X8

Redefining 8K Video Processing

Industry leading X series video processing platform takes a massive step into the 8K future with X8. Designed and built for demanding high performance where 4K is the norm, X8 provides unparalleled multi-signal compositing, sync and switching with low latency while maintaining and enhancing visual fidelity.

· Up to 48 4K Layers

Take advantage of powerful multiple 4K layers – output up to 48 scaled layers/windows on a fully configured system across 12 4K outputs, with up to eight 4K layers on any output port.

· 8K Source Management

Splice 4K inputs and outputs for 8K operations fully in sync tear and glitch free, retaining the rich visual content even when scaled.

· Seamless 4K & 8K Switching

Open, switch and transition video layers seamlessly with full sync even across multiple outputs. Transition between multi-signal, multi-scene presets, and PIP over background layers, bringing together 4K and spliced 8K sources on demand.

· Full Color Space

Process high resolution video without compression or loss. X8 is 4:4:4 native with wide bandwidth in device to process high quality video without compromise. Up-sampling of 4:2:0 and 4:2:2 content to 4:4:4 is also supported

· Seamless Synchronization

RGBlink technologies ensure high performance very low latency hardware-based video processing. Synchronisation and delivery of signals of any resolution across multiple outputs is tear-free and scaled pixel-to-pixel.

· Build for Integration

Leverage RGBlink OpenAPI to connect from almost any platform, allowing integration capabilities that go way beyond simply triggering presets or scenes.

· Powerful Display Systems Controls

Unlock unique and extensive device capabilities with the RGBlink XPOSE 2.0 control platform built right into X8 and accessible via a web browser. Create entire display systems comprised of not only multiple resolution displays but also displays of any format or type.

· Native IP Streaming

Stream H.264 video sources via the LAN port providing live previews in browser connected XPOSE 2.0 configurations, presets and playlists.
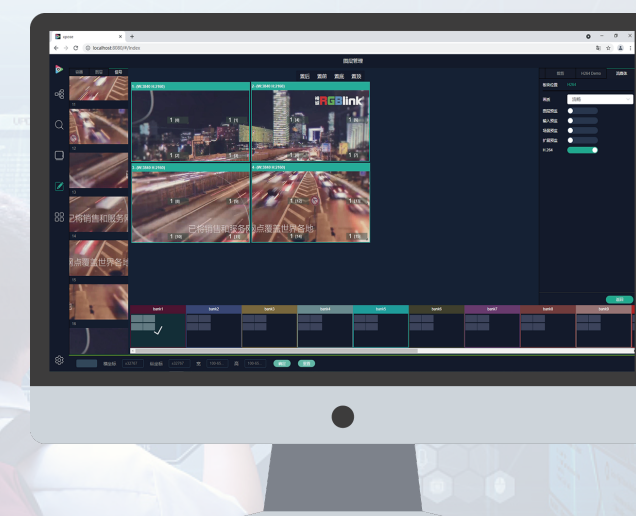
· Lower TCO

Fit modules and components to the X8 system without unneeded overhead or bloat. Hot swap and exchange input and output modules without powering down the overall system. The modular design enables higher up times, ease of maintenance, and operational efficiencies.

· World Leading Development

RGBlink designs, develops and manufactures in house, with unique capabilities and draws from the extensive RGBlink IP pipeline and experience in creating the advanced capabilities in the X8 processing platform.

● Live Virtual Control

RGBlink XPOSE 2.0 provides an industry, intuitive to use configuration and control platform for advanced RGBlink processors including X8.

Signals can be previewed live, multiple display system containers built, presets created and managed. Playback facilities include live and broadcast style as well as scheduled timeline-based options and more.

· Extreme Resolutions

X8 supports 8K multi-cable ultra-high resolution sources in conventional and panoramic configurations, as well as standard 4K and 2K signal formats.
For display, configure ultra large displays across multiple 4K outputs using multiple video layers

· Seamless Video Switching

All switching is seamless with no black frames and is glitch/tear free across multiple outputs. Switch between presets with fades and cuts, as well as using transition effects.

WIPE RIGHT SOFT	WIPE SQUARE IN SOFT	WIPE UP HARD	WIPE LEFT SOFT
WIPE SQUARE OUT SOFT	WIPE DOWN HARD	WIPE UP SOFT	WIPE RIGHT HARD
WIPE DOWN SOFT	WIPE LEFT HARD	WIPE SQUARE IN HARD	WIPE SQUARE OUT HARD

· Audio Support

Select embedded audio from any source for re-embedded to any display output.

