



# D6

## 4K Digital Processor



4K end-to-end presentation processing and scaling for high performance video

**RGBlink**<sup>®</sup>

# D6

## For high performance 4K video end-to-end, D6 delivers.

Modern presentations demand 4K at refresh rates supporting digital media. D6 builds on the tradition of its broadcast quality predecessors and RGBlink innovations while adding new and enhanced features.

RGBlink modular slots are utilised throughout for the ultimate in flexibility and configurability, with each slot supporting 4K 60fps and signal options including HDMI, DisplayPort and 12G-SDI as well as conventional 2K signal options.

D6 has RGBlink XPOSE built right in for interactive and visual configuration in conjunction with the large integrated LCD display. Preview not only directly on board, but also from the dedicated PVW multi-view output.

### Modular Design

D6 has four input and four output slots with each slot supporting up to 4K@60. A wide range of options are available including a digital input module with HDMI 2.0 and DisplayPort 1.2, a 12G-SDI module that supports multiple 3G-SDI inputs too.

### Multi-Mode Operations

Select the operation mode suitable for the application from conventional Preview mode with seamless alpha cross fades, to Presentation Modes for the maximum layers and seamlessly fade-in-fade mixing, and videowall splicing modes. A range of presets allow quick and easy configuration to requirement.

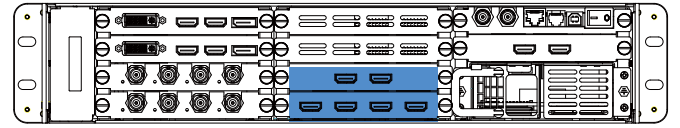
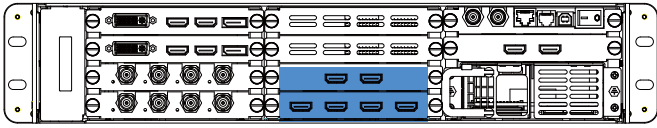
### HDR Support

Signals with High Dynamic Range are supported for processing via the processor with D6 having a high bandwidth 60Gbps backplane and wide gamut 12bit grey level processing

### Full Color Space

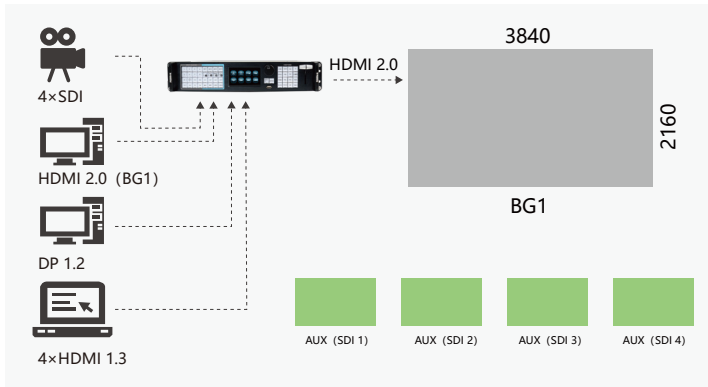
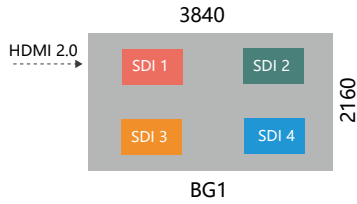
Video scaling and conversion takes advantage of the RGBlink full 4:4:4 in hardware processing engine for the maximum visual performance.





## 4K2K Preview/Switcher Mode

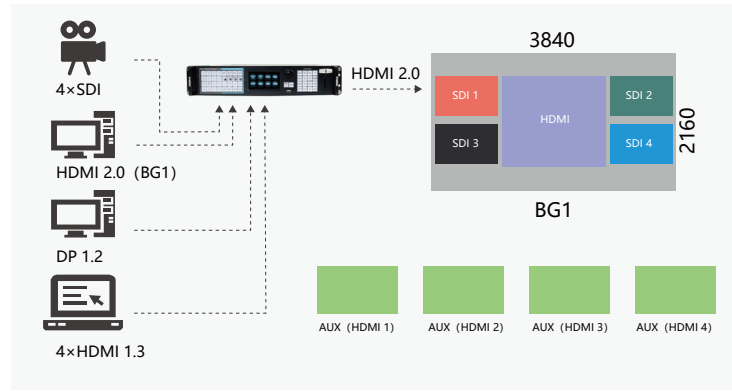
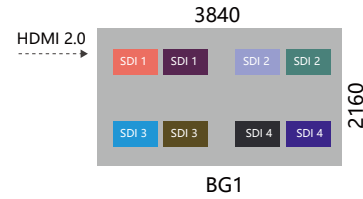
Seamless switcher mode with alpha cross fade between presets. Support for scaled background and up to four foreground layers (two layers per 4K1K pixel space)



