FLEX Series
Mixed Signal Matrix

FLEXpro ^{8}

Next generation flexible solution for sophisticated video applications

FLEXpro8 is an all new video processing solution for modern large scale display applications. With support for over 18 mega pixels across eight outputs, FLEXpro8 is designed for professional applications. Fit up to 16 independent inputs integrating a range of video sources and signals utilised in commercial display systems.

The innovative RGBlink modular signal system provides native on support for HDBaseT, Fiber and LED Control signals as well as conventional signals, embracing flexibility while being an efficient self-contained system.

Whether for integration or proAV FLEXpro8 has the multi-signal, multi-layer technology for virtually any display application.

Modular Design

FLEXpro8 has 4 input slots which may be configured with up to 16 universal single modules or 8 dual height modules. Input support incudes 4K@60 (HDMI2.0) as well as SDI, DVI, HDBaseT and USB2.0 Media. Modular outputs across 2 slots provides for 8 outputs, standard as DVI with options for SDI, HDMI, DVI, DisplayPort, HDBaseT and importantly native Subtio Quatro signals.
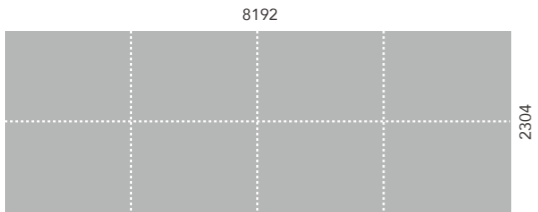
HDR Support

Signals with High Dynamic Range are supported for processing via the processor with high bandwidth and wide gamut 12bit grey level processing.
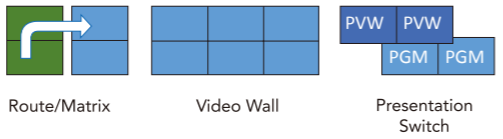
HDR

18 Mega Pixel Capacity

Arrange outputs on a virtual canvas to create display surfaces up to 8192x2304px at high 60Hz digital refresh.

8192

2304

Multi-Mode Operations

Select the operation mode suitable for the application from continuous video wall mode to presentation mode and routing modes.

Route/Matrix   Video Wall   Presentation Switch

PVW PVW
PGM PGM

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.

4:4:4

Video Over IP

FLEXpro8 includes options for video over ethernet standards including HDBaseT modules allowing direct connection to displays without conversion.

SDI
SDI
HDMI 2.0
HDMI 2.0

ethernet
ethernet
ethernet
ethernet
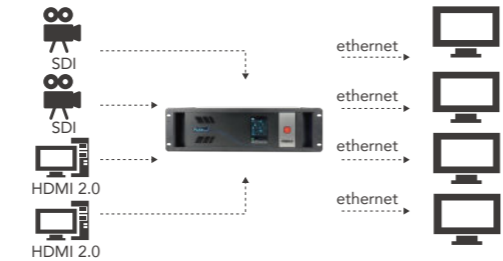
4K / UHD Support

Select from digital input and output options including HDMI.
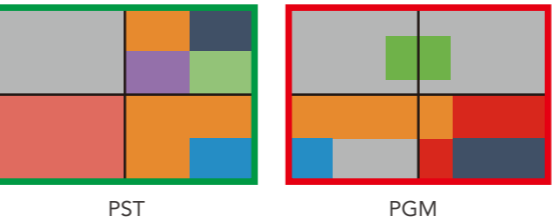
4K 60

Subito™

Genlock

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

Presentation Switch

Set FLEXpro8 in presentation mode to configure the outputs as for full preview (PST) and program (PST) operations with multiple layers across outputs. Seamlessly switch between presets.

PST   PGM

32 Video Layers

Display up to 32 video layers from across any of up to 16 input sources. A signal ouput supports up to eight layers allowing extensive multi-windowing opportunities

