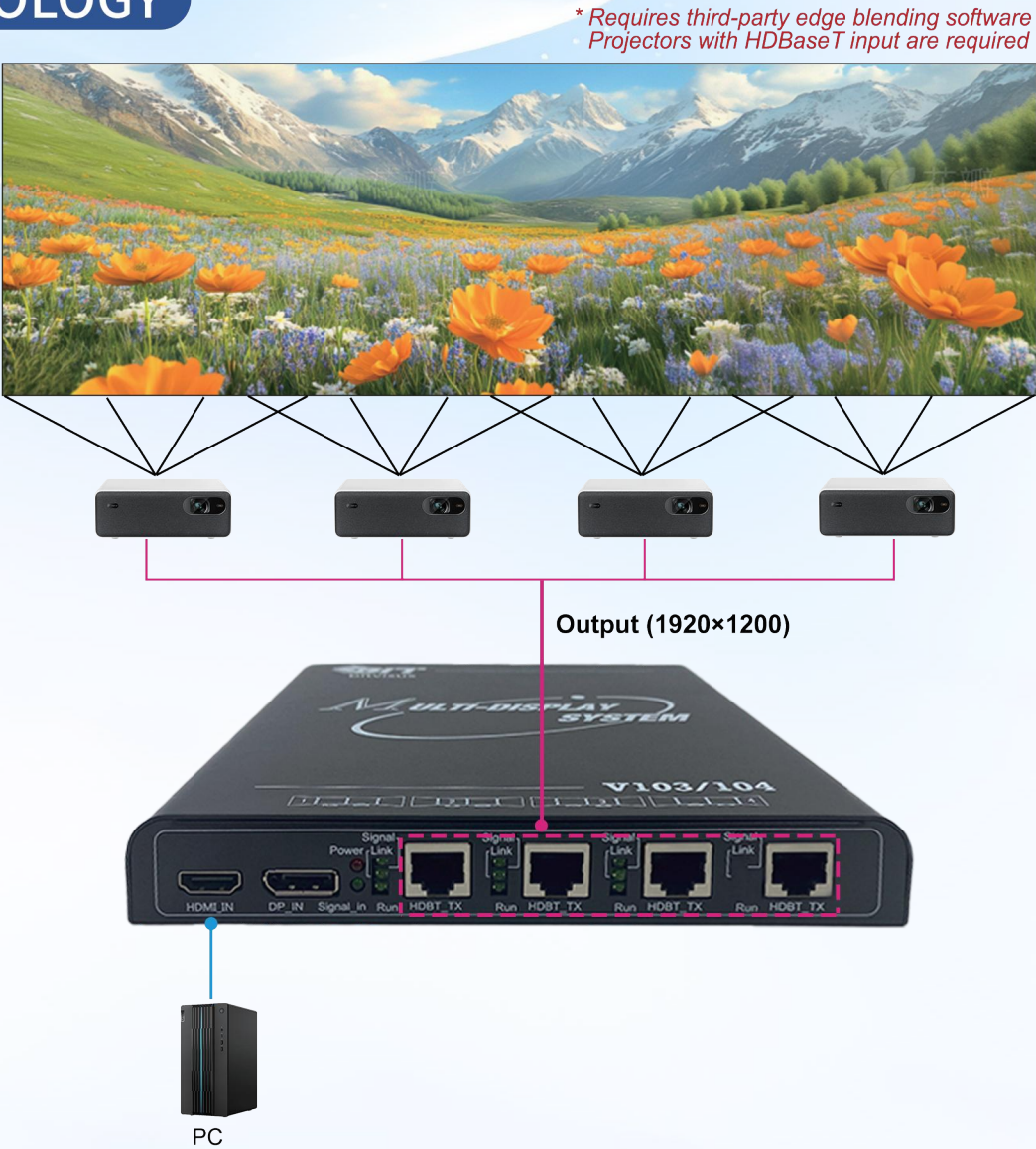

EDID


HDMI/DP

FEATURES

Input Interfaces	HDMI2.0×1/DP1.2×1
Output Interfaces	HDBaseT×4
Max Pixel Clock Frequency	600MHz
Layout	1×1, 1×2, 1×3, 1×4, 2×1, 2×2, 3×1, 4×1
Typical Resolutions	7680×1200@60Hz, 3840×2160@60Hz 1920×4800@60Hz, 3840×2400@60Hz

TOPOLOGY

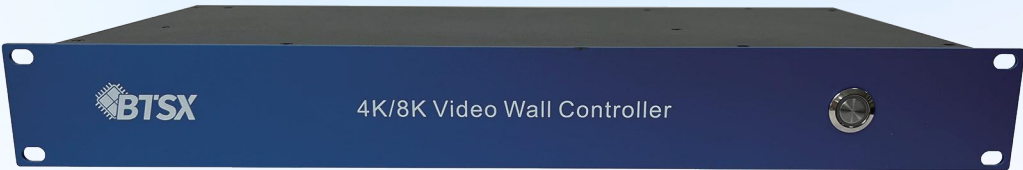


SPLICING



BIT-VWC-809MV

4K60 multiview video wall controller



4K60

RS232

WEB

Multiviewer

HDMI

FPGA

FEATURES

Input Interfaces	IN1-2:HDMI2.0×2,DP1.2×2
	IN3-4:HDMI2.0×2,IN5-8:HDMI1.3×4
Input Resolution	IN1-4:3840×2160@60Hz
	IN5-8:1920×1080@60Hz
Output Interfaces	HDMI1.3×9,HDMI2.0(Loop)
Output Resolution	1920×1080@60Hz,1920×1200@60Hz
Control Method	Infrared Remote, RS232, Web GUI

TOPOLOGY



SPLICING



BIT-VWC-818MV/827MV

4K60 multiview video wall controller





4K60



RS232



WEB



Multiviewer



HDMI

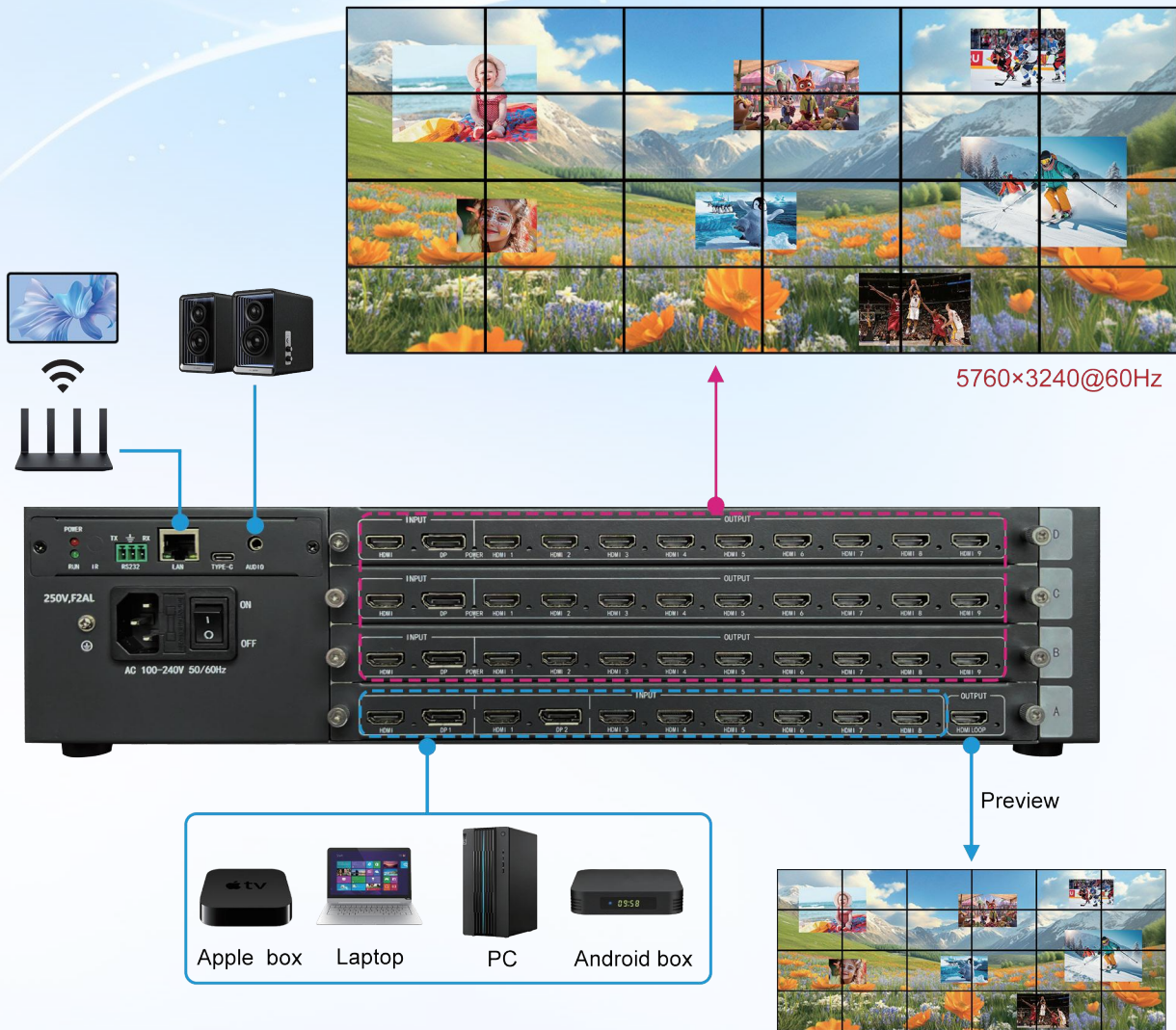


FPGA

FEATURES

Input Interfaces	2×HDMI 2.0 / DP 1.2, 2×HDMI 2.0, 4×HDMI 1.3
Input Resolution	3840×2160@60Hz, 1920×1080@60Hz
Output Interfaces	27×HDMI 1.3, 1×HDMI 1.3(loop out)
Output Resolution	1920×1080@60Hz or 1920×1200@60Hz
Control Method	Web GUI (TCP/IP), RS232, CEC management