· Low Latency Cross Conversion

With the best up-down processing engine in the industry, RGBlink offers the widest signal support capabilities and supports unique custom configured resolutions allowing even more video to be controlled, synchronised and delivered to any display.

· High Performance Backplane

Maintaining full 4K60 4:4:4 for all signals, the X8 backplane and cross-point offers extreme bandwidth to ensure pixel perfect delivery at every resolution and format.

· Genlock Sync

Synchronise and Genlock to other devices in a video system, with X8 accepting BlackBurst in.
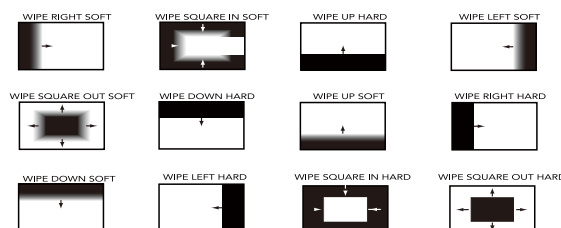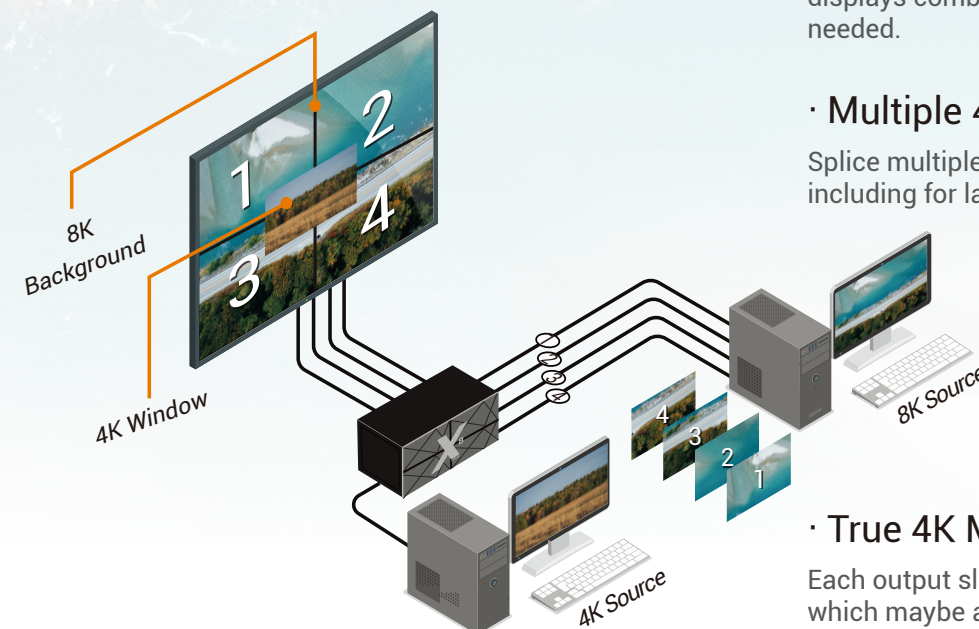
· Configurable Preview

The dedicated HDMI is configurable for up to 64 windows for the ultimate in local monitoring capability.

RGBLink X8

· 8K Workflow Support

Manage multiple 8K sources and output displays combining with other content as needed.

· Multiple 4K Canvas

Splice multiple 4K inputs in any configuration including for landscape or panoramic arrangements.

8K Background

4K Window

4K Source

8K Source

· True 4K Multi-Layer Windowing

Each output slot in X8 supports eight 4K60 layers which maybe assigned freely across outputs, including as eight 4K layers on single 4K output.

Ultra wide canvas
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4KSignal   4KSignal   4KSignal   4KSignal

Quality without Compromise

Maintain the highest fidelity of source signals without compression or loss with 4:4: YUV/RGB colour space.