8192

2304
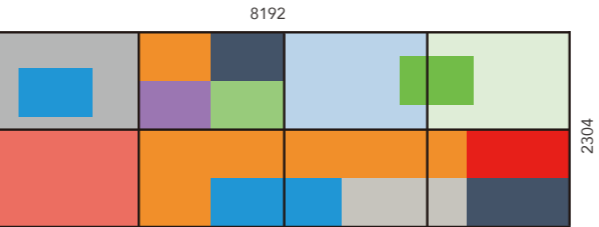
Dedicated Multi-View Preview

A built in preview feature allows local and remote preview video sources. Connect display to HDMI PVW for a 4x4 Multiview. Connect the H.264 to XPOSE or a third party application to view multiple sources remotely. When connected to XPOSE, video can be seen in presets during configuration and operations.
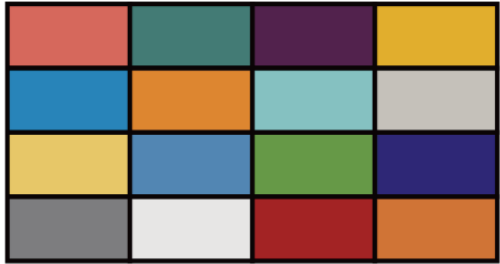
Connect and Control

Remotely configure and control FLEXpro8 from XPOSE on Windows or macOS via LAN. Integrators may take advantage of RGBlink OpenAPI controlling FLEXpro8 from third party devices or applications over UDP.
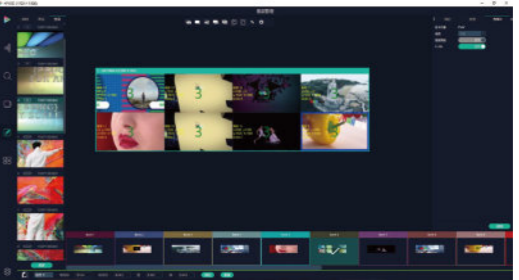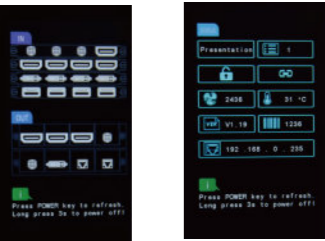
Modular Power Supply

Fully self contained power supply is user exchangeable without tools. Power Supply is designed for high availability 24/7 server applications.

Front LCD Monitoring

The integral LCD provides local monitoring and status of FLEXpro8.

