



# D6

## 4K Digital Processor



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

**RGBlink®**

# 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.

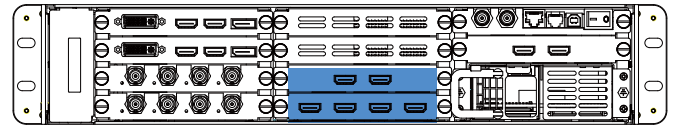
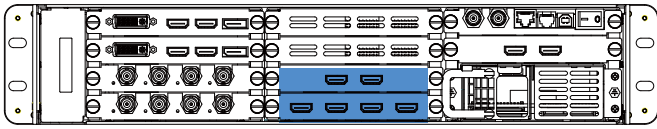
### HDR Support

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

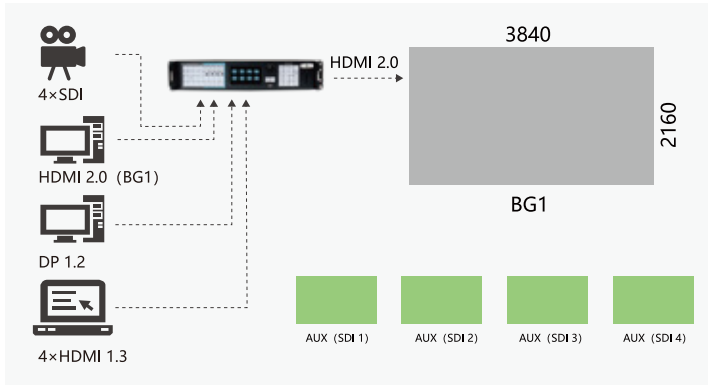
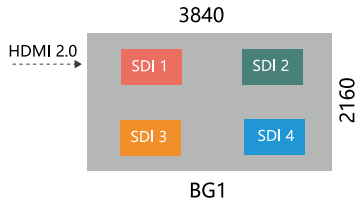
Video scaling and conversion takes advantage of the RGBlink full 4:4:4 in hardware processing engine for the maximum visual performance.





### 4K2K Preview/Switcher Mode

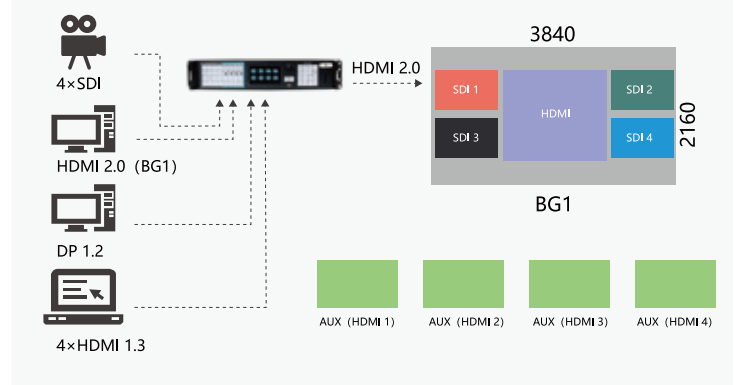
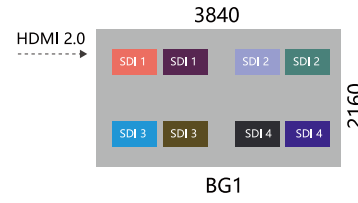
Seamless switcher mode with alpha cross fade between presets. Support for scaled background and up to four foreground layers (two layers per 4K1K pixel space)



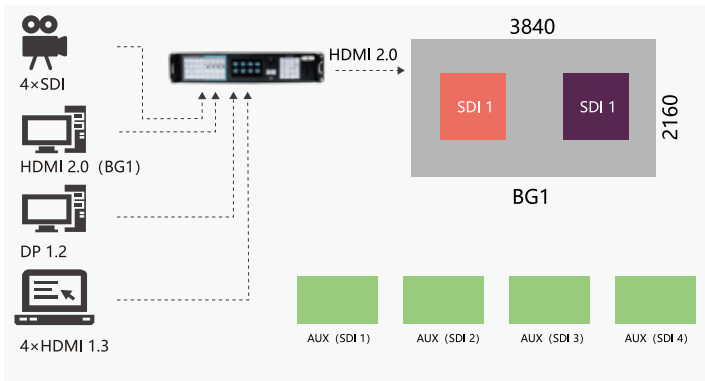
Example: 4K HDMI as 8K1K background video display. Other sources utilised as auxiliary (AUX) displays for relay or iMag.