Manage video chroma sub-sampling and up-sampling of 4:2:0 and 4:2:2 sources for maximum flexibility.
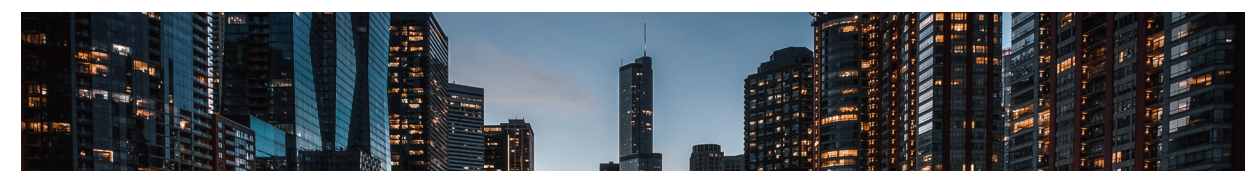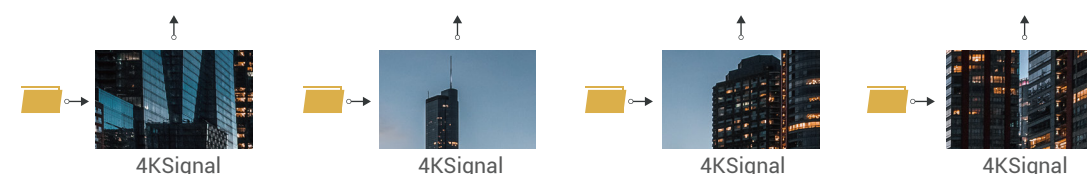
Flexible Canvas Assignment

The ultimate in flexibility, create layouts in pixel space canvas, mapping sources as layers across positioned displays.
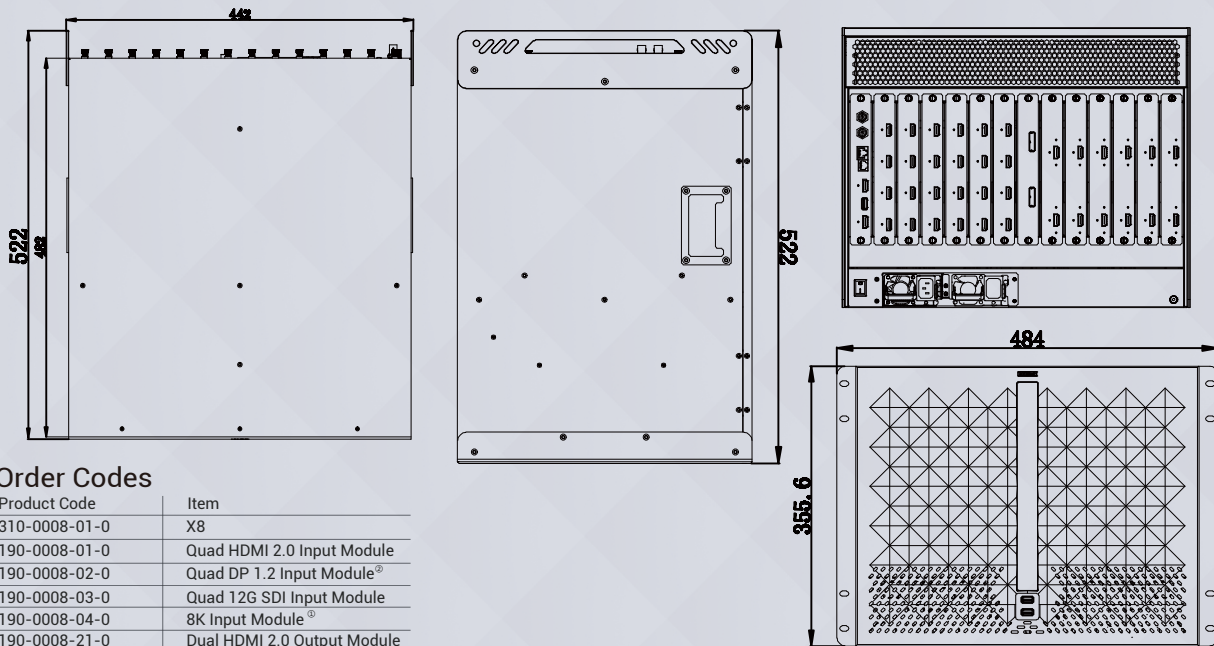
Save and recall layouts and presets on demand for visually engaging experiences powered at the edge with RGBlink X8.