TOPOLOGY



SPLICING



BIT-VWC-MD1212Ma

4K60 seamless matrix processor

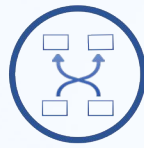


- 

Modular Chassis
- 

AV Matrix
- 

Web Control
- 

Web API
- 

Software-Defined Cabling
- 

Seamless Switching
- 

EDID Management
- 

Free-Form Video Canvas

FEATURES

Input Interfaces	HDMI2.0×12
Max Input Resolution	4096×2160@60Hz
Output Interfaces	HDMI2.0×12
Max Output Resolution	4096×2160@60Hz
Control Method	Buttons,Infrared Remote, RS232, Web GUI

TOPOLOGY



SPLICING



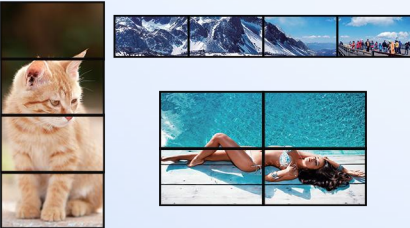
Full screen splicing display



Matrix mode



Multi-picture splicing

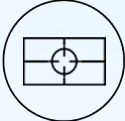


Multi-Zone

BIT-VWC-8K60Y-115Pro

8K60 splicing processor



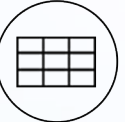
- 

Border Correction
- 

Modular Chassis
- 

Web Control
- 

EDID Management
- 

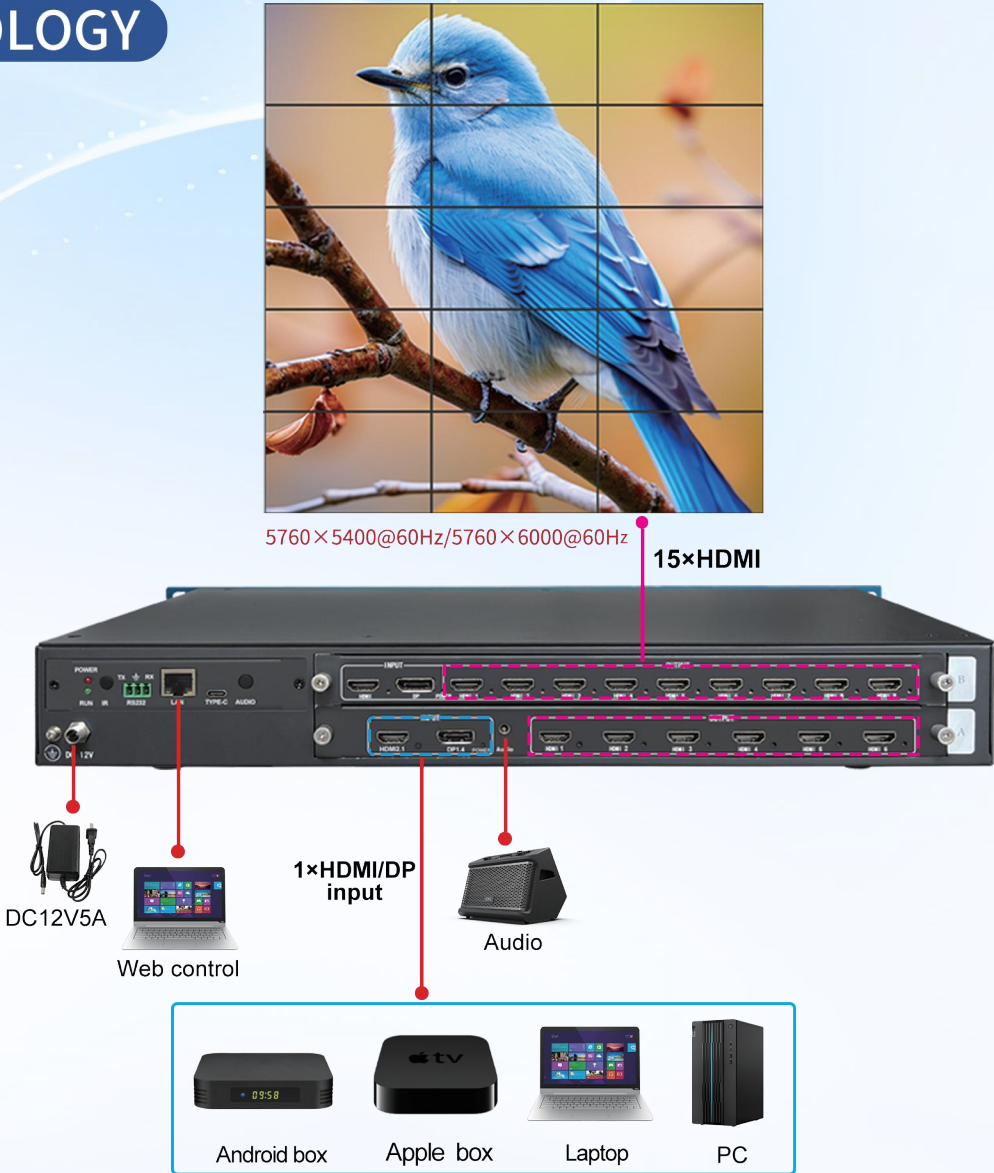
Pixel to Pixel
- 

Multi-Screen Splicing

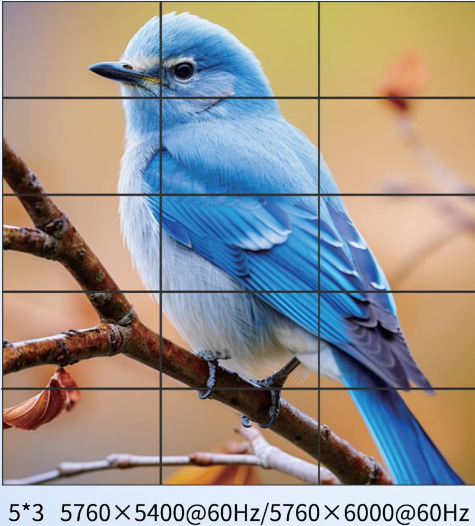
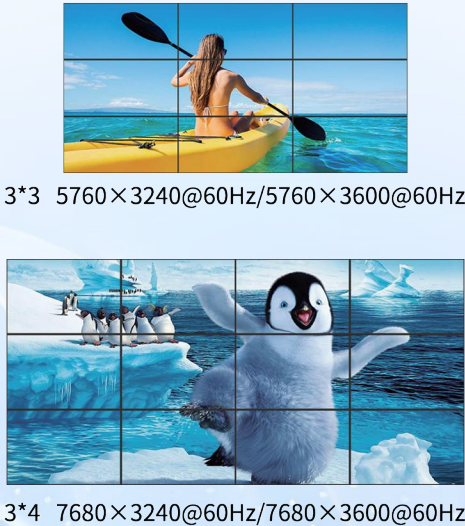
FEATURES

Input Interfaces	HDMI2.1/DP1.4(choose one out of two)×1
Max Input Resolution	2×4: 7680×2160@60Hz/7680×2400@60Hz
	3×3: 5760×3240@60Hz/5760×3600@60Hz
	3×4: 7680×3240@60Hz/7680×3600@60Hz
	4×3: 5760×4320@60Hz/5760×4800@60Hz
	5×3: 5760×5400@60Hz/5760×6000@60Hz
Output Interfaces	HDMI1.3×15
Max Output Resolution	1920×1200@60Hz
Control Method	RS232，Web GUI