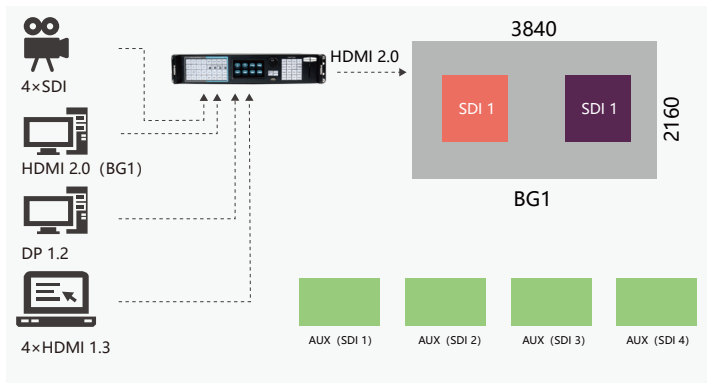
Example: 4K HDMI as 8K1K background video display. Other sources utilised as auxiliary (AUX) displays for relay or iMag.

## 4K2K Presentation Mode

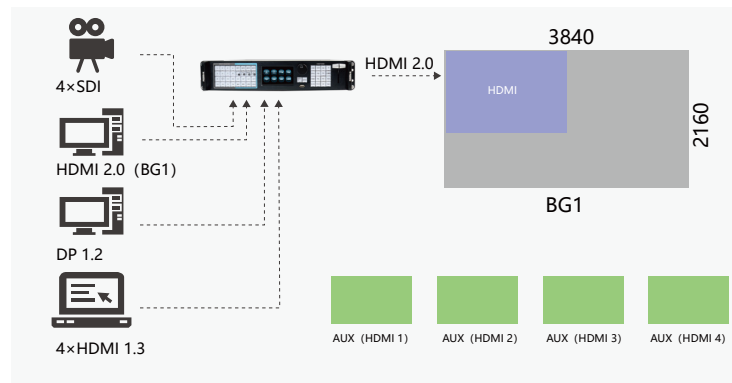
Video scaling and conversion takes advantage of the RGBlink full 4:4:4 in hardware processing engine for the maximum visual performance.



Example: 4K HDMI as 4K background video display. Five sources arranged as foreground layers (using six layers). Seamless fade-out-fade-in switching against background. Auxiliary (AUX) for relay or iMag.



Example: 4K background video display. Two foreground layers (as 2 layers each bridging 1K vertical), switched seamlessly, AUX relay outputs

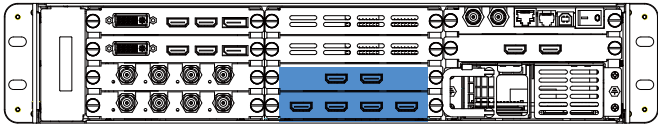


Example: 4K background video. Foreground layer (as 2 layers bridging 1K vertical Seamless fade-out-fade-in switching . AUX relay/iMag outputs.



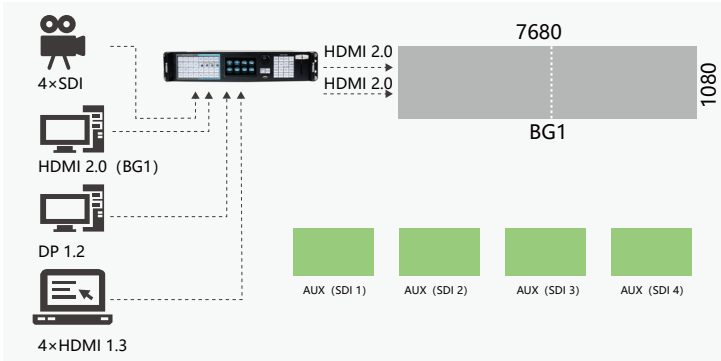
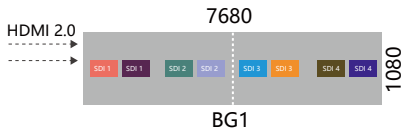
# 4K 60

\* D6 shown with optional modules fitted as example configuration. Refer to Specifications and Guide