LED Control System

With RGBlink Subito built directly in to FLEXpro 8, installing Subito Quatro provides deep and rich no-gap integration for LED displays natively into the video processing solution, enhancing efficency and productivity with a single common interface while reducing potential points of failure and saving valuable rack space.
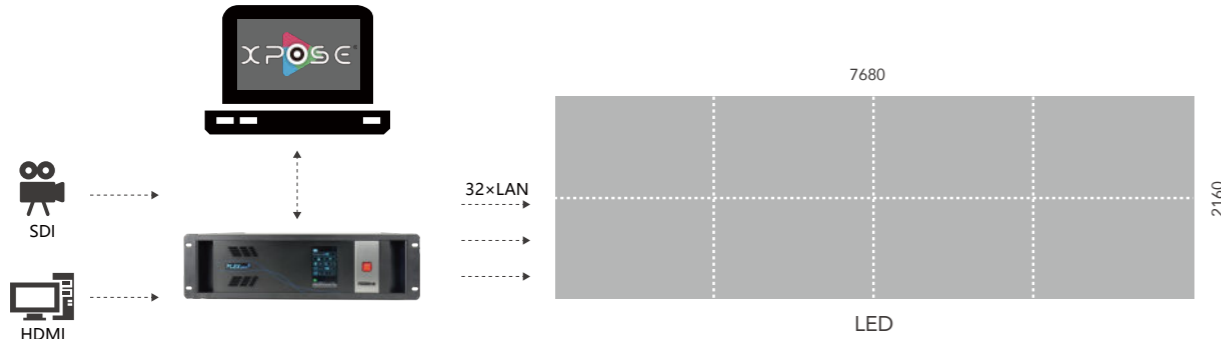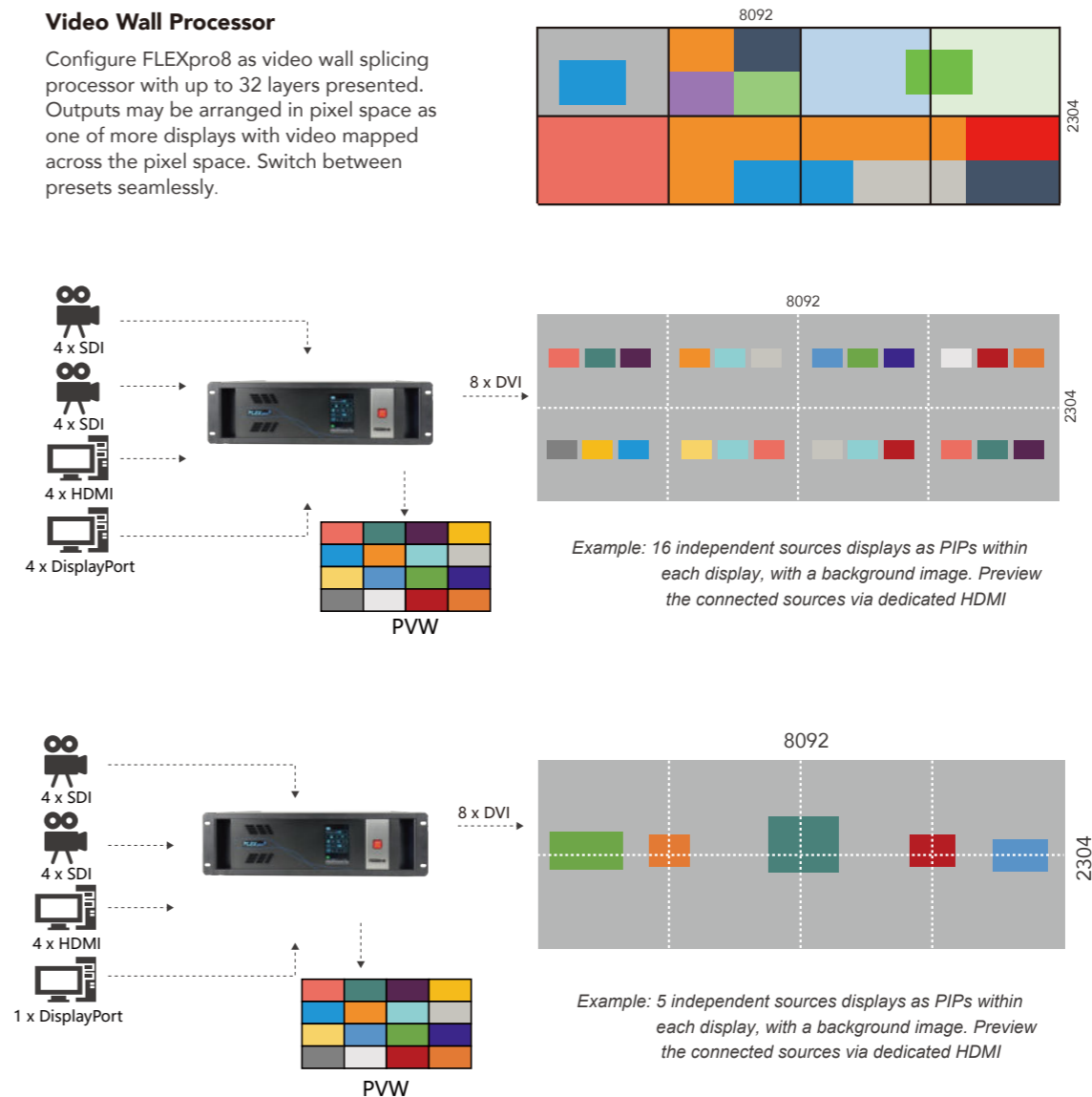

Display System Management

Multi-display and multi-mode operations are available on FLEXpro 8, enabling the processor to provide a complete systems based solution acrosss a cominbation of display types and operation requirements with centralised control.

Rotation and projection blending require RGBlink ARO module(s)
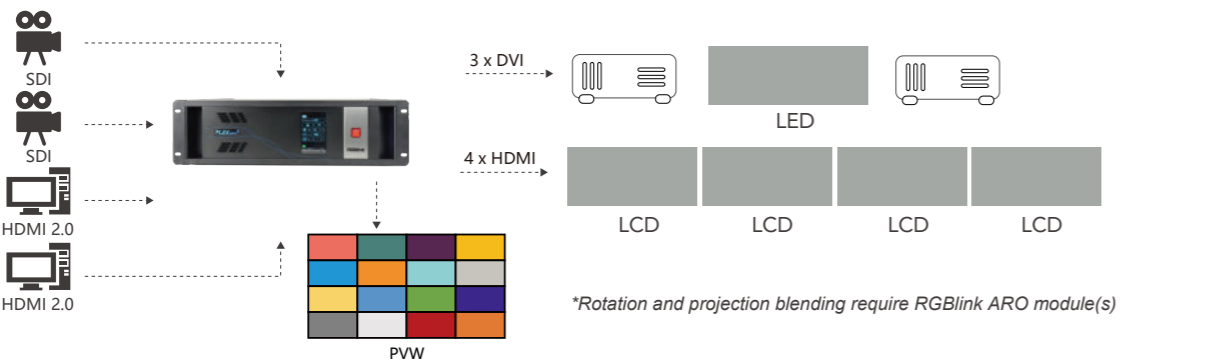
Video Wall Processor

Configure FLEXpro8 as video wall splicing processor with up to 32 layers presented. Outputs may be arranged in pixel space as one of more displays with video mapped across the pixel space. Switch between presets seamlessly.