TOPOLOGY



SPLICING



BIT-VWC-218/436

8K60 video wall controller



- 

Modular Chassis
- 

FPGA
- 

Web Control
- 

Pixel to Pixel
- 

36-Channel Splicing
- 

Rotate The First Row 180°

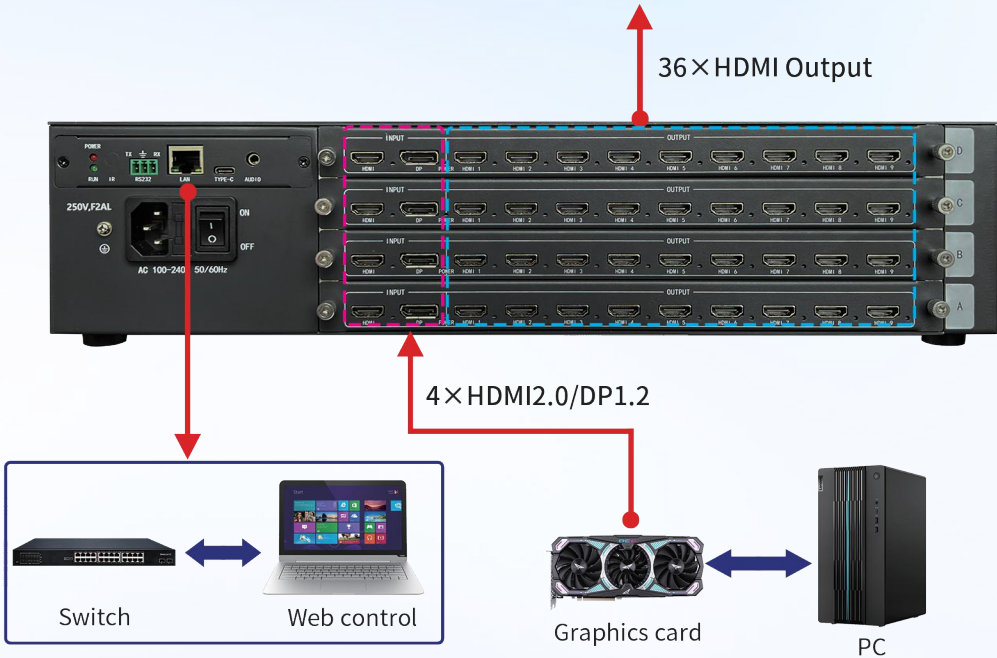
FEATURES

Input Interfaces	HDMI2.0/DP1.2(choose one out of two)×4
Max Input Resolution	4×9: 17280×4320@30Hz
	4×8: 15360×4320@30Hz
	5×5: 9600×5400@30Hz
	5×6: 11520×5400@30Hz
	5×7: 13440×5400@60Hz
	6×6: 11520×6480@30Hz
Output Interfaces	HDMI1.3×36
Output Resolution	1920×1080@60Hz/1920×1200@60Hz
Control Method	RS232, Web GUI

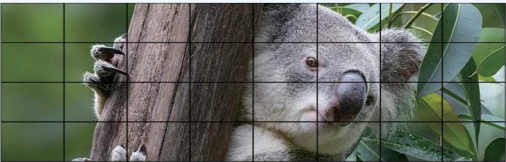
TOPOLOGY



(open any windows with multiple picture software)



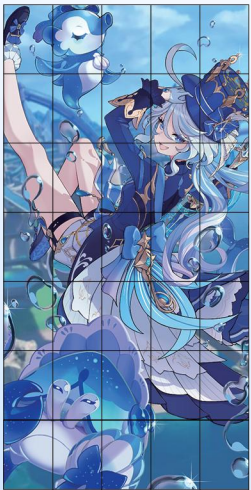
SPLICING



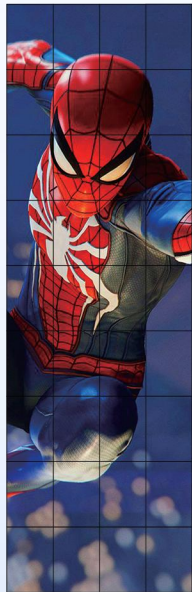
4*8 15360×4320@30Hz



6*6 11520×6480@30Hz



7*5 5400×13440@30Hz



9*4 4320×17280@30Hz

BIT-MV-4K60-1602

4K60 multiview video processor

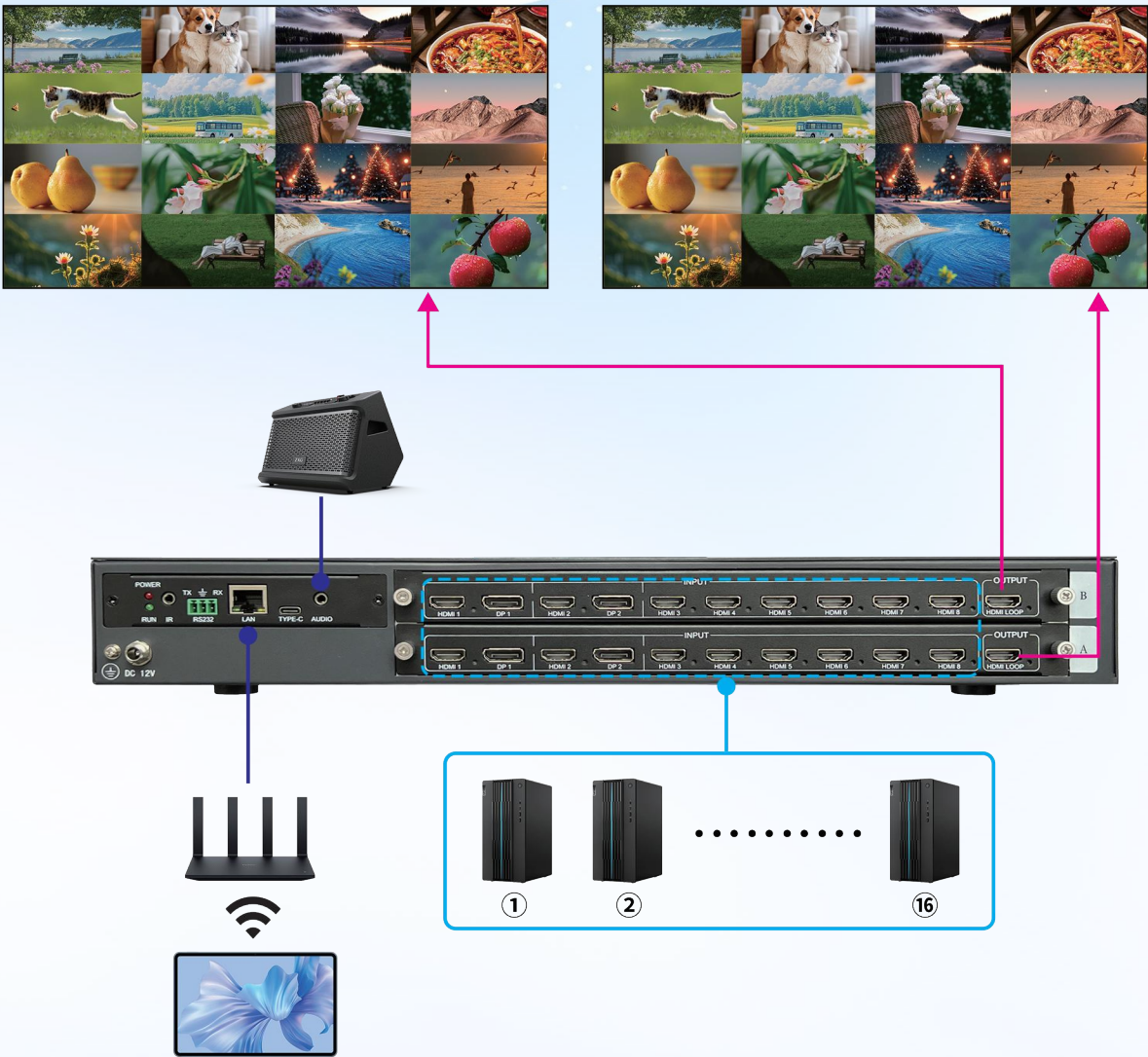


- Customize Output
- Layer Overlay
- Seamless Switching
- Web API
- Dual-output Display
- Web Control
- Scene Preset
- Multi-viewer

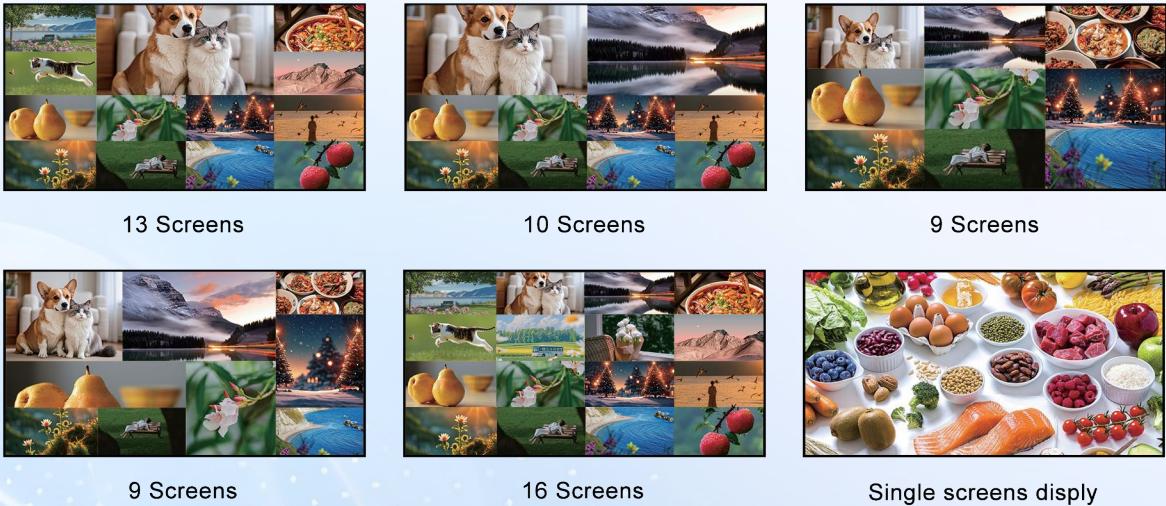
FEATURES

Input Interfaces	A/B IN1-2: HDMI2.0/DP1.2(choose one out of two)×2
	A/B IN3-4: HDMI2.0×2
	A/B IN5-8: HDMI1.3×2
Max Input Resolution	3840×2160@60Hz
Output Interfaces	HDMI2.0×2
Max Output Resolution	3840×2160@60Hz
Control Method	Buttons, Infrared Remote, RS232, Web GUI

