

**CHRISTIE®**

# SPYDER-S SERIES

Redefine compositing and processing  
with unparalleled performance





# EVERYTHING YOU NEED NOTHING YOU DON'T

## DON'T GET BOXED IN

### MOVE BEYOND THE LIMITS OF "ONE SIZE FITS ALL"

Christie® Spyder-S Series takes everything you know about multi-screen windowing and image processing and turns it on its head with a modular distributed architecture that lets you create a system with everything you need and nothing you don't.

Spyder-S Series is a revolution in compositing that moves beyond traditional "one-size-fits-all" solutions so you don't get boxed in by limited flexibility and scalability.

You get all the power and performance you need but with a distributed, modular twist to adapt the platform to your environment, no matter the scale, for dual windowing modes of either canvas or tiled compositing. You're also guaranteed that every screen delivers the same breathtaking image quality with lightning-fast performance.

### CANVAS MODE

Create a system that perfectly fits your display needs without compromising performance. The unique distributed architecture uses 100G network connections to connect up to sixteen nodes and expand inputs, outputs, and canvas size, allowing you to create an almost infinite number of configurations.

Control the display with the integrated operator monitor that lets you see the entire canvas, preview sources and GUI elements, and drag-and-drop the arrangement of the canvas, including 8K video, in real-time with almost no latency.

### TILE MODE

Spyder-S allows you to assign each output to the canvas as Full (aux out), Quad-Split, or 4x4 multi-viewer. Sources can be assigned to any of the destinations simultaneously, placed at different locations, and you can use a mix to transition to a new source.

With multi-viewer functionality on all regular outputs, sources aren't shown over a background, and you can subdivide your sources into different arrays.

Sources are shown at the sizes you choose during configuration, allowing you to switch or mix the source into any output, quadrant, or multi-viewer tile. Each tile, whether half or quarter-sized, can transition between two sources.

### UNIQUE FEATURES

Christie Spyder-S Series offers you the widest variety of I/O and network standards, superior performance, and flexible architecture.

- Delivers the high-quality, low-latency processing functions that Spyder users demand
- With Spyder Studio as the control environment, there's no need to learn new software
- Automation commands are backward compatible with Spyder X80, with only a few new commands for new features
- Expand your system up to 64 inputs and 32 outputs
- SDI 3/6/12G / SFP+ (ST297) / DP 1.4 / HDMI 2.0a / HDMI 2.1

# WHAT MAKES CHRISTIE SPYDER-S SERIES DIFFERENT?

## A RIGHT-SIZED SOLUTION

The modular distributed architecture lets you combine multiple nodes to create the exact system you need, simplify customization and scalability, and seamlessly integrate into any size multi-display environment.

Get the most out of your investment: Create four small systems one week and four larger systems the next to deliver the right-sized solution to your customers.

## VERSATILITY AND SCALABILITY

The distributed architecture lets you create flexible set-ups that you can expand over time while still delivering the performance, reliability, and image quality you need.

## ADVANCED CONNECTIVITY

Spyder-S Series supports the latest AV standards, including 8K video, HDR, and beyond, giving you a future-ready system designed to handle the evolving demands of digital content and immersive media experiences.

## SEAMLESS, REAL-TIME CONTENT CONTROL NO LATENCY

Deliver unmatched image quality across all displays and configurations for pristine color reproduction and contrast ratios. The ultra-low latency ensures smooth, synchronized content, perfect for applications where you can't afford to have delays.

## POWERFUL PROCESSING AT EVERY NODE

The distributed system design ensures no single point of failure while maintaining ultra-low latency across any size multi-screen setup. With efficient resource allocation across multiple screens and displays, you never have to compromise image quality



## SCALABLE CONTROL FOR ADDED FLEXIBILITY

Manage the system from a centralized control interface to easily add, remove, or reconfigure screens and windows on the fly. The advanced networking features allow real-time collaboration across distributed locations and flexible signal management for diverse setups, including control rooms.

