# **KS9800**

# Multi-picture splicing processor(11.5U)

Version: v3.1 Release date: February 2022



# **Specification**



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Professional Ultra HD Video Display Control system integrated solution and service provider

#### Overview

The KS9800 Great Wall series multi-screen splicer is a professional video processing and control device. It is a pure hardware FPGA design architecture. All the boards of the product adopt a modular design. The input and output slots can be mixed. All card slots can be fully used. There are many kinds of equipment. The size and specification can meet the application requirements of different projects. This series is a splicing controller specially designed for large screen, projection, LCD and other equipment.



#### Features

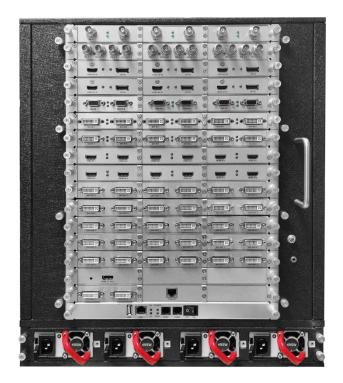
- 1. Multi-screen display, enhanced board single output port can realize 24 screens simultaneously display (standard configuration is 8 screens), the screen can be displayed across the output port, support any overlay, any size setting.
- Can be equipped with 4K@60Hz module, support DP1.2, HDMI2.0 input, resolution maximum support 4096×2160@60Hz or 7680×1080@60Hz.
- 3. Software control, users can directly connect through the host computer software or local area network control, while supporting B/S architecture, users can use a browser to access the device through the local area network or the Internet for management.(B/S architecture is optional)
- KFS multi-machine synchronization technology, when multiple external Kommander servers are connected, frame synchronization is achieved, and point-to-point full frame synchronization display of 16K and above screens can be achieved.
- 5. Group screen management, the device supports eight groups of screen management, and the resolution of the corresponding output port of each group of screens can be set separately to meet the mixed control of multiple display terminals in special-shaped screens and complex scenes.
- Super Resolution zoom technology, video compensation processing algorithm, no size limitation for picture reduction, and retain image details, reduce the out-of-focus phenomenon after the picture is magnified multiple times.
- 7. CrossInt splicing processing technology can effectively prevent splicing misalignment and out of synchronization.
- 8. Multi-machine cascading, multiple devices can be cascade spliced through the synchronization card.(Synchronization control card is optional)
- 9. Input character superposition function, embed characters in each input signal, mark the input signal, and

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display the embedded signal while displaying the input signal on the screen.(An enhanced card is required)

- 10. OSD graphic overlay function, you can overlay text or pictures on the video image through the client software, you can set the font size and overlay position.(An enhanced card is required)
- Basemap capture function, which can intercept the current output image and save it to the device. A single
  machine can save up to 15 4K×2K basemaps, and can combine multiple basemaps.(An enhanced card is
  required)
- 12. Mode calling function, the user can preset multiple display layout plans, can be called with one key when using, and supports up to 200 modes.
- 13. Mobile terminal management function, which can perform parameter setting and signal management on the device through the mobile terminal device APP software, and supports Android, IOS and Windows systems.
- 14. Seamless switching function, there is no black screen, no flickering, and no jamming during the signal switching or mode calling of the screen.
- 15. EDID management function, by changing the device EDID information, the user can set the input resolution of the device.

### Port specifications



Input port		
Туре	Quantity	specification
DVI-D (24+1)	90max	$\cdot$ The maximum resolution is 2048×1152@60Hz, and
		customized resolution is supported
		$\cdot$ compatible with HDMI1.3 and below
SDI (BNC)		·Support the standard: SMPTE 259M SD-SDI 270 Mbit/s 480i,
		576i
		SMPTE 292M HD-SDI 1.485 Gbit/s 720p, 1080i
		SMPTE 424M 3G-SDI 2.970 Gbit/s 1080p
CVBS (BNC)		·NTSC/PAL adaptive, supports 3D comb filter
VGA (D-Sub)		· Maximum supported resolution is 1920×1200@60Hz
		(UXGA)
		· Signal level: R, G, B, Hsync, Vsync:0 to1Vpp±3dB (0.7V
		Video+ 0.3V Sync) 75 ohm; Black level: 300mV Sync-tip: 0V
HDMI1.4a		·1.4a supports a maximum resolution of 4096x1152@60Hz or
(Type A)		4096×2160@30Hz, and supports custom resolution
		·1.4 The following version supports a maximum resolution of
		2048 x 1152@60Hz, and supports custom resolutions
HDMI2.0	30max	·HDMI2.0 supports a maximum resolution of 4096 x
	_	2160@60Hz or 7680 x 1080@60Hz, and supports custom
		resolution with a horizontal width of up to 8000 points and a
		height of up to 4000 points
DP1.2		DP1.2 supports a maximum resolution of 4096 x 2160@60Hz

or 7680 x 1080@60Hz, and supports a customized resolution
with a horizontal width of up to 8000 points and a height of
up to 4000 points