TOPOLOGY



SPLICING



BIT-MV-4K60-801

4K60 8 channels multi-viewer



3840*2160@60Hz



HDMI Support



Seamless Switching



IR Remote Control



WEB Control



Multi-Viewer Mode

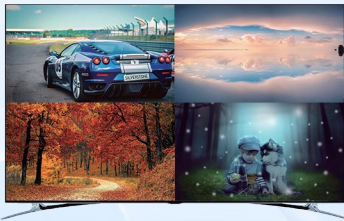
FEATURES

Input Interfaces	IN1-2:HDMI2.0×2,DP1.2×2
	IN3-4:HDMI2.0×2 IN5-8:HDMI1.3×4
Input Resolution	3840×2160@60Hz
Output Interfaces	HDMI2.0
Control Method	Buttons, Infrared Remote, RS232,Web GUI
Output Resolution	1920×1080@60Hz , 3840×2160@30Hz , 3840×2160@60Hz

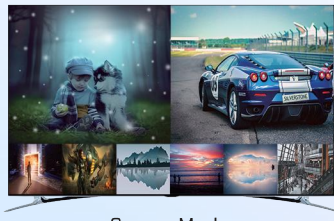
TOPOLOGY



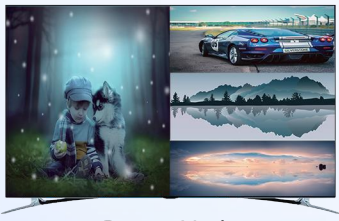
SPLICING



An average of 4 screen



Screen Mode
(2 big 6 small)



Screen Mode
(1 big 3 small)

BIT-MV-4K60-401

4K60 4 channels multi-viewer



KEY SWITCH

4K60

4 INPUT & 1 OUTPUT

IR CONTROL

FEATURES

Input Interfaces	4 × HDMI 1.3
Input Resolution	1920 × 1080@60Hz
Output Interfaces	HDMI 2.0
Output Resolution	3840 × 2160@60Hz
Sound frequency	Supports 4 HDMI audio inputs, 1 HDMI audio output (4 select 1)

TOPOLOGY



SPLICING

point-to-point equal-proportion segmentation

left and right

top and bottom

Non-equivalent split

Channel switching

BIT-Ma-U1-MC0808

4K60 HDMI matrix



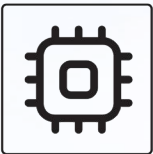
4K@60Hz



IR control



EDID



high-definition chip

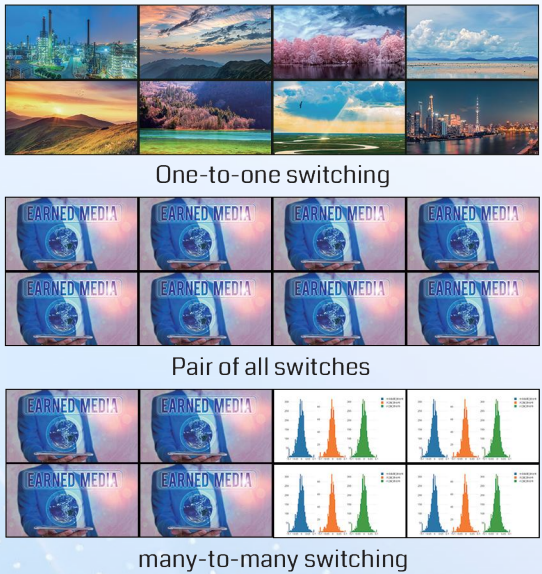
FEATURES

HDMI Compatible	HDMI2.0
HDCP Compatible	HDCP2.2/1.4
Video Resolution	Up to 4K×2K@50/60Hz
Input Port	8×HDMI
Control Interface	1×TCP/IP, 1×RS232

TOPOLOGY



SPLICING



BIT-HPF-4K60-108Pro

4K60 hardware blending processor



EDID Management



10BIT



ROI Cropping



Geometric Correction



4K60 Input



Modular System

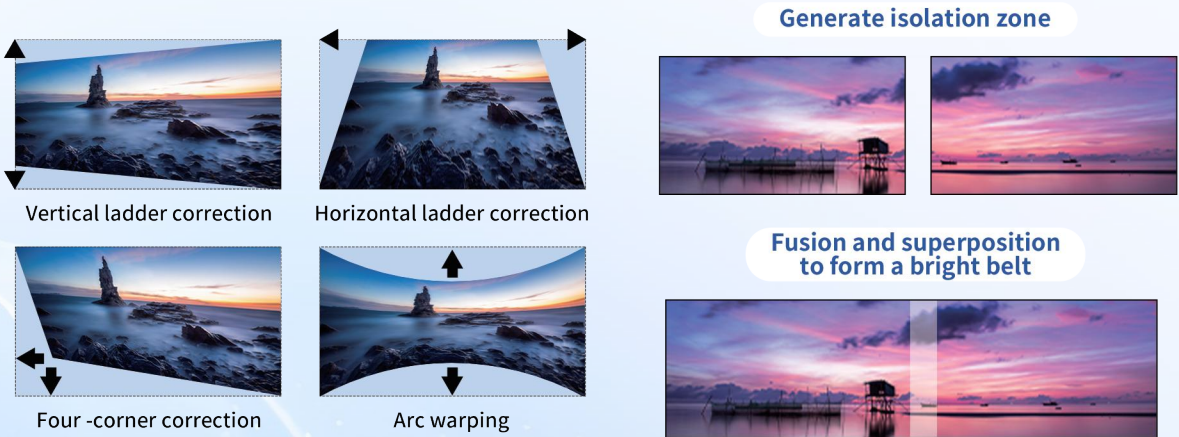
TOPOLOGY



FEATURES

Input Interfaces	HDMI2.0/DP1.2(choose one out of two)×1
Max Input Resolution	3840×2160@60Hz
Output Interfaces	HDMI1.3×8
Output Resolution	1920×1080@60Hz, 1920×1200@60Hz, 1280×720@60Hz, 1024×768@60Hz, 1280×800@60Hz, 1280×1024@60Hz, 1400×1050@60Hz, 1920×1200@60Hz
Output Mapping	Supported

SPLICING



BIT-VJ/EPF-104

4 channels 4K magic box



- 8K/4K playback control
- Warping & Blending
- Windowing overlay
- Rotate at any degrees
- Built-in 64G internal storage
- Sync Audio output
- Creative splicing
- Mixed size splicing
- Capture of partial image
- Visualization software

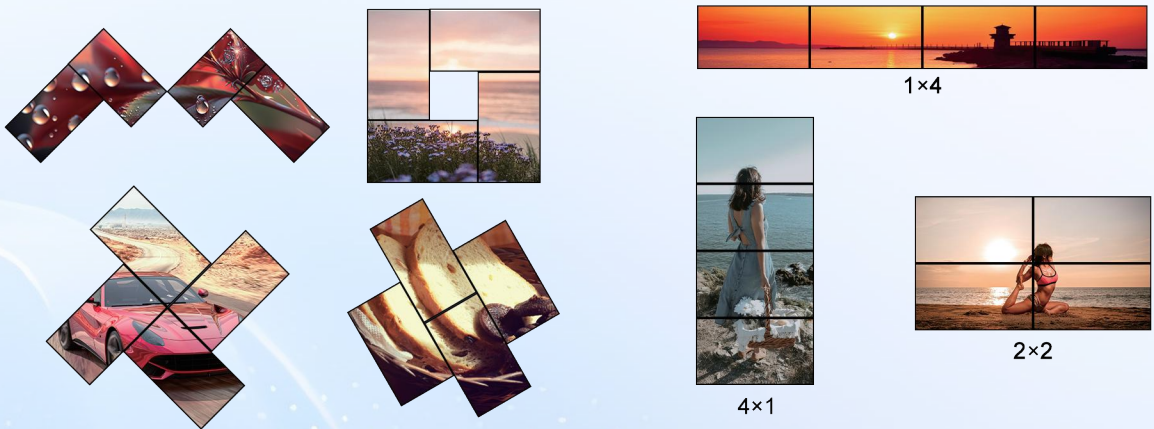
TOPOLOGY



FEATURES

Signal Capture	4096×2160@60Hz
HDMI Output	HDMI1.3×4
Output Mapping	Supported
Decoding	4K60
Output Resolution	1920×1200@60Hz, 1920×1080@60Hz, 1024×768@60Hz, 1280×720@60Hz, 1280×800@60Hz

SPLICING



BIT-VJ/EPF-106Pro

6 channels 8K magic box



- 8K/4K playback control
- Warping & Blending
- Windowing overlay
- Rotate at any degrees
- Built-in 64G internal storage
- Sync Audio output
- Creative splicing
- Mixed size splicing
- Capture of partial image
- Visualization software

TOPOLOGY



FEATURES

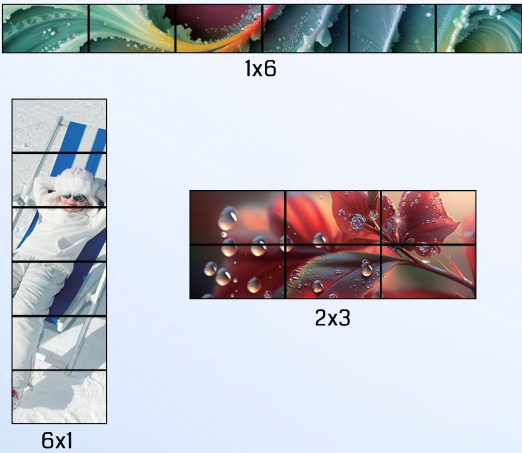
Signal Capture	4096×2160@60Hz
HDMI Output	HDMI1.3×6
Output Mapping	Supported
Decoding	8K60
Output Resolution	1920×1080@60Hz