## 8K1K Presentation Mode

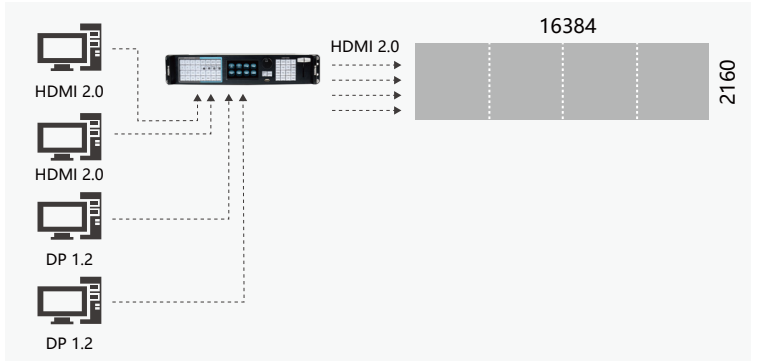
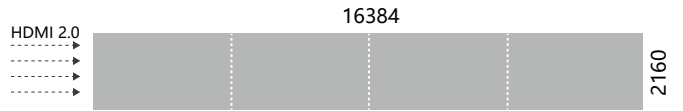
Configures a 4K output module as 8K1K with each of the two outputs on the module each with 4K1K, Utilise a 8K1K background with up to eight foreground scaled layer/windows with layer modules fitted. Switch between presets with fade-in-fade out of foreground layers.



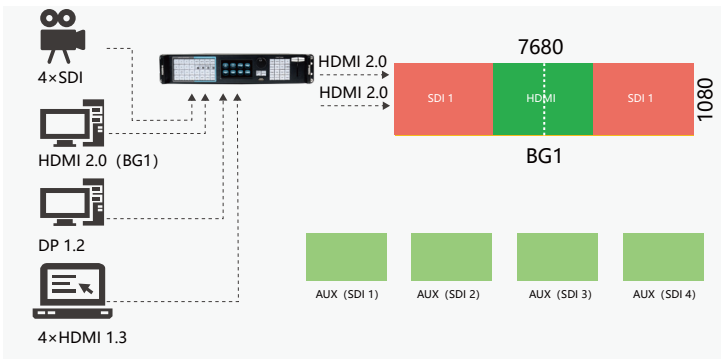
Example: 4K HDMI as 4K background video display. Other sources utilised as auxiliary (AUX) displays for relay or iMag.

## Split/Videowall Mode

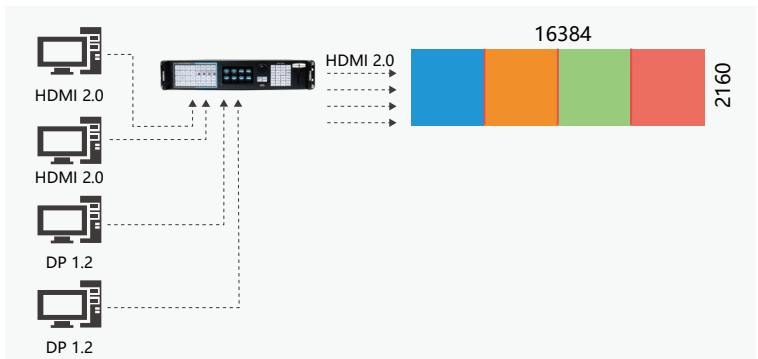
Create large scale video walls with 4K signals split and spliced up to 16K. Fit D6 with four 4K output modules