### 4K2K Presentation Mode

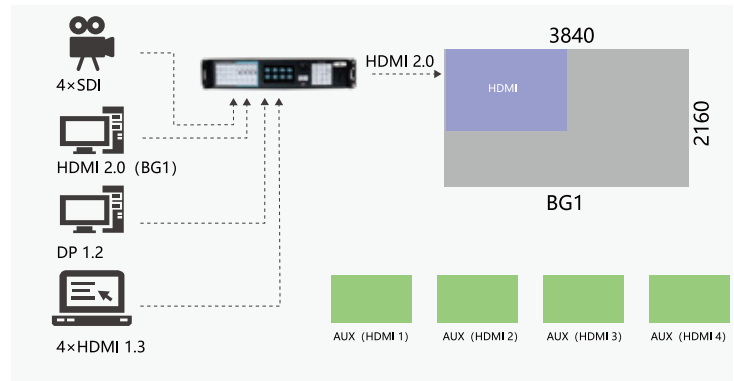
Video scaling and conversion takes advantage of the RGBlink full 4:4:4 in hardware processing engine for the maximum visual performance.



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.

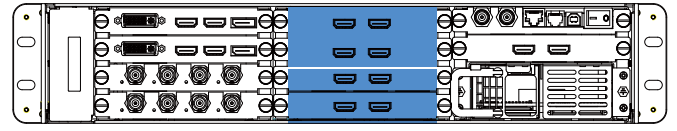
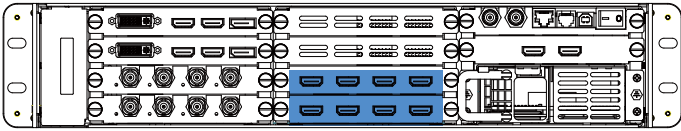


Example: 4K background video. Foreground layer (as 2 layers bridging 1K vertical) Seamless fade-out-fade-in switching . AUX relay/iMag outputs.



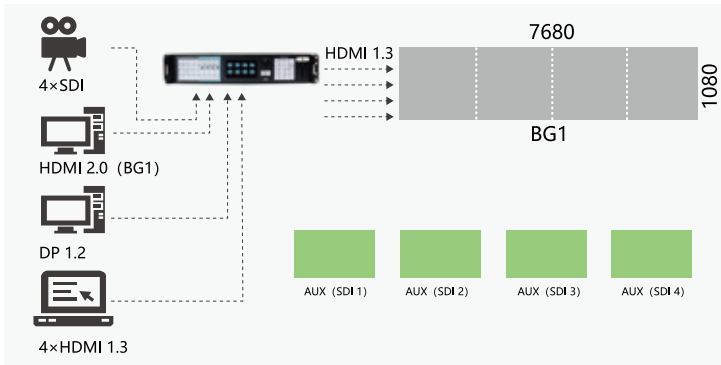
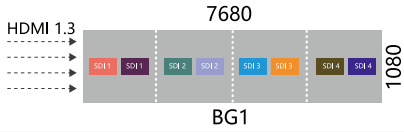
# 4K 60