SPLICING

Any splicing within 6 screens,
Each output supports rotation
of any degrees



Conventional splicing



BIT-VJ/EPF-U1-115Pro

15 channels 8K magic box



- 

8K/4K playback control
- 

Warping & Blending
- 

Windowing overlay
- 

Rotate at any degrees
- 

Built-in 64G internal storage
- 

Sync Audio output
- 

Creative splicing
- 

Mixed size splicing
- 

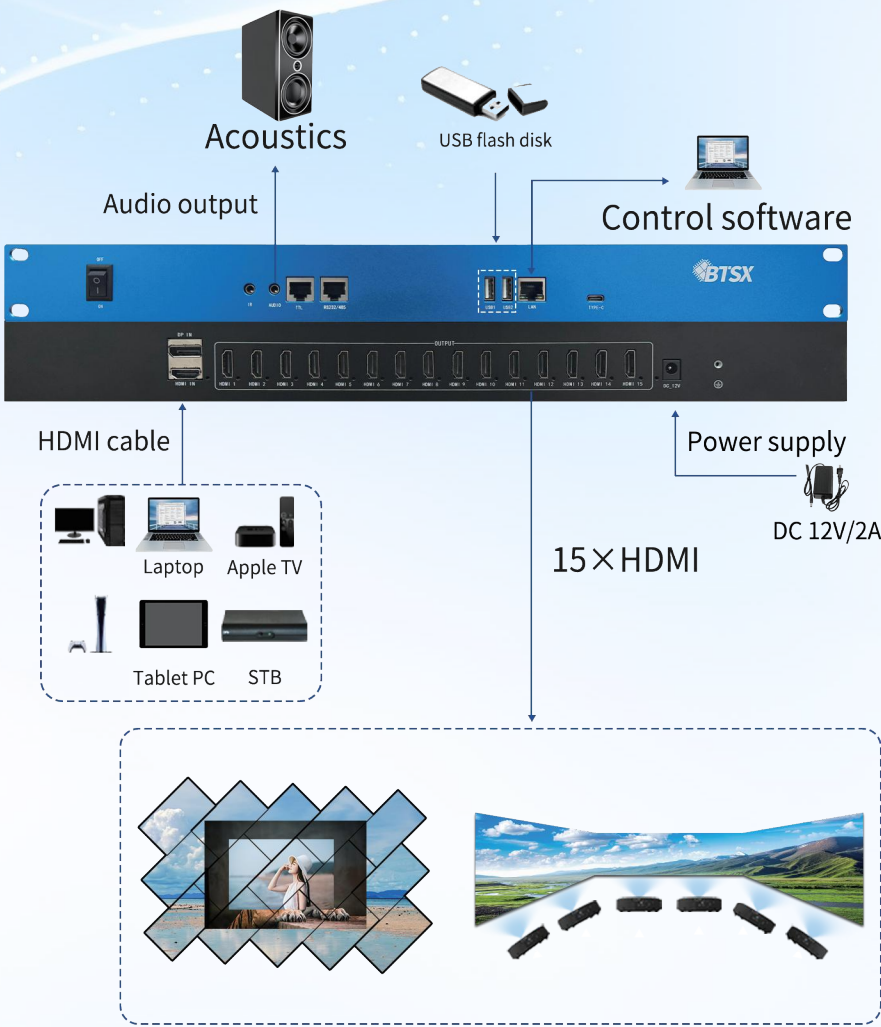
Capture of partial image
- 

Visualization software

FEATURES

Signal Capture	4096×2160@60Hz
HDMI Output	HDMI1.3×15
Output Mapping	Supported
Decoding	8K60
Output Resolution	1920×1080@60Hz,1920×1200@60Hz

TOPOLOGY

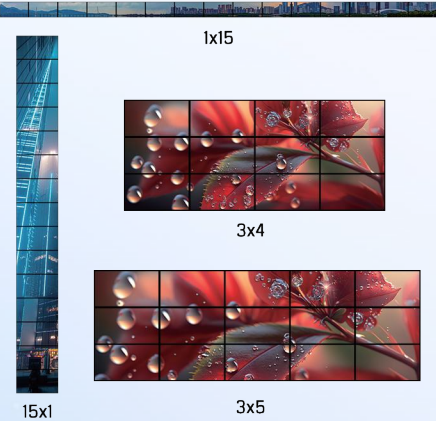


SPLICING

Any splicing within 15 screens,
Each output supports rotation
of any degrees



Conventional splicing



BIT-VP-U1-MD416

4 input 16 output video processor



- 4K60

4096×2160
- Seamless switching

Seamless switching
- RS232

RS232 control
- IR

IR control
- Host computer

Host computer
- Splicing modes

Splicing modes
- Color adjustment

Color adjustment
- Shortcut operation

Shortcut operation
- Rotation

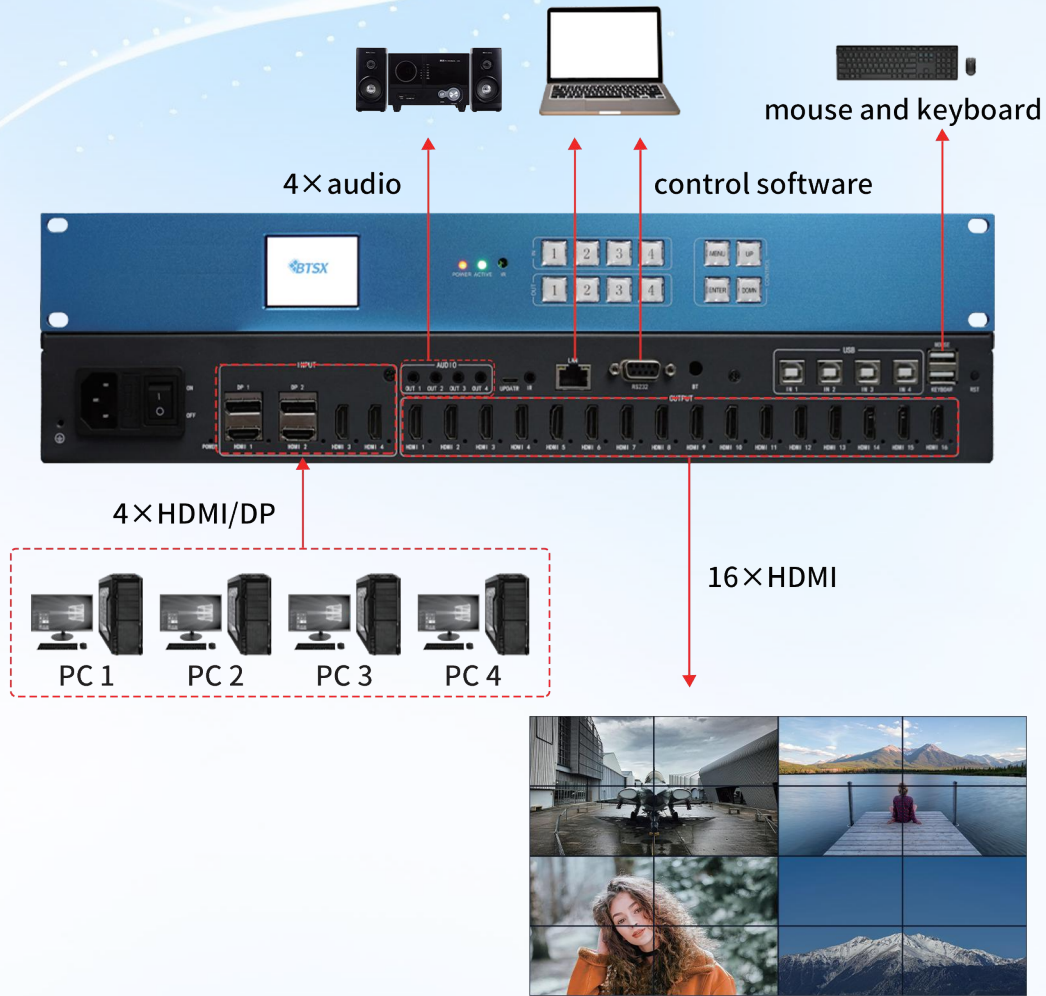
Rotation
- PIP

PIP

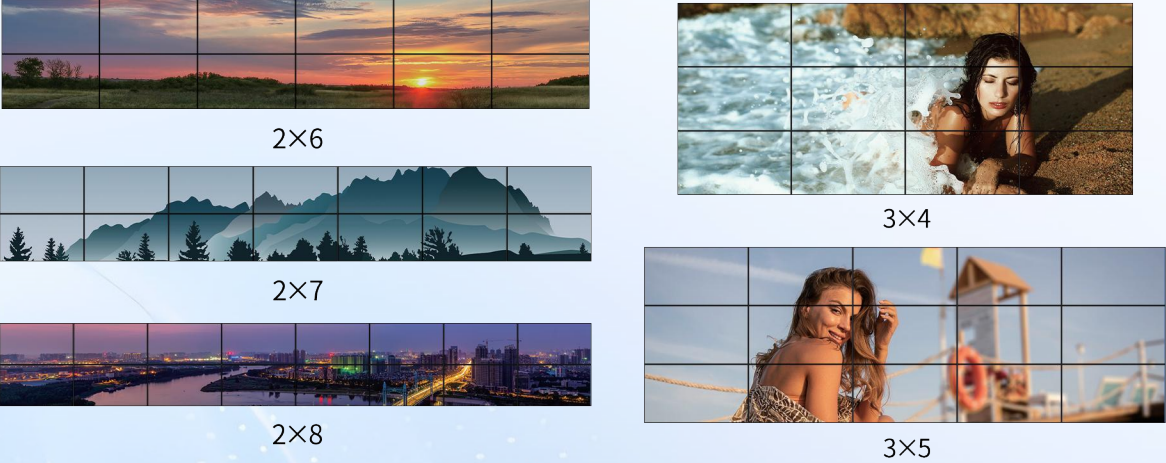
FEATURES

Input Interfaces	HDMI2.0×4、DP1.2×2
Input Resolution	3840×2160@60Hz
Output Interfaces	HDMI1.3×16
Output Resolution	1920×1080@60Hz
Control Method	Infrared Remote,buttons, RS232, Windows control software