## INTUITIVE CONTROL FOR ANY WORKFLOW

Enhanced, user-friendly control software offers intuitive and customizable workflows to ensure Spyder-S works for you. With remote management capabilities, you and your team get full control of the system from any location, improving operational flexibility.

## DESIGNED WITH SUSTAINABILITY IN MIND

Spyder-S is an energy-efficient solution that reduces operational costs while delivering maximum output.



Powered by Spyder Studio

# WHAT MAKES CHRISTIE SPYDER-S SERIES DIFFERENT?



## OPERATOR MONITOR

One output on each node\*\*\* can be configured as an Operator Monitor

- Shows twenty sources
- Any pixel space with previews for that pixel space

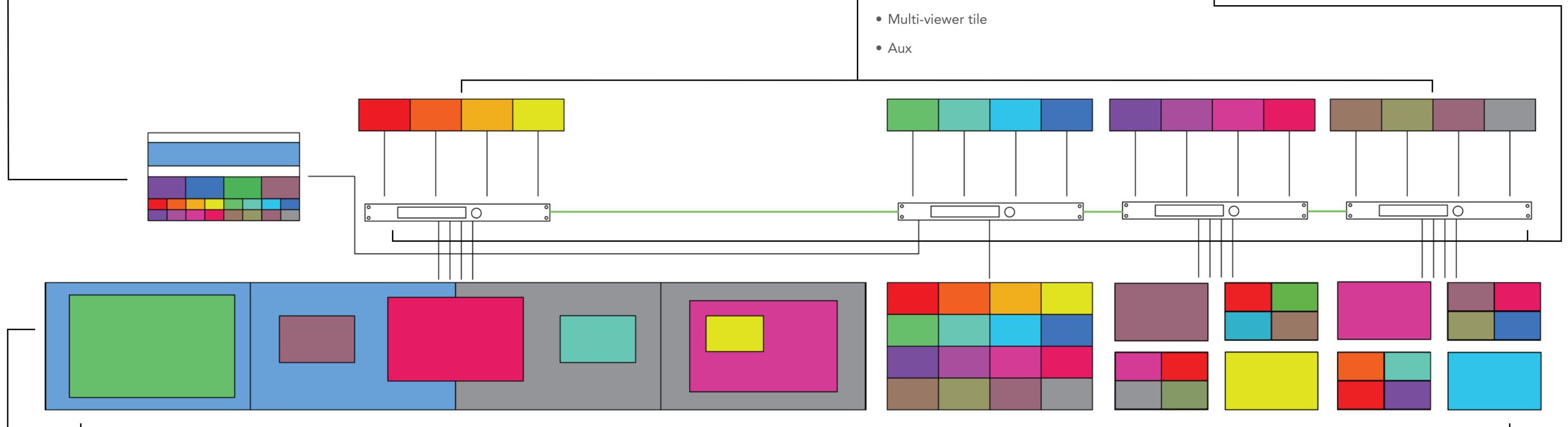
## INPUTS

Any layer can be shown on any destination in the following ways, simultaneously:

- Canvas Program
- Canvas Preview
- Multi-viewer tile
- Aux

## NODES

- Nodes connect via one or more 100Gbps links
- Currently, nodes are utilizing 100G in and 100G out
- Can be increased to 200 Gbps in and 200 Gbps out\*\*



## CANVAS

- Canvas Size: 3 Gigapixels per second (50-100 Megapixels per video frame) 100 Gbps
- Canvas can be expanded by adding nodes
- Sources, source tiles, and Operators Monitor can be shared with an expanded system
- 200 Gbps will increase the canvas size

## OUTPUTS

Every output\*\*\* can be configured as a

- Canvas output
- Aux output

• Tiled output that can:

- Show four (quad-split) sources and up to 16 sources
- have semi-transparent UMD label that automatically switches names with the source selection user-defined theme (transparency, bg color and font color)