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



### 8K1K Presentation Mode

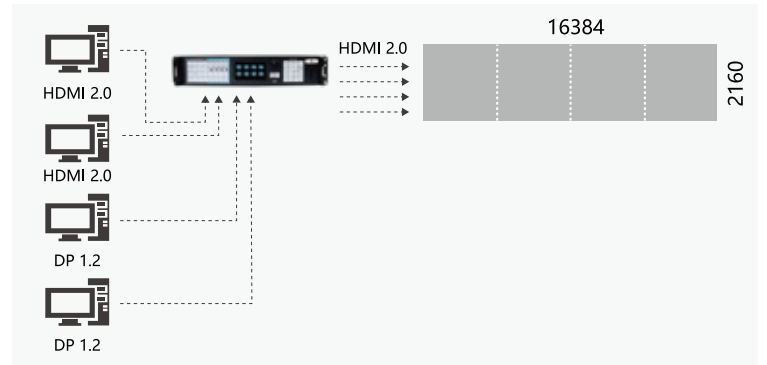
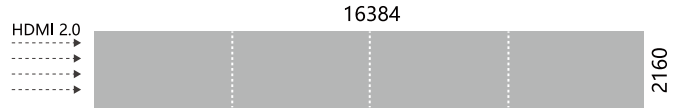
Configures a 4K output module as 8K1K with each of the two outputs on the module each with 4K1K, Utilise a 8K1K background with up to eight foreground scaled layer/windows with layer modules fitted. Switch between presets with fade-in-fade out of foreground layers.



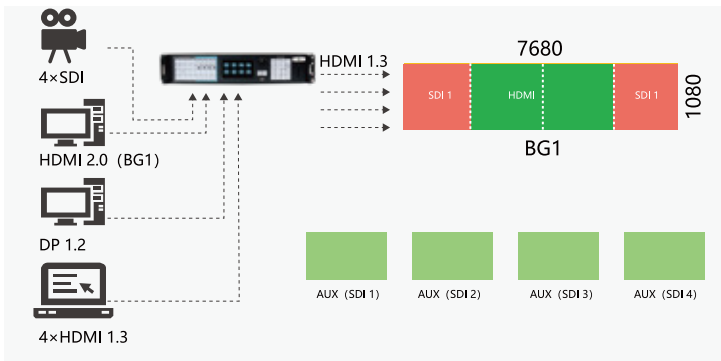
Example: 4K HDMI as 4K background video display. Other sources utilised as auxiliary (AUX) displays for relay or iMag.

### Split/Videowall Mode

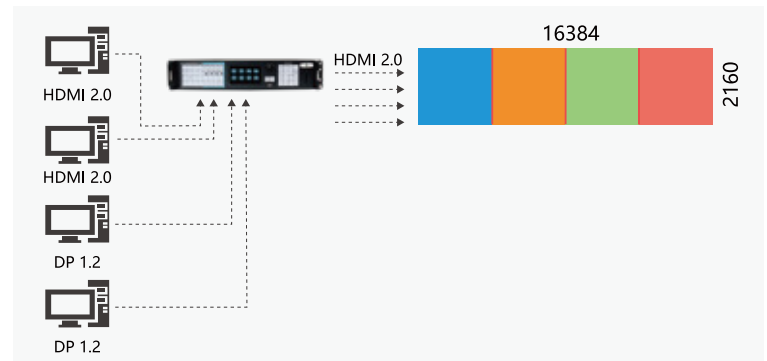
Create large scale video walls with 4K signals split and spliced up to 16K. Fit D6 with four 4K output modules.