TOPOLOGY



SPLICING



BIT-VP-U1-IC409Pro

4 input 9 output video processor



FPGA



4K60

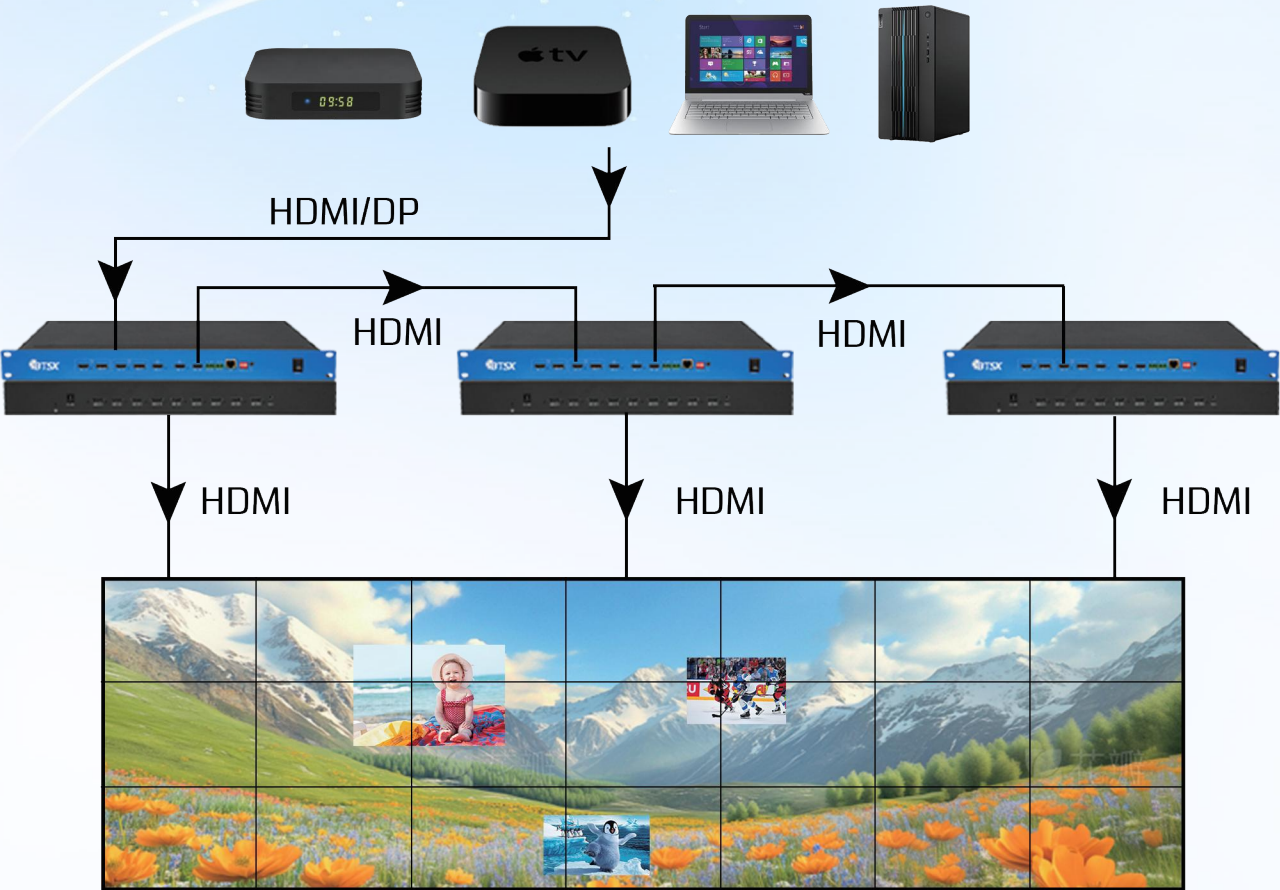


4 INPUT & 9 OUTPUT



RS232

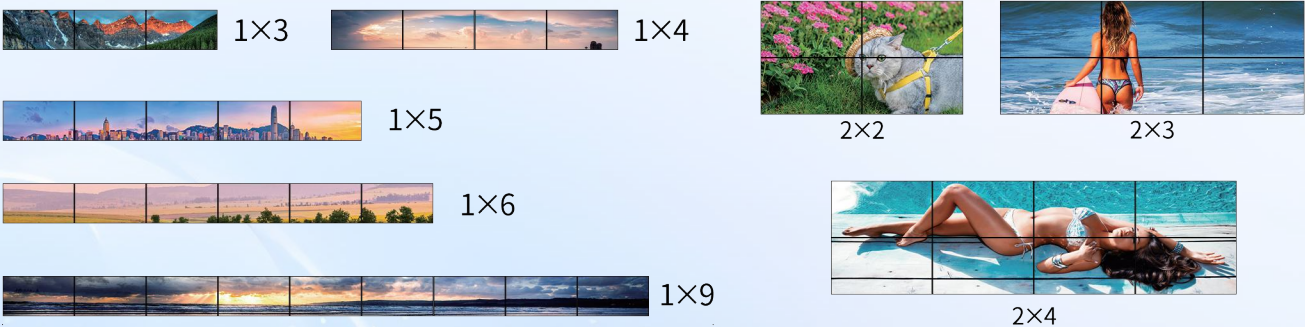
TOPOLOGY



FEATURES

Input Interfaces	HDMI2.0×4, DP1.2×2
Output Interfaces	HDMI1.3×9, HDMI2.0 (Loop-out)
Max Input Resolution	4096×2160@60Hz
Output Resolutions	1920×1080@60Hz,1920×1200@60Hz
Control Method	IR Remote, RS232,TCP/IP, Windows control software

SPLICING



BIT-Dec64-09

4K60 decoding video processor



WEB CONTROL



IPC DECODING



PIP

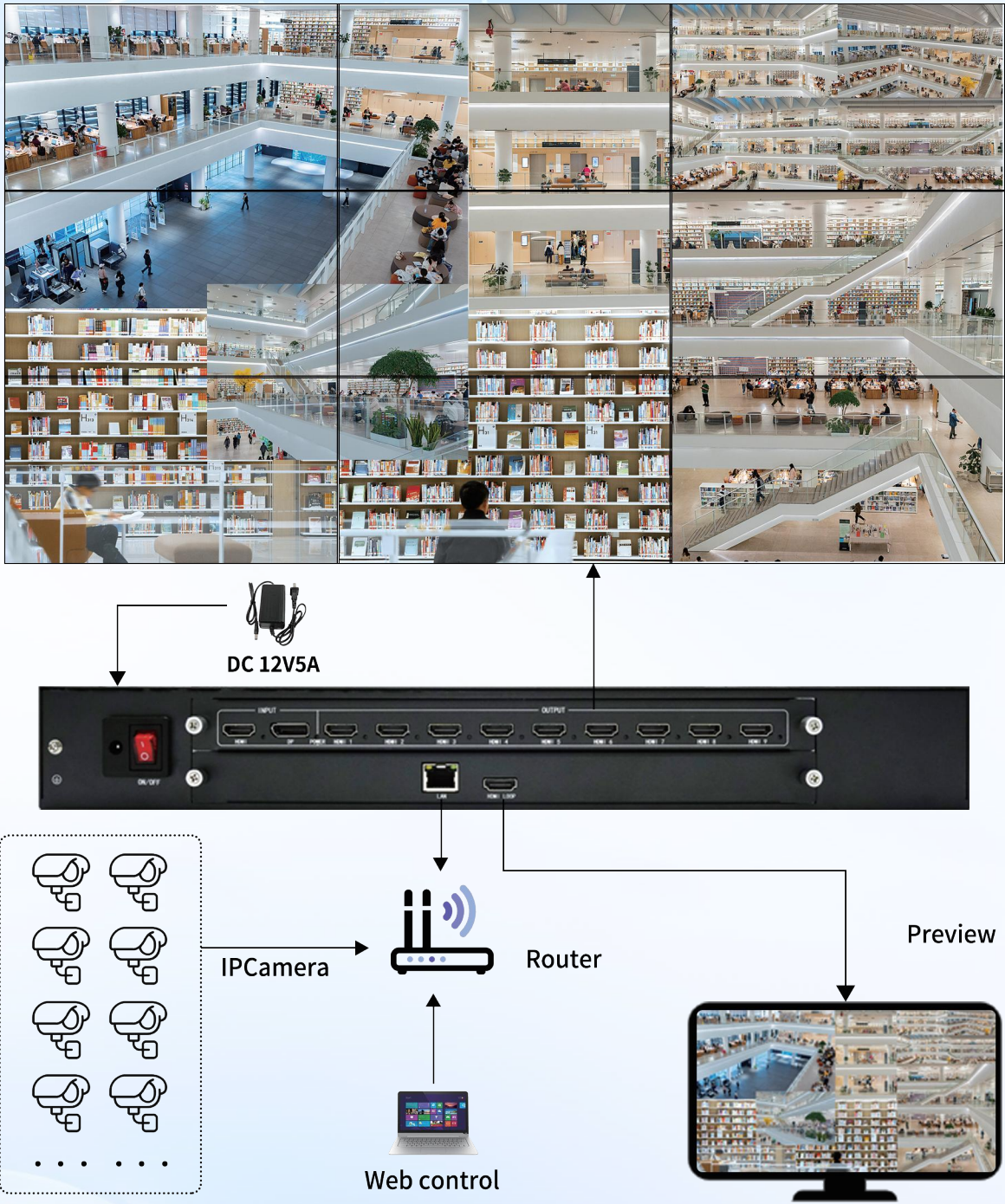


9 SPLICING MODES

FEATURES

Input Interfaces	Gigabit Ethernet
Output Interfaces	HDMI1.3×9, HDMI1.4(Loop-out)
Control Method	Web GUI
Output Resolution	1920×1080@60Hz,1920×1200@60Hz
Decoding Capability	64×D1@H.265/ H.264 or 16×1080@30Hz H.265/H.264