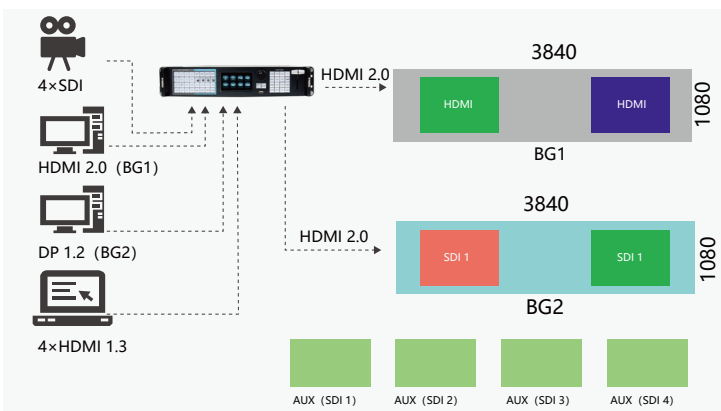
Example: 4K HDMI as 16K2K display



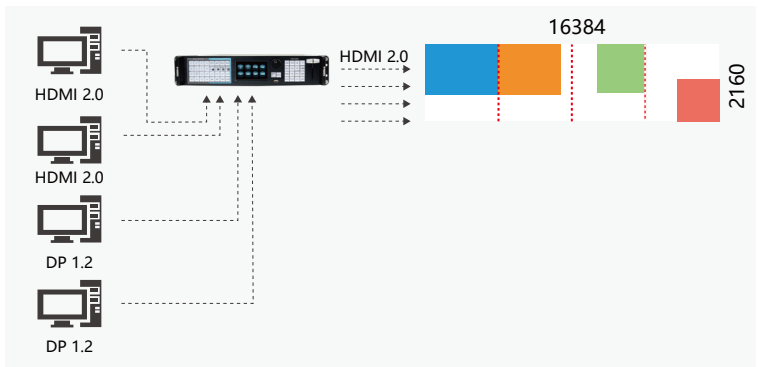
Example: 4K HDMI as 8K1K background video display hidden by . Foreground layers can be switched seamlessly with fade-out-fade-in to background. Other sources utilised as auxiliary (AUX) displays for relay or iMag.



Example: Four 4K sources distributed evenly across 16K output.



Example: Two 4K signals each as 4K1K background video display with foreground layers as layers/PIPs. Layers switched seamlessly with fade-out-fade-in to background. Other sources utilised as auxiliary (AUX) displays for relay or iMag.



Example: Four 4K sources scaled across 16K output canvas.



## Multi Layer Switching & Scaling

At the heart of presentation switching is true seamless switching of mixed signal types and resolutions. D6 scales and synchronises all video sources for output, and for switching operations seamless switches between preset and program. RGBlink pixel-to-pixel scaling engine presents pixel perfect video to non-native or creative displays as well providing the multi-PIP/layer/window capabilities.

## Background Video

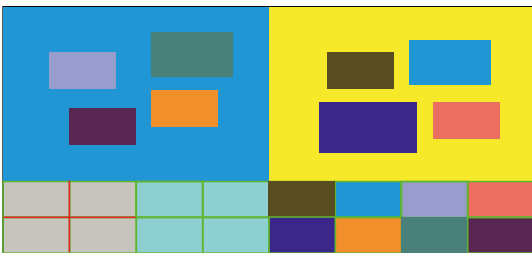
Select a source to be a background for the program output. Background is converted and scaled automatically to the full output resolution. Background video is ideal for Presentation Mode where many layers are utilised offering a canvas for fade-out-fade-in to occur against for maximum effect.

## Genlock

For synchronisation with other video devices, Genlock Y In is provided along with loop out.

## Dedicated Multi-View Preview

A built in preview feature allows review and configuration of video presets before TAKE to program. The multi-view is automatically configured for operation mode. Preview may be monitored from the front panel or viewed externally via the 2K preview output port independent of program output resolutions.



## Chroma Key/DSK

Apply a key from presets or specify to requirement for foreground keying against the background layer.



## Image Enhancement

A full range of image enhancement controls are available on board including Noise Reduction, Gamma control, Hue, Tone, Color Temperature and more.

## Low Latency

Full hardware based video processing offers industry leading low cost latency across the processor.

## Control Local and Remote

The D6 front panel features large tactile and individually illuminated buttons as well as integral display. Uniquely the D6 front panel can be removed either for security or located and connected remotely increasing operational flexibility.

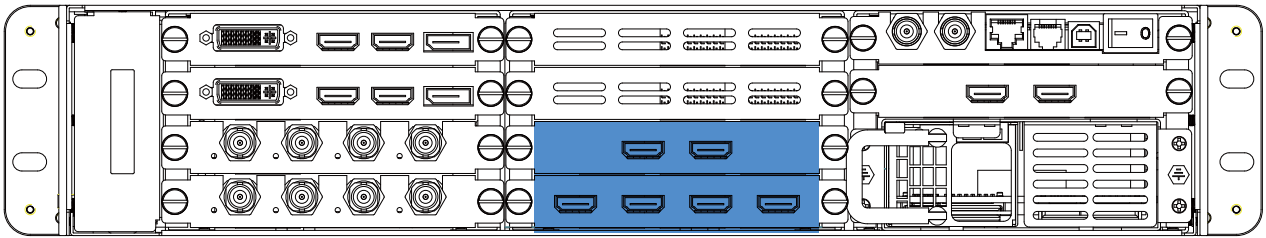


## Connect and Control

Remotely configure and control D6 from XPOSE on Windows or macOS and via LAN or USB. RGBlink T Series control consoles may also be used for remote control, and for integrators RGBlink OpenAPI offers even further possibilities