\*\* Future release

\*\*\* 4x4 nodes

# CHRISTIE SPYDER-S SERIES



SDI 12G 8-CH



SDI 12G 16-CH



DISPLAYPORT 1.4



HDMI 2.0



HDMI 2.1




# UNMATCHED VERSATILITY AND FLEXIBILITY TO CREATE THE SYSTEM YOU NEED

Technical specifications		Spyder-S compositor
SDI 12G 8 Ch	I/O Configurations	• Software Defined 8x0, 4x4
	Refresh Rates	• 24, 25, 30, 48, 50, 60 and each /1.001 • In 4x4 configuration, any output can be canvas or tiled
	Color Space, Sampling, Bits	• YCbCr 4:2:2 10-bit, RGB 4:4:4 10-bit • 4th output also has operator monitor mode
	HDR/SDR	• See website for HDR detail
	Resolutions	• Up to 4K at 60Hz
	Audio	• Up to 16x Channels 20/24-bit, 44/48 kHz, 125/1000us pacing • Up to 16x Channel volume control each output (optional)
SDI 12G 16 Ch	I/O Configurations	• 16x0 configured as 8x Mixer/Keyers • Single-Link 3/6/12G • Can also be configured in any mode avail on SDI 12G 8 Ch
	Refresh Rates	• 24, 25, 30, 48, 50, 60 and each /1.001
	Color Space, Sampling, Bits	• YCbCr 4:2:2 10-bit
	HDR/SDR	• See website for HDR detail
	Resolutions	• Up to 4K at 60 Hz
	Audio	• Up to 16x channels 20/24-bit, 44/48 kHz, 125/1000us pacing
HDMI 2.0 4x4	I/O Configurations	• HDMI 2.0 • 4x4
	Refresh Rates	• 24, 25, 30, 50, 60 and each /1.001 • any output can be canvas or tiled
	Color space, Sampling, Bits	• YCbCr 4:2:2/4:4:4, and RGB 4:4:4, 8,10-bit • 4th output also has operator monitor mode
	HDR/SDR	• See website for HDR detail
	Resolutions	• Up to 4K at 60 Hz and non-standard formats
	Audio	• Up to 8x channels 20/24-bit, 44/48 kHz, 125/1000us pacing • Up to 8x channel volume control each output (optional)
	KVM	• USB 2.0 Ports for HID connec: 4 host, 4 device ports

Technical specifications		Spyder-S compositor
HDMI 2.1 4x4	I/O Configurations	• HDMI 2.1 • 2x2
	Refresh Rates	• 24, 25, 30, 50, 60 and each /1.001 • either output can be canvas or tiled
	Color space, Sampling, Bits	• YCbCr 4:2:2/4:4:4, and RGB 4:4:4, 8,10-bit • 2nd output also has operator monitor mode
	HDR/SDR	• See website for HDR detail
	Resolutions	• Up to 4096 x 2160 at 60 Hz (4 Ch) • or 7680 x 4320 at 30 Hz (2 Ch) • or 7680 x 4320 (1 Ch)
	Audio	• Up to 8x channels 20/24-bit, 44/48 kHz, 125/1000us pacing
	KVM	• USB 2.0 Ports for HID connec: 2 host, 2 device ports
	DISPLAYPORT 1.4	I/O Configurations
Refresh Rates		• 24, 25, 30, 50, 60 and each /1.001
Color space, Sampling, Bits		• YCbCr 4:2:2/4:4:4, and RGB 4:4:4, 8,10-bit
HDR/SDR		• See website for HDR detail
Resolutions		• Up to 4096 x 2160 at 60 Hz (4 Ch) • or 7680 x 4320 at 30 Hz (2 Ch) • or 7680 x 4320 (1 Ch)
Audio		• Up to 8x channels 20/24-bit, 44/48 kHz, 125/1000us pacing
All Models	Network Interfaces	• 2x QSFP28 100 Gb Ethernet • 1x SFP+/RJ45 1 Gb Ethernet (control) • Additional 2x QSFP28 (optional) • 2x SFP28 1/10/25 Gb Ethernet (optional)
	Synchronization Options	• Burst/Tri-Level (BBTL) in or out • Optional VESA Stereo Sync Input Connector (DP Only)
	Dimensions w x d x h	• 18.75 x 8.24 x 1.73" (476.25 x 209.29 x 43.94mm)
	Weight	• Up to 8.5 lbs (3.85kg)
	Power	• 110v-240V, 220W typical, up to 240W max
	Environment	• Safe Operating Temperature Range: 0 to 40 C (32 to 104 F) • Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F) • Operating Relative Humidity: 10-90% non-condensing • Operating Altitude: <3,000m (<10,000 feet)