Example: 16 independent sources displays as PIPs within each display, with a background image. Preview the connected sources via dedicated HDMI

Example: 5 independent sources displays as PIPs within each display, with a background image. Preview the connected sources via dedicated HDMI

Remote control

Control FLEXpro 8 via XPOSE, T1 Series consoles, or integrate via RGBlink OpenAPI with XPOSE and OpenAPI unlocking the powerful video control possibilities.
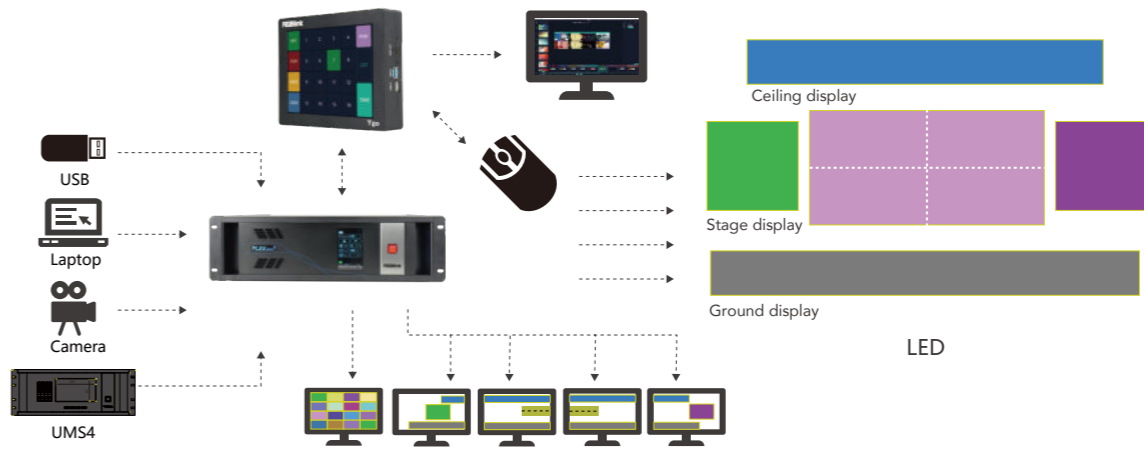
FLEX RS1

Creative Power - Advanced Rotation and Blending Processing.

For creative video display applications anywhere, RGBlink FLEX RS1 extends the possible. FLEX RS1 adds new levels of flexibility to hardware based video solutions. With multiple operation modes, the four FLEX RS1 outputs may be utilised for advanced rotation, blending and splicing from a choice of 4K inputs.

Each output is resolution independent. In rotation applications, each output can individually be rotated in single degree increments, positioned on a virtual canvas or pixel space with support for variable pixel densities.

As a blending processor for projection, variable edge blending is configurable to produce panoramic displays or arrays in any configuration.

For splicing applications – ideal for LED displays – FLEX RS1 is an easy to use compact processor for up to 8K x 1K.

4K Digital Input

FLEX RS1 features the RGBlink 4K60 digital input module for high resolution digital media sources to be connected via DisplayPort or HDMI. For rotation and blending applications, the 4K input provides for high quality visual signals to be used with minimum need for upscaling.

RGBlink ARO™

Advanced Rotation and blending Output module features four DVI outputs with wide processing capability enabling sophisticated real time video display independent of source video.

Multi-Mode Operations

Suitable for a wide range of usage applications from installation to events, for creative rotation to blending and splicing, FLEX RS1 is a self-contained solution that simplifies advanced operations with a single device providing high level commonality across diverse applications.

Independent Output Resolution

Each of the four outputs is resolution independent.

Flip/Mirror

Outputs may be flipped in support of rear-projection applications or similar.

Scale Crop & Position

Position displays on virtual canvas, select area of interest to set density and relative display size.