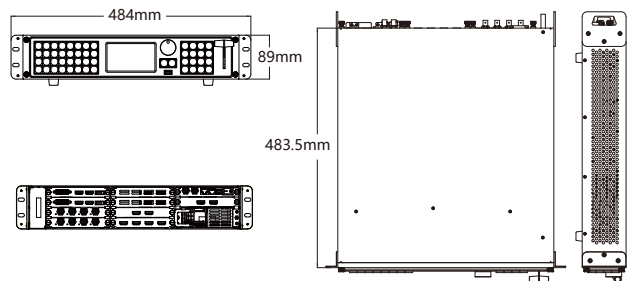
# 4K 60



## Specifications

Connections	Input	4 slots, up to 16 inputs		
		Select from	4K Digital Module   12G-SDI Module   Quad 2K HDMI Module	
			1 x DVI   2 x HDMI   2 x DisplayPort   4 x BNC   4 x HDMI	
	Output	4 slots, up to 16 outputs		
		Select from	4K HDMI Module   12G-SDI Module   Quad 2K HDMI Module	
			2 x HDMI   4 x BNC   4 x HDMI	
	Preview (PVW)	2 x HDMI		
	Communication	2 x BNC   1 x RJ45   1 x RJ11   1 x USB-B   1 x USB A	Genlock Y In/Loop   LAN   Serial RS232 In   Serial USB In   USB In	
	Power	2 slots	fit up to 2 power supplies   1 x IEC (each power supply)	
Performance	Input Resolutions	SDI		
		SMPTE	480i   576i   720p@25/30/50/60Hz   1080i@50/59.94/60Hz   1080p@23.98/24/25/29.97/30/50/59.94/60Hz   1080psf@23.98/24/25/29.97/30Hz   2160p@30/50/60Hz	
		DVI		
		SMPTE	480i   576i   720p@50/60Hz   1080i@50/60Hz   1080p@50/60Hz   2160p@30Hz	
		VESA	800x600@50/60Hz   1024x768@50/60Hz   1280x720@50/60Hz   1280x800@50/60Hz   1280x960@50/60Hz   1280x1024@50/60Hz   1400x1050@50/60Hz   1600x1200@50/60Hz   1920x1080@50/60Hz   2048x1152@50/60Hz   2560x1600@50/60Hz   2560x1600@50/60Hz   3840x2160@24/25/30Hz   3840x1080@50/60Hz	
		DisplayPort   HDMI		
		SMPTE	480i   576i   720p@50/60Hz   1080i@50/60Hz   1080p@50/60Hz   2160p@50/60Hz	
		VESA	800x600@50/60Hz   1024x768@50/60Hz   1280x720@50/60Hz   1280x800@50/60Hz   1280x960@50/60Hz   1280x1024@50/60Hz   1400x1050@50/60Hz   1600x1200@50/60Hz   1920x1080@50/60Hz   2048x1152@50/60Hz   2560x1600@50/60Hz   3840x2160@50/60Hz	
		Output Resolutions	Select from below or configure customised	
		SDI		
	SMPTE	480i   576i   720p@25/30/50/60Hz   1080i@50/59.94/60Hz   1080p@23.98/24/25/29.97/30/50/59.94/60Hz   1080psf@23.98/24/25/29.97/30Hz   2160p@30/50/60Hz		
	HDMI 2.0			
	SMPTE	720p@50/60Hz   1080p@50/60Hz		
	VESA	800x600@50/60Hz   1024x768@50/60Hz   1280x720@50/60Hz   1280x800@50/60Hz   1280x960@50/60Hz   1280x1024@50/60Hz   1400x1050@50/60Hz   1600x1200@50/60Hz   1920x1080@50/60Hz   2048x1152@50/60Hz   2560x1600@50/60Hz   3840x2160@24/25/30/50/60Hz   4096x2160@50/60Hz		
	Supported Standards	SDI   HDMI   DVI   DisplayPort	12G SDI   2.0   DVI-I   1.2	
	Grey Level	12 bit		
	Colour Space	4:4:4		
Power	Voltage	AC 85~264V 50/60Hz		
	Max Power	400W		
Environmental	Temperature	0°C – 40°C		
	Humidity	10% - 85%		
Physical	Weight	Nett	15.1kg	
		Packaged	19.7kg	
	Dimension	Nett	483mm x 545mm x 95mm	
		Packaged	630mm x 595mm x 255mm	

Product Code	Item
110-0628-01-0	D6
190-1628-06-0	SDI Input Module (configurable 3G/6G/12G)
190-1628-07-0	4K Input Module (DVI/HDMI/DP)
190-1628-21-0	HDMI 2.0 4K Output Module
190-1628-23-0	SDI 12G Output Module
190-1628-30-0	Four Layer Output Module
190-1628-31-0	HDMI 2K Output Module
190-1628-50-0	PVW HDMI Output Module
950-0005-00-0	Hot Swap PSU 400W



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