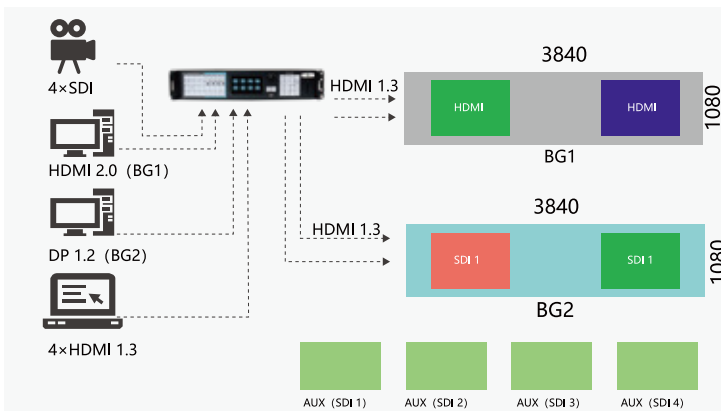
Example: 4K HDMI as 16K2K display



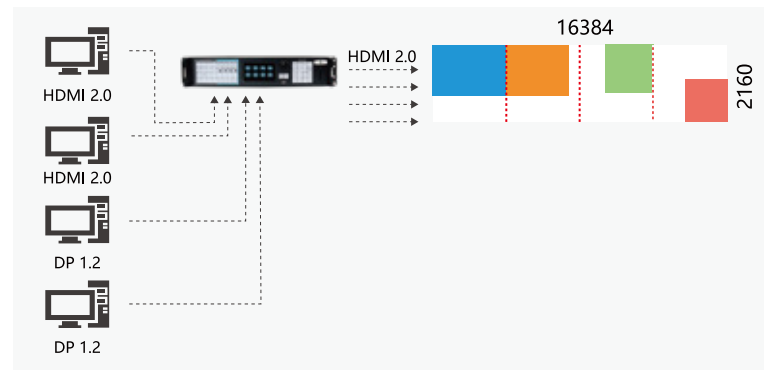
Example: 4K HDMI as 8K1K background video display hidden by . Foreground layers can be switched seamlessly with fade-out-fade-in to background. Other sources utilised as auxiliary (AUX) displays for relay or iMag.



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



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

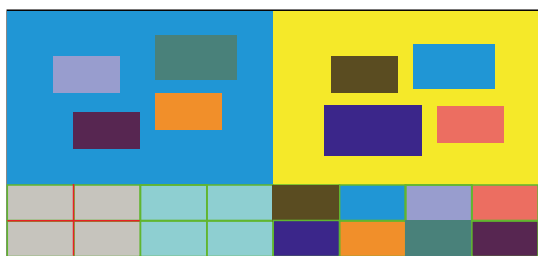
Select a source to be a background for the program output. Background is converted and scaled automatically to the full output resolution. Background video is ideal for Presentation Mode where many layers are utilised offering a canvas for fade-out-fade-in to occur against for maximum effect.