ArtNet for Performance

FLEX RS1 has ArtNet built in, with an extensive DM512 control profile, RS1 may be dynamically controlled from DMX show controllers allowing for real-time animation applications.


Integrate with OpenAPI

Control FLEX RS1 remotely from third party devices and applications with RGBlink OpenAPI UDP command set.

Familiar XPOSE Configuration

FLEX RS1 maybe connected via Ethernet to a computer running XPOSE for control and configuration within the RGBlink universal application platform. The intuitive visual interface templates and interacts with FLEX RS1 for full control and configuration.
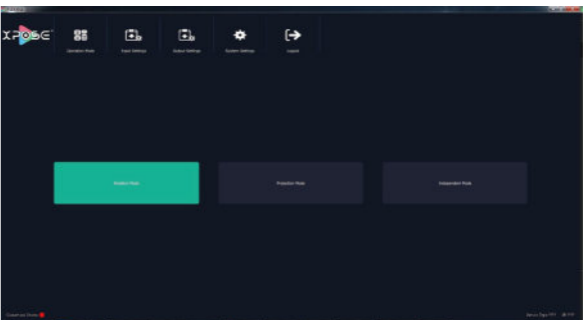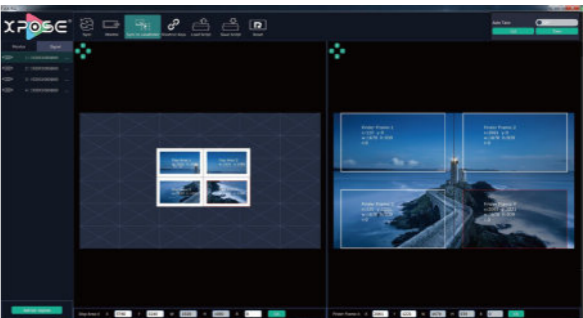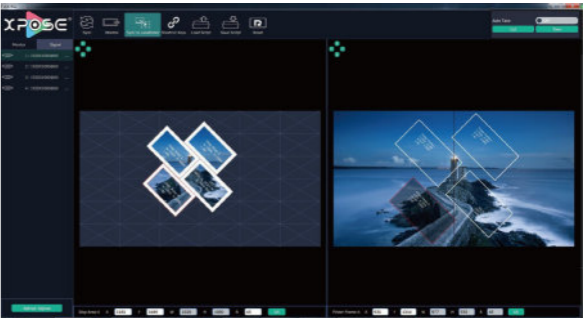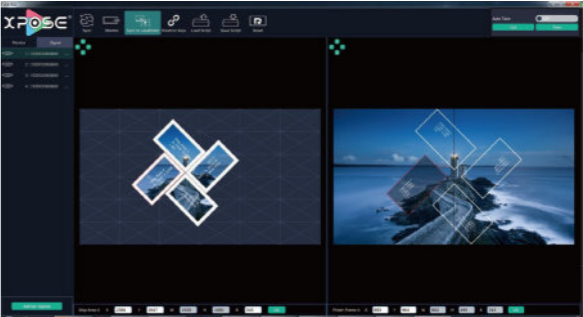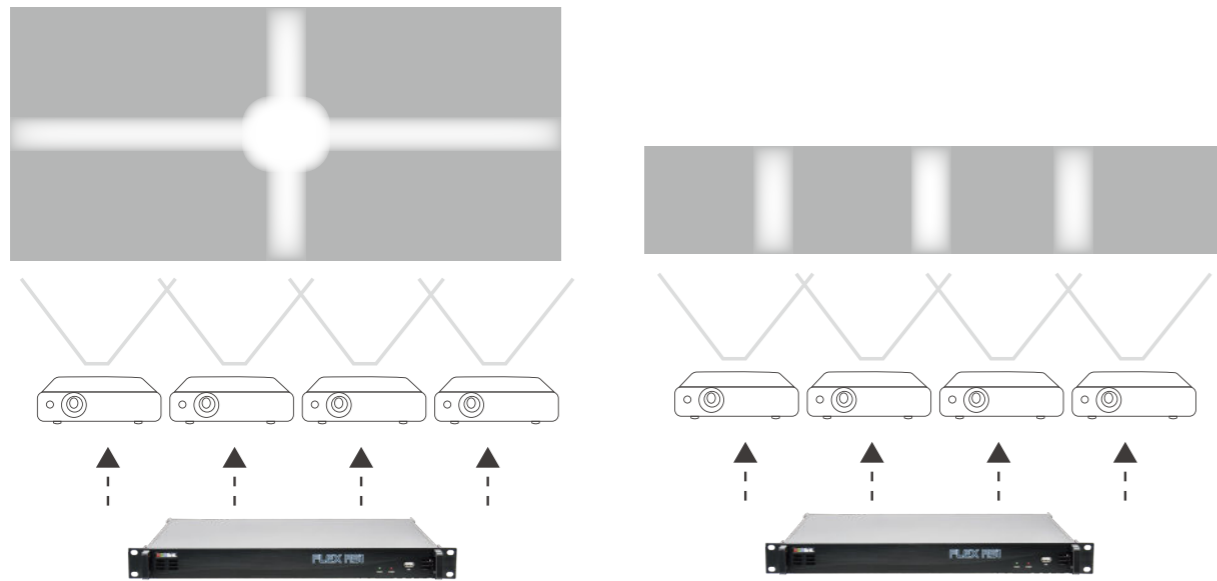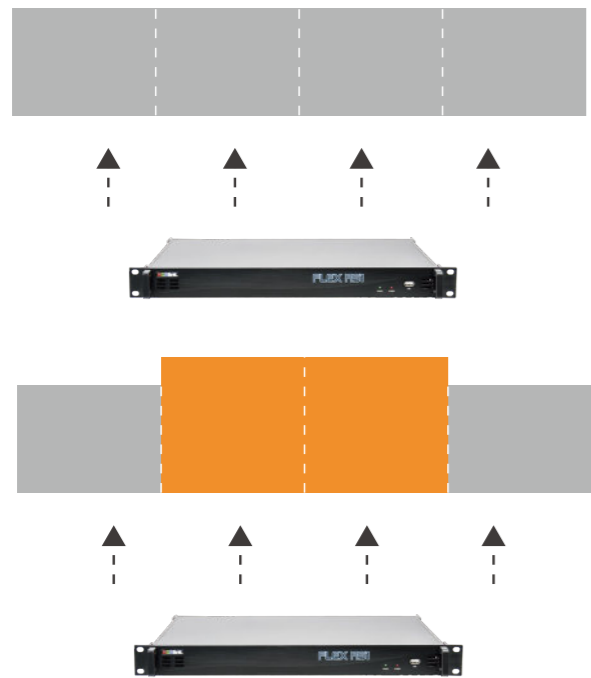
Variable Edge Blending