TOPOLOGY



BIT-AVOP-ASP-4K60-KVM

4K60 AV over IP



4K60

AV-over-IP

HDCP 2.3

Video Wall

Image Rotation

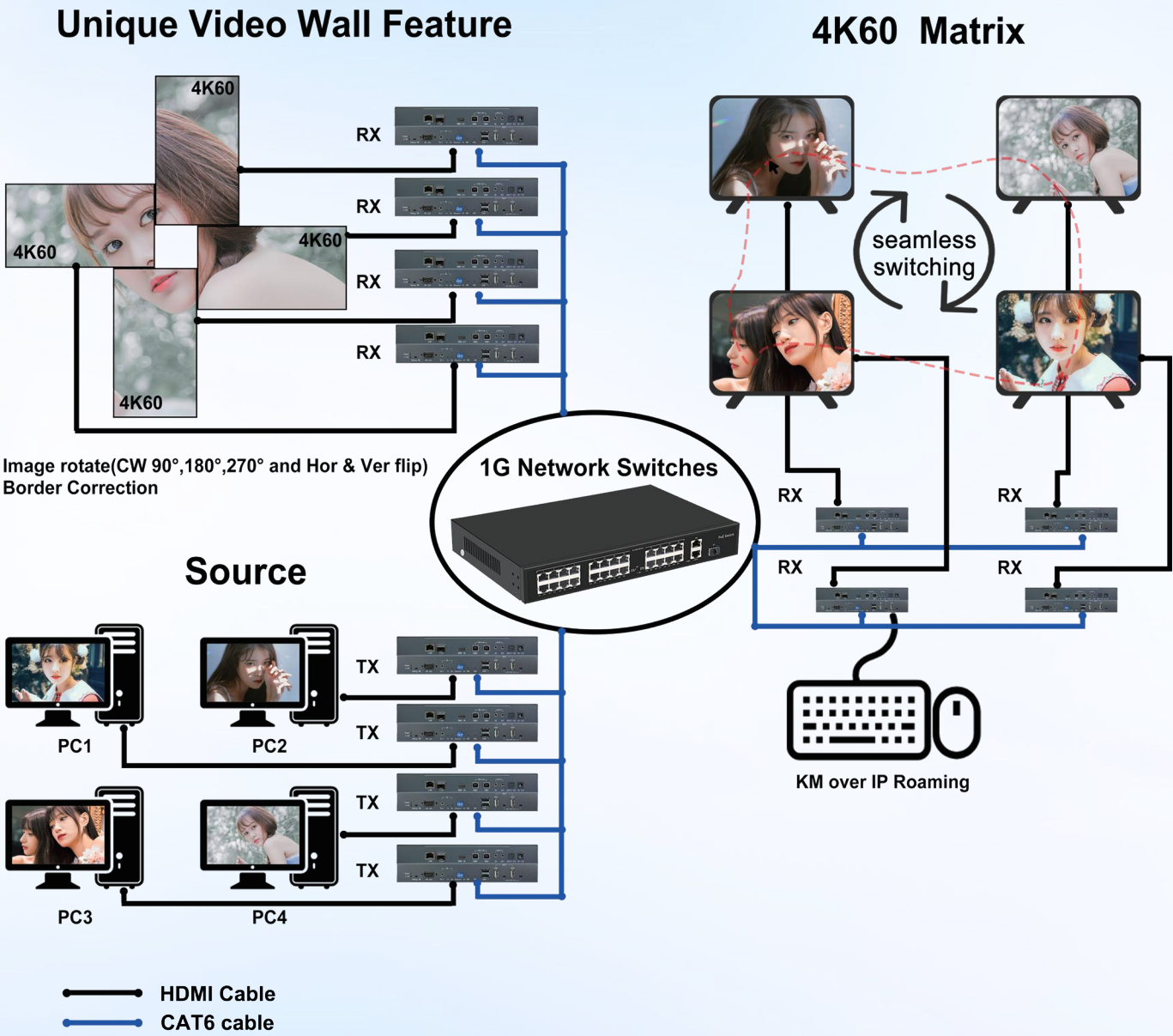
Input Echo

FEATURES

Resolutions	Up to 4K60(4096×2160@60Hz)4:4:4
HDCP	Supports HDCP 2.2/2.3
Transmission Distance	Up to 100m via CAT6 cable
Transmission Mode	1G Distributed Network; Unicast & Multicast
Video Wall & Rotation	Any scaling wall; 90°/180°/270° rotation & mirroring
Audio	3.5mm embedding/de-embedding & SPDIF output
Control	Bidirectional IR, RS232, and USB 2.0

TOPOLOGY

4K60 AV over IP



BIT-Ex-HDBT-8K-V3K

8K HDBaseT extender



8K30Hz 4:4:4

EDID

POE

ARC/eARC

Zero Latency & Uncompressed

8K30Hz/90m
4K120Hz/90m

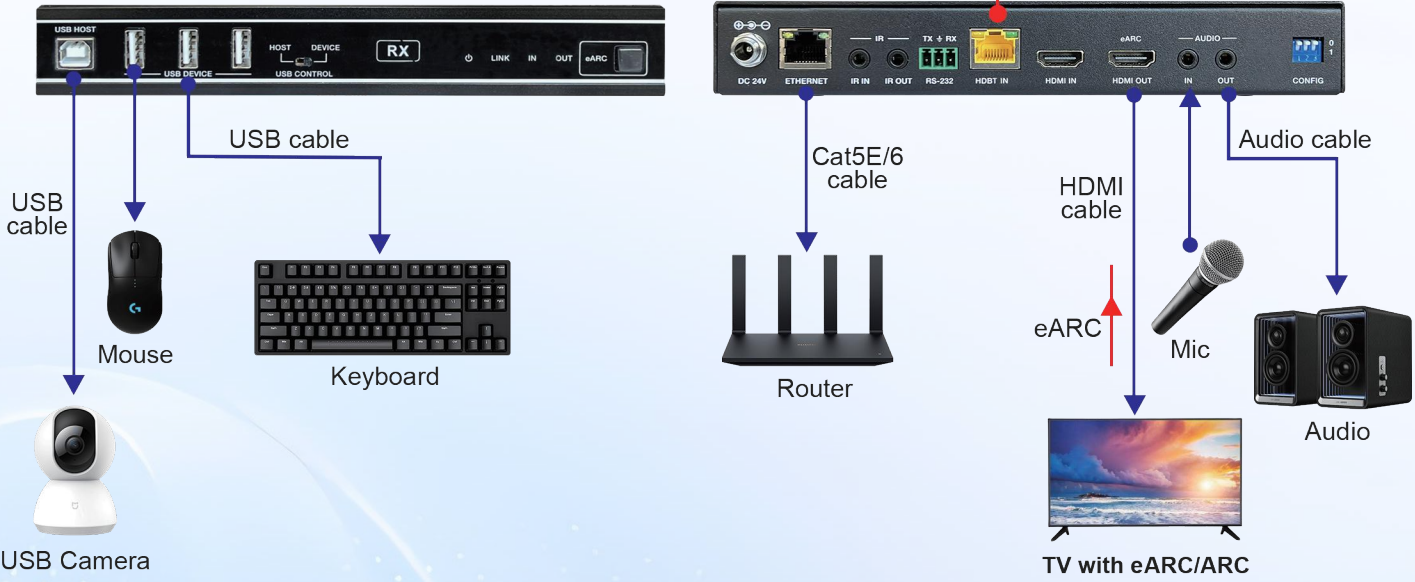
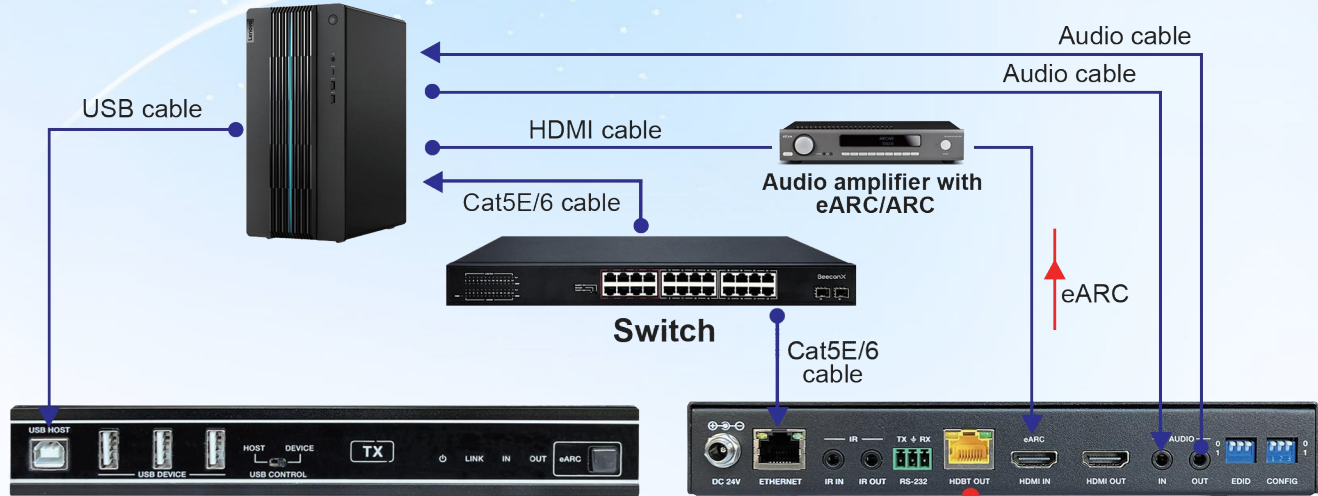
Immersive Audio