### 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.

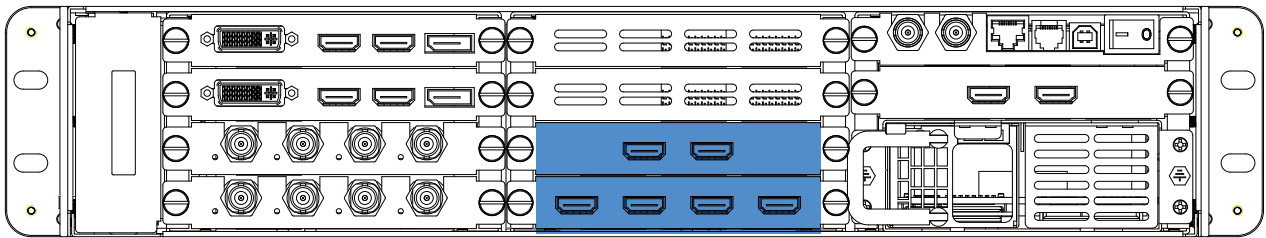


### Connect and Control

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



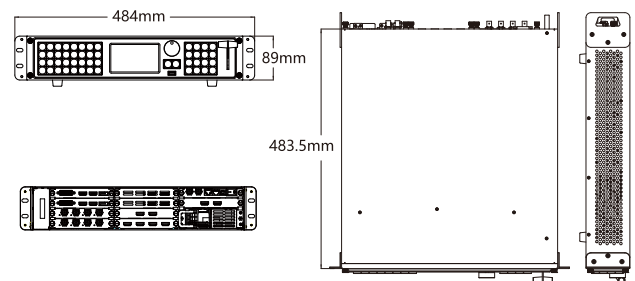
## Specifications

Connections	Input	4 slots up to 16 inputs, select from		
		4K@60Hz Module	1 x DVI-I   2 x HDMI-A   1 x DisplayPort	
		12G SDI Module	4 x BNC (1 x 12G/6G SDI or 4 x 3G SDI)	
	Output	4 slot up to 16 outputs, select from		
	4K HDMI Module	2 x HDMI-A		
	12G SDI Module	4 x BNC (1 x 12G/6G SDI or 4 x 3G SDI)		
	2K HDMI Module	4 x HDMI-A		
PVW	Standard with	PVW HDMI Module	2 x HDMI-A	
Communication	Genlock In/Loop	2 x BNC		
	LAN	1 x RJ45		
	RS232	1 x RJ11		
	Serial USB In	1 x USB Type B		
	USB In	1 x USB Type A		
Power	2 slots, up to 2 power	1 x IEC (each PSU)		
Performance	Input Resolutions	<b>SDI</b>		
		SMPTE	720p@25/30/50/60   1080i@50/59.94/60   1080p@23.98/24/25/29.97/30/50/59.94/60   2160p@30/50/60	
		<b>DVI</b>		
	SMPTE	720p@50/60   1080i@50/60   1080p@50/60   2160p@30		
	VESA	800x600@60   1024x768@60   1280x768@60   1280x800@60   1280x1024@60   1360x768@60   1366x768@60   1400x900@60   1400x900@60   1600x1050@60   1600x1050@60   1600x1200@60   1680x1050@60   1920x1080@23.98/24/25/29.97/30/50/59.94/60   1920x1200@60   2048x1152@60   2560x812@60   2560x816@60   2560x1600@60   3840x1080@60   3840x2160@23.98/24/25/29.97/30		
	<b>DP   HDMI</b>			
	SMPTE	720p@25/30/50/60   1080p@23.98/24/25/29.97/30/50/59.94/60   2160p@30/50/60		
	VESA	800x600@60   1024x768@60   1280x768@60   1280x800@60   1280x1024@60   1360x768@60   1366x768@60   1400x900@60   1600x1050@60   1600x1050@60   1600x1200@60   1680x1050@60   1920x1080@23.98/24/25/29.97/30/50/59.94/60   1920x1200@60   2048x1152@60   2560x812@60   2560x816@60   2560x1600@60   2560x1600@60   3840x1080@60   3840x2160@23.98/24/25/29.97/30/50/60		
	Output Resolutions	Select from below or configure customised		
		<b>SDI</b>		
SMPTE		720p@25/30/50/60   1080i@50/59.94/60   1080p@23.98/24/25/29.97/30/50/59.94/60   2160p@30/50/60		
<b>HDMI</b>				
SMPTE	720p@25/30/50/60   1080p@23.98/24/25/29.97/30/50/59.94/60   2160p@30/50/60   2160p@30/50/60   2160p@30/50/60			
VESA	800x600@60   1024x768@60   1280x768@60   1280x800@60   1280x1024@60   1360x768@60   1366x768@60   1400x900@60   1600x1050@60   1600x1200@60   1680x1050@60   1920x1080@23.98/24/25/29.97/30/50/59.94/60   1920x1200@60   2048x1152@60   2560x812@60   2560x816@60   2560x1600@60   2560x1600@60   3840x1080@60   3840x2160@23.98/24/25/29.97/30/50/60			
Supported Standards	SDI	SMPTE ST 2082-1, SMPTE ST 2081-1, SMPTE ST 424, SMPTE ST 292-1, SMPTE ST 259, DVB-ASI, MADI		
	HDMI	2.0		
	DVI	Dual Link		
	DisplayPort	1.2		
Power	Input	AC 90-264VAC, 50/60Hz		
	Max Power	400W		
Environmental	Temperature	0°C - 40°C		
	Humidity	10% - 85%		
Physical	Weight	Net	15.1kg	
		Packaged	19.7kg	
	Dimension	Net	483mm x 545mm x 95mm	
Packaged	630mm x 595mm x 255mm			

## Order codes

Product Code	Item
110-0628-01-0	D6
190-1628-06-0	SDI Input Module (configurable 3G/6G/12G)
190-1628-07-0	4K@60Hz Input Module (DVI/HDMI/DP)
190-1628-21-0	HDMI 2.0 4K Output Module
190-1628-23-0	12G SDI 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	PSU 400W

## Dimensions



**HDMI® HDCP™**

WEB: [www.rgblink.com](http://www.rgblink.com) EMAIL: [sales@rgblink.com](mailto:sales@rgblink.com) PHONE: +86 592 5771197  
Proudly designed and manufactured in **Xiamen Hi Technology Zone, China**

**RGBlink®**



[www.rgblink.com](http://www.rgblink.com)