D4

4K HDR Scaler & Switcher

RGBlink®
D4

The standard in multi-format 4K presentation switching

D4 is a very flexible video switching and scaling solution for 4K signals featuring multiple output modes, a comprehensive on board feature set and acclaimed RGBlink modular design.

Truly multi-signal, D4 may be fitted with a wide range of input signals including HDMI 2.0m DisplayPort 1.2 and 12G-SDI along with conventional 2K signals.

In the tradition of previous generation 2K solutions signals can be converted, scaled, transcoded to 4K output. Dual channel 4K HDMI 2.0 output are standard while these two channels may be duplicated for output via the option slot.

There is full 4:4:4 colour space, 12 bit on board processing and support for HDR signals to meet the highest performance standards.

EDID management is built in and D4 is also HDCP 2.X compliant.

Across a range of applications requiring scan conversion, scaling or seamless presentation switching, D4 is ideal for high performance and broadcast workloads.

Features

- Resolution up to 4K2K@60 or 8K1K@60
- Full YUV 4:4:4 Color Space
- 12bit internal processing
- Low latency
- HDMI 2.0, DP1.2 In & Out
- UHD and HDR compliant
- HDCP 2.X compliant
- 4K EDID Management
- 4K test pattern
- SmartSlot™ input and output modules
- H.264 Preview streaming
- Genlock In & Loop
- Multiple 4K input seamless switching
- 4K Picture in Picture (4K PIP)
- Multi-layer presentation switching
- Cut & variable time alpha fade
- Mirror/Flip
- Rotation including 90°, 180°, 270°
- Support for multiple device cascade
Standard Mode
Both output channels are duplicated offering the same output as program and monitor. PIP's are available in this mode with PiP/layer count dependent on output resolution and layer arrangement.

Example: 4K input scaled across a 4K output with 4K PIP source overlaid

Presentation Mode
Up to three 4K inputs may be used as PiPs over a 4K background video source.

Example: Three 4K source as PIP, 1 4K source as background

Independent (Dual 4K) Mode
Each of output channels separately configured for image, resolution, scale and other attributes.

Example: Two separate inputs to two separate outputs, each at different resolution
Splicing Mode
Output channels are utilised to stitch or splice input source(s) to create large seamless fully synchronised display surfaces.

Example: 4K input scaled across 8K x 2K display area using two outputs, forming panoramic or wide screen display.

Switcher (Preview) Mode
Both outputs are set to the same resolution, whether 2K or 4K, with one channel serving as program (PGM), and the other channel as preset preview (PST) for full seamless alpha switching been preset and programme. All adjustment made on PST prior to switching to live PGM display output.

Example: One HDMI source on PGM output with a second HDMI source scaled ad configure via output as PST.

*shown with optional input and output modules – refer specification and options. 90deg rotation not available at launch.
**HDR**
Signals with High Dynamic Range are supported for processing via the processor with high bandwidth and wide gamut 12bit grey level processing.

**Visual Enhancements**
Apply a range of visual effects and enhancements with fine grain controls.

- Chroma
- Brightness
- Invert
- Contrast
- Hue
- Sharpen
- Gamma
- Color Temperature
- Noise Reduction

**Format**
D4 accepts all common 2K & 4K input formats, with EDID management built in. Output to any 2K or 4K format with custom resolutions able to be specified to downstream requirements.

**Rotation & Flip**
Support image rotation and flip including horizontal and vertical flip/mirror.

**Crop & Position**
Select X and Y offsets along with width and height to select any image part for output.

**Scale**
Scale output(s) to any size within the selected resolution range.

**Output Splicing**
Split output across the dual output channels providing an 8K x 2K display canvas and seamless pixel to pixel hard edge blend.
## Specifications

### Connections

<table>
<thead>
<tr>
<th>Input</th>
<th>2 slots up to 4 inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from</td>
<td>4K HDMI Module 4 x HDMI-A (2 In/2 Loop)</td>
</tr>
<tr>
<td></td>
<td>DP 1.2 Module 2 x DisplayPort</td>
</tr>
<tr>
<td></td>
<td>3G SDI Module 4 x BNC (2 In/2 Loop)</td>
</tr>
<tr>
<td></td>
<td>12G SDI Module 4 x BNC (2 In/2 Loop)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output</th>
<th>1 slot up to 2 duplicated outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard with</td>
<td>HDMI 2.0 2 x HDMI-A</td>
</tr>
<tr>
<td>Select from</td>
<td>DP 1.2 Module 2 x DisplayPort</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genlock 2 x BNC</td>
</tr>
<tr>
<td>LAN 1 x RJ45</td>
</tr>
<tr>
<td>Serial USB In 1 x USB Type B</td>
</tr>
</tbody>
</table>

### Performance

<table>
<thead>
<tr>
<th>Input Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDI</td>
</tr>
<tr>
<td>SMPTE 480i</td>
</tr>
<tr>
<td>DP 1.2 720p @25/30/50/60</td>
</tr>
<tr>
<td>1600x1200 @60</td>
</tr>
<tr>
<td>VESA 2560x1600 @60</td>
</tr>
<tr>
<td>4096x2160 @50/60</td>
</tr>
<tr>
<td>HDMI 2.0 720p @25/30/50/60</td>
</tr>
<tr>
<td>VESA 800x600 @60</td>
</tr>
<tr>
<td>1360x768 @60</td>
</tr>
<tr>
<td>1600x1050 @60</td>
</tr>
<tr>
<td>2048x1152 @60</td>
</tr>
</tbody>
</table>

### Features

- Splicing 8K/24
- Effects Noise Reduction | Deinterlace | Sharpness | Gamma
- Audio Supported for embedded audio
- Invert/Mirror Yes
- EDID Management Yes

### Power

- Input AC 85-264V, 50/60Hz
- Max Power 100W
- Temperature 0°C - 45°C
- Humidity 10% - 85%

### Physical

- Weight Net 7.2kg
- Package 8.5kg
- Dimensions Net 480mm x 474mm x 45mm
- Package 535mm x 530mm x 130mm

## Order Codes

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>120-0004-01-0 D4</td>
<td></td>
</tr>
<tr>
<td>191-0004-01-0 Dual DP 1.2 Input Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-02-0 Dual HDMI 2.0 Input Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-03-0 Dual 3G SDI Input Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-04-0 Dual 12G SDI Input Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-21-0 Dual DP 1.2 Output Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-22-0 Dual 12G SDI Output Module</td>
<td></td>
</tr>
<tr>
<td>191-0004-23-0 Quad DVI Output Module</td>
<td></td>
</tr>
</tbody>
</table>

## Dimensions

- Width 45mm
- Height 480mm

---

Proudly designed and manufactured in Xiamen Hi Technology Zone, China

WEB: www.rgblink.com EMAIL: sales@rgblink.com PHONE: +86 592 5771197