Bidirectional KVM

FEATURES

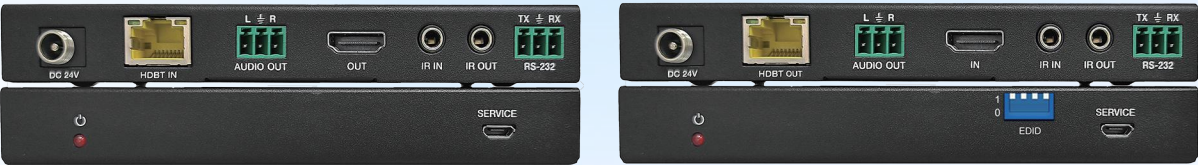
HDMI/ HDCP/ HDBaseT Compliance	HDMI 2.1/ HDCP 2.3/ HDBaseT 3.0
Video Resolution	Up to 8K@30Hz 4:4:4 10bit, 4K120Hz 4:4:4 10bit
Transmission Distance	60m/197ft for CAT6, 90m/295ft for CAT6A/7
Power Supply	DC 24V/3A; Support POE
Other	Supports USB 2.0, eARC, bidirectional IR, bidirectional RS232, and audio encryption/de-embedding

TOPOLOGY



BIT-Ex-HDBT-8K-150C

8K HDMI extender



8K30 4:4:4

HDMI 2.1

HDCP 2.3

8K30Hz/90m
4K120Hz/90m

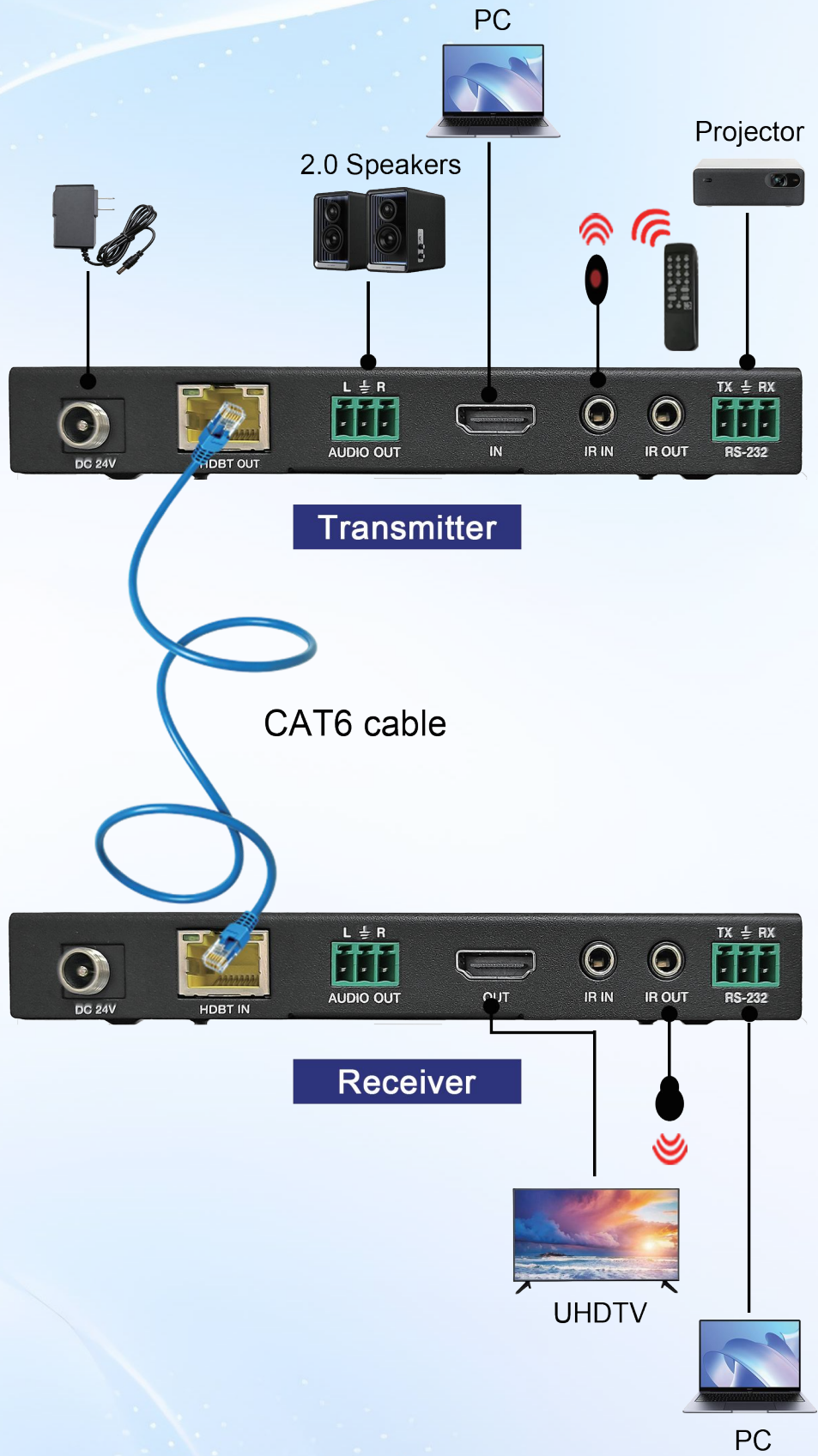
POE

Immersive
Audio

FEATURES

HDMI/HDCP Compliance	HDMI 2.1/HDCP 2.3
Transmission Distance	150m/492ft for 1080p; 120m/394ft for 4K@60Hz; 90m/295ft for 8K@30Hz over CAT6 cable
Power Supply	DC 24V/1A; Support POE
Other	Supports bidirectional IR, bidirectional RS232, and audio separation

TOPOLOGY



BIT-Ex-ASP/IP-4K60-KVM

One to multiple 4K60 IP/fiber extender





4096x2160@60Hz



HDMI 2.0



USB 2.0



20km/100m



Audio separation



IR control

FEATURES

Resolutions	Up to 4K60 standard resolutions
HDCP	HDCP1.4
EDID Passthrough/Fixed	EDID Learning
Transmission Distance	Single-mode fiber 10km/CAT6 100m
Transmission Mode	One-to-One, One to Multiple
Signal Type	Video,Bidirectional audio embedding/ de-embedding,Bidirectional infrared, Bidirectional RS232,USB2.0

TOPOLOGY



MODULAR CHASSIS



BIT-Ex-Fib-4K60-KVM

4K60 fiber extender



USB-HID



4K@60Hz



EDID



RS232 CONTROL

TOPOLOGY



MODULAR CHASSIS



Resolutions	Up to 4K60 resolutions
HDCP	HDCP2.2
EDID Passthrough/Fixed	Fixed/Passthrough
Transmission Distance	Single-mode fiber up to 30KM
Signal Type	Video,Audio follow HDMI, Bidirectional infrared, Bidirectional RS232,USB1.0

BIT-MultiPictures_Pro



Video Wall Controller



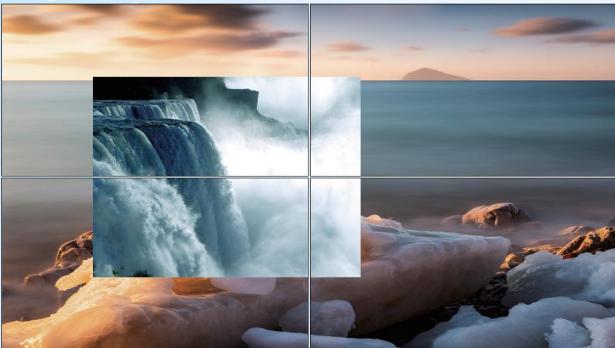
Installing MultiPicture



Pixel-to-Pixel ultra-high resolution

Screen resolution customization/application window opening resolution customization

No signal acquisition, you can play the display of pictures, videos, OFFICE documents, web pages, real-time window roaming operation, simple operation



Version upgrade comparison

	Basic Version	Premium Version
Image Video	✓	✓
Web	✓	✓
Documentation	✗	✓
Plan	✗	✓
Window rotation	✗	✓
Video PPT play control	✗	✓
playback	✗	✓
Capture	✗	✓
Decoding Cameras	✗	✓
Software on the wall	✗	✓
Customized Wall	✗	✓
Subtitles	✗	✓
Multi-language	✓	✓