	Resolution	Frame Rate	Bit Depth	Colorimetry/Sampling	Standard	Mapping Structure	Reference Standard	Payload ID Byte 1
1.5G	1280x720	60/59.94/50/30/29.97/25/24/23.98	10	YCbCr 422	292-1		296	0x84
	1920x1080	30/29.97/25/24/23.98	10	YCbCr 422	292-1		274	0x85
	2048x1080	30/29.97/25/24/23.98	10	YCbCr 422	292-1		2048-2	0x85
3G	1920x1080	60/59.94/50	10	YCbCr 422	425-1	1	274	0x89,0x8A
	2048x1080	60/59.94/50/48/47.95	10	YCbCr 422	425-1	1	2048-2	0x89,0x8A
	1280x720	60/59.94/50	10	RGB, YCbCr 444	425-1	2	296	0x88
	1920x1080	30/29.97/25/24/23.98	10	RGB, YCbCr 444	425-1	2	274 (ITU-R BT.2100)	0x89,0x8A
	2048x1080	30/29.97/25/24/23.98	10	RGB, YCbCr 444	425-1	2	2048-2	0x89,0x8A
	1920x1080	30/29.97/25/24/23.98	12	RGB, YCbCr 444	425-1	3	274	0x89,0x8A
	2048x1080	30/29.97/25/24/23.98	12	RGB, YCbCr 444	425-1	3	2048-2	0x89,0x8A
	1920x1080	30/29.97/25/24/23.98	12	YCbCr 422	425-1	4	274 (ITU-R BT.2100)	0x89,0x8A
	2048x1080	30/29.97/25/24/23.98	12	YCbCr 422	425-1	4	2048-2	0x89,0x8A
6G	3840x2160	30/29.97/25/24/23.98	10	YCbCr 422, 420	2081-10		2036-1 (ITU-R BT.2100)	0xC0
	4096x2160	30/29.97/25/24/23.98	10	YCbCr 422	2081-10		2048-1	0xC0
	1920x1080	60/59.94/50	10	RGB, YCbCr 444	2081-10		274 (ITU-R BT.2100)	0xC1
	2048x1080	60/59.94/50/48/47.95	10	RGB, YCbCr 444	2081-10		2048-2	0xC1
	1920x1080	60/59.94/50	12	RGB	2081-10		274 (ITU-R BT.2100)	0xC1
	2048x1080	60/59.94/50/48/47.95	12	RGB	2081-10		2048-2	0xC1
	1920x1080	60/59.94/50	12	YCbCr 422	2081-10		274 (ITU-R BT.2100)	0xC1
	2048x1080	60/59.94/50/48/47.95	12	YCbCr 422	2081-10		2048-2	0xC1
12G	3840x2160	60/59.94/50	10	YCbCr 422, 420	2082-10		2036-1 (ITU-R BT.2100)	0xCE
	4096x2160	60/59.94/50/48/47.95	10	YCbCr 422	2082-10		2048-1	0xCE
	3840x2160	30/29.97/25/24/23.98	10	RGB, YCbCr 444	2082-10		2036-1 (ITU-R BT.2100)	0xCE
	4096