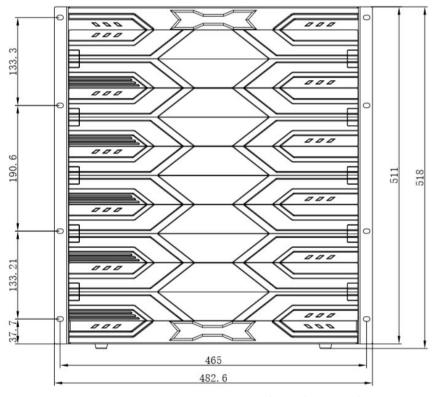
Output port		
type	Quantity	specification
DVI-D (24+1)		· The maximum resolution is 2048×1152@60Hz, and
	90max	customized resolution is supported. The maximum width is
		4000 and the maximum is 4000
HDMI2.0		·HDMI2.0 supports a maximum resolution of 4096 x
(4K@60Hz)		2160@60Hz or 7680 x 1080@60Hz, and supports custom
	15max	resolution with a horizontal width of up to 8000 points and a
		height of up to 4000 points
DP1.2		·DP1.2 supports a maximum resolution of 4096×2160@60Hz
(4K@60Hz)		or 7680×1080@60Hz, and supports custom resolution with a
		maximum horizontal width of 8000 points and a maximum
		height of 4000 points
LAN		$\cdot$ Four LAN ports per card for data transmission to the
	180max	receiving card,
		$\cdot$ The maximum load of single network port is 650,000 pixels,
		the maximum width is 4000 and the maximum is 4000
		$\cdot$ The maximum load of a single card is 2.45 million pixels, the
		maximum width is 4000 and the maximum is 4000

Monitoring port		
Туре	Quantity	specification
DVI-D	2	·Each port monitors 36 inputs, supports a total of 72 inputs
RJ45port	1	·Used to display images on mobile APP and PC software

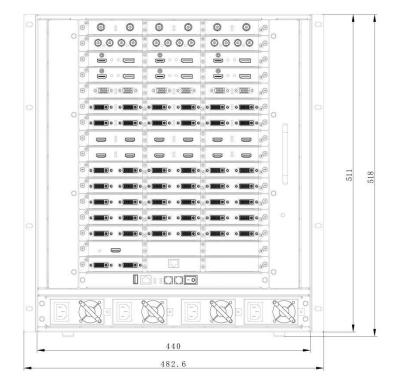
Control port		
Туре	Quantity	specification
RJ11 (RS-232)	2	Data transmission rate is 4800, 9600, 19200, 38400, 57600,
		115200 (BT)
RJ-45	1	100M

Machine specification		
Input power	100-240V AC~50/60Hz 6.6A	
Operating temperature	0-45℃	
Dimensions	482.6×360.7×518mm (L×W×H)	
net weight	31KG	
Machine power consumption	400W	

### Attachment: Equipment size drawing

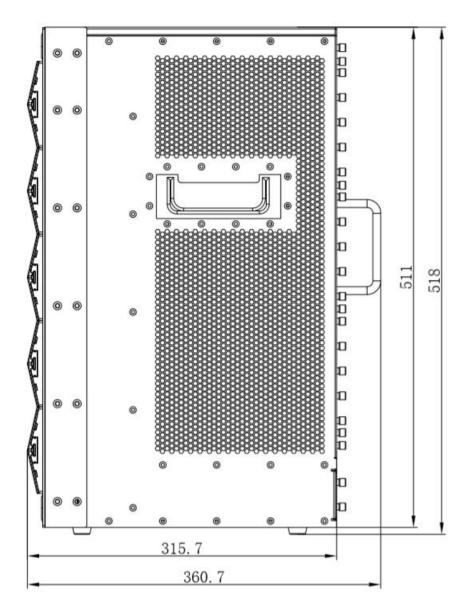


Front panel dimension drawing



### Rear panel dimension drawing

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Side dimension drawing