Source 1
Tian

Source 2
Ming

Source 3
Lee

Player 1

Player 2

Background 1

Background 2

Specification

Conncetors	Input	6 input slots,up to 24 inputs		
		Select from	4K HDMI Module	4×HDMI-A
			DP 1.2 Module	4×DisplayPort
			12G SDI Module	4×BNC
			8K Module(Preliminary)	1×HDMI-A + 1×DisplayPort
	Output	6 output slots,up to 12 outputs		
		Select from	4K HDMI Module	2×HDMI-A
			DP 1.2 Module	2×DisplayPort
	Communication	PVW	1×HDMI-A	
		USB 3.0	1×USB-A	
		CTL	1×HDMI-A	
		RS 232	1×RJ11	
		LAN	1×RJ45	
		Genlock/Sync	2×BNC (1 In | 1 Loop)	
	Power	2 slots,up to 2 power inputs	2×IEC	
Performance	Input Resolutions	Select from below or configure customized		
		HDMI		
		SMPTE	720p@23.98/24/25/29.97/30/50/59.94/60	1080p@23.98/24/25/29.97/30/50/59.94/60	2160p@23.98/24/25/50/59.94/60		
		VESA	1024×768@60/75/85	1280×768@50/60	1280×800@50/60	1280×1024@60	1360×768@60	1400×900@60	1400×1050@60	1600×1200@60	1680×1050@60	1920×1080@60	1920×1200@60	2048×1152@60	2560×812@60	2560×816@60	2560×1600@60	3840×1080@60	3840×2160@50/60	4096×2160@60	7680×1080@60	7680×4320@60	User Customized Resolution		
		12G SDI		
		SMPTE	720p@50/60	1080p@50/60	2160p@50/60		
		DP		
		SMPTE	720p@23.98/24/25/29.97/30/50/59.94/60	1080p@23.98/24/25/29.97/30/50/59.94/60	2160p@23.98/24/25/50		
		VESA	1024×768@60/75/85	1280×768@50/60	1280×800@50/60	1280×1024@60	1360×768@60	1400×900@60	1400×1050@60	1600×1200@60	1680×1050@60	1920×1080@60	1920×1200@60	2048×1152@60	2560×812@60	2560×816@60	2560×1600@60	3840×1080@60	3840×2160@50	4096×2160@60	7680×1080@60	7680×4320@60	User Customized Resolution		
	Output Resolutions	Select from below or configure customized		
		HDMI 2.0		
		SMPTE	1080p@25/29.97/30/50/59.94/60	2160p@25/29.97/30/50/59.94/60		
		VESA	640×480@60	800×600@75	1280×768@50/60	1280×1024@60	1360×768@60	1600×1200@60	1920×1080@60	2048×1152@60	2560×812@60	2560×816@60	2560×1600@60	3840×1080@30/60	3840×2160@30/50/60	4096×2160@60	7680×1080@60	User Customized Resolution		
		DP1.2		
		SMPTE VESA	720p@23.98/24/25/29.97/30/50/59.94/60	1080p@23.98/24/25/29.97/30/50/59.94/60	2160p@23.98/24/25/50		
			1024×768@60/75/85	1280×768@50/60	1280×800@50/60	1280×1024@60	1360×768@60	1400×900@60	1400×1050@60	1600×1200@60	1680×1050@60	1920×1080@60	1920×1200@60	2048×1152@60	2560×812@60	2560×816@60	2560×1600@60	3840×1080@60	3840×2160@50	4096×2160@60	7680×1080@60	User Customized Resolution		
	Bandwidth	18Gbps		
	Grey level	3840x2160@50 10bit HLG	3840x2160@30 10bit HDR (for HDMI 2.0 output)		
	Color Space	RGB/YUV444	YUV422		
	HDCP	2.2		
Power	Input Voltage	AC 100V-240V, 50/60Hz		
	Max Power	1200W		
Environment	Temperature	0℃ ~ 50℃		
	Humidity	10%~95%		
Physical	Weight	37.9kg(Net)	44kg (Package)		
	Dimension	522mm×484mm×355.6mm(Net) |610mm×720mm×700mm(Package)		

Dimension

Order Codes

Product Code	Item
310-0008-01-0	X8
190-0008-01-0	Quad HDMI 2.0 Input Module
190-0008-02-0	Quad DP 1.2 Input Module②
190-0008-03-0	Quad 12G SDI Input Module
190-0008-04-0	8K Input Module ③
190-0008-21-0	Dual HDMI 2.0 Output Module
190-0008-22-0	Dual DP 1.2 Output Module③

* ① Schedule leadtime : Jun. 1st 2022   ② Schedule leadtime : Jun. 15st 2022   ③ Schedule leadtime : Jul. 1st 2022

HDMI® HDCP™

RGBlink®