As an edge blending processor, FLEX RS1 may be configured to output video enabling up to four projectors to be arranged combined to form a single display surface. Area of interest is also selectable allowing variable projection distances and non-linear overlaps.
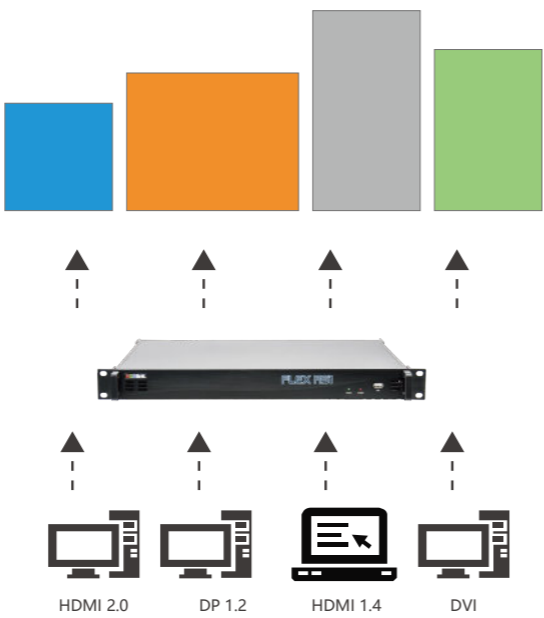

Advanced Rotation

FLEX RS1 enables displays to be physically positioned and rotated in fine single degree increments, with the processor mapping and delivering video content to the display surface based on position in pixel space. Variable density allows displays of varying sizes to be combined to form creative video display solutions.

HDMI 2.0
DP 1.2
HDMI 1.4
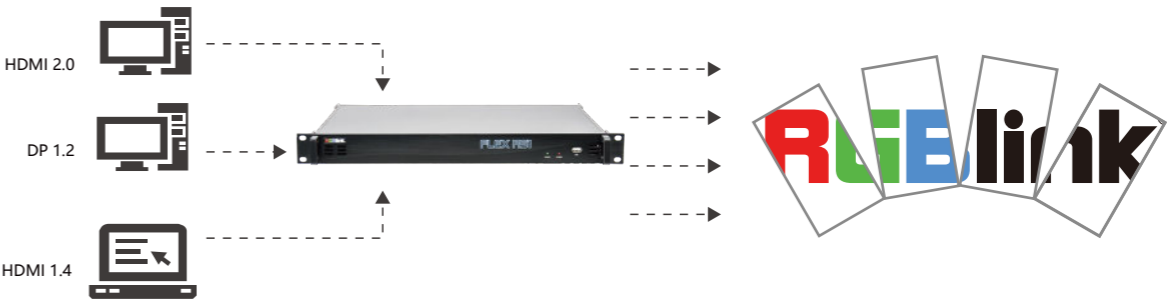
Each of the four outputs may be configured individually with rotation in 1 degree positioning. Video layered and mapped across the output displays.

HDMI 2.0
DP 1.2
HDMI 1.4
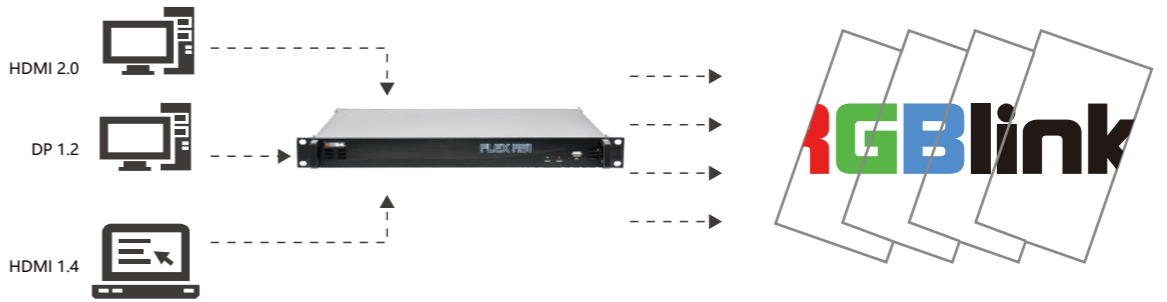
Overlapping displays are supported in any arrangement, opening up a wide range of application possibilities.

HDMI 2.0
DP 1.2
HDMI 1.4

Each output can be configured independently allowing displays of multiple sizes and pixel densities to be supported.

4K Video Wall Splicing

Adding to the versatility of FLEX RS1 is the facility to use the processor as a 4K video wall controller with outputs able to configured independently for a range of display possibilities.
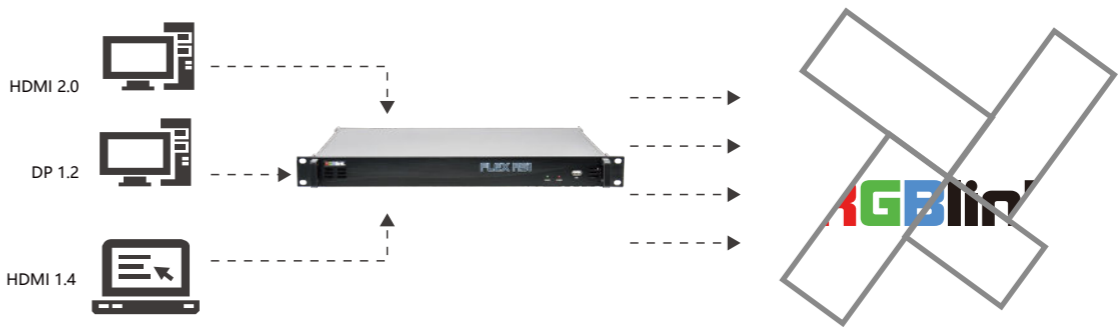

Matrix Routing

Take advantage of all four inputs, routing scaling/converting to each of the four DVI outputs. Each output has independent resolution.

HDMI 2.0   DP 1.2   HDMI 1.4   DVI

FLEX

FLEX 16

16x16 Mixed Signal Matrix & Videowall Processor

Just 2U, FLEX16 supported up to 16 inputs and outputs which may be selected from a wide range of signal options. Install the Splicing EXT slot interface in place of a Matrix EXT slot interface to achieve spliced videowall output. FLEX 16 is standard with removable front panel keyboard and OLED display for local matrix operations, there is an optional a blank panel for splicing or unattended applications.

32x32 Mixed Signal Matrix & Videowall Processor

Install up to 32 inputs and outputs. With no requirement to fill all slots FLEX32 can be configured precisely for specific applications from the wide range of signal options available. Installing one of more Splicing EXT slot interfaces in place of a Matrix EXT slot interfaces to achieve spliced videowall output in combination with matrix operations for a compact and efficient video distribution and display system. FLEX 32 is standard with front panel keyboard and OLED display for local matrix operations, with a blank panel able to be installed for matrix and applications using remote control.
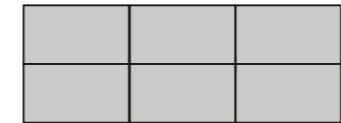
Matrix

One-to-one or one-to-many with signal cross conversion

Videowall

Input signal spliced across output videowall display
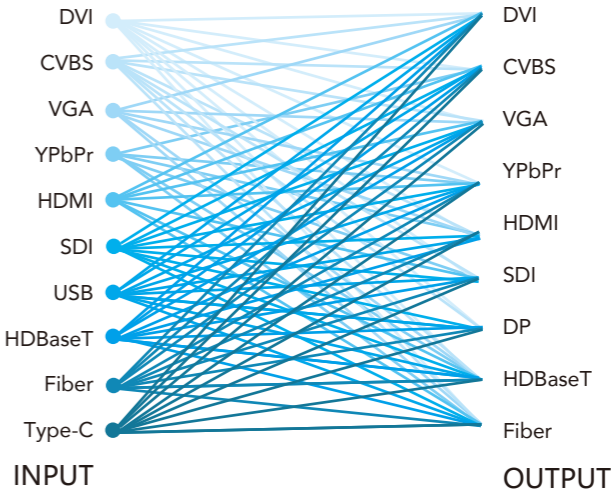

Fully Modular Design

Input and output modules across the FLEX series are common and include a wide range of signal options that can be mixed-and-matched to requirement, reducing the need for external convertors, reducing points of failure and reducing complexity, saving space and enhancing performance.

DVI   SDI   HDMI

USB   HDBaseT   Fiber

Type-C   DP
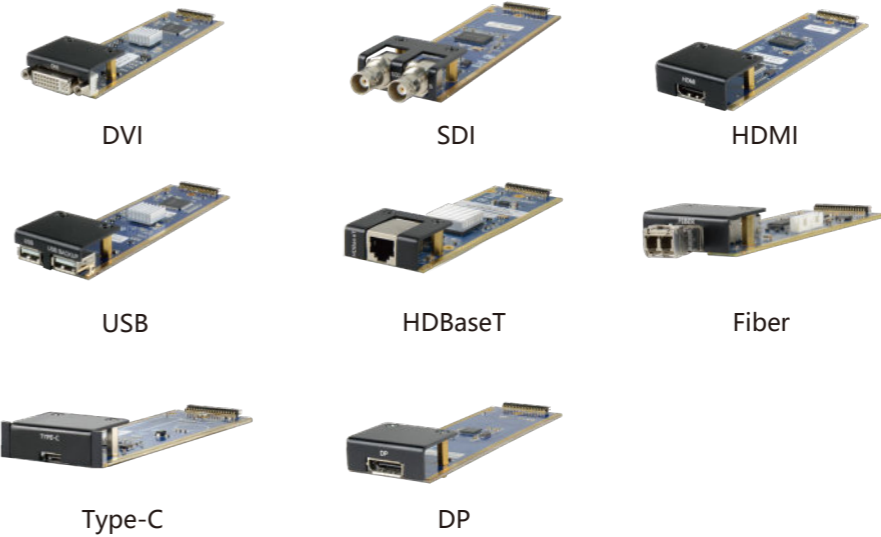
Matrix Operations

As hybrid mixed-signal matrix, FLEX supports any-in-any-out signal switching as one-to-many, many-to-many and many-to-one. FLEX products provide a simple user focussed structure that maximises flexibility and allows installation with the overhead of unutilised signals.

INPUT	OUTPUT
DVI	DVI
CVBS	CVBS
VGA	VGA
YPbPr	YPbPr
HDMI	HDMI
SDI	SDI
USB	DP
HDBaseT	HDBaseT
Fiber	Fiber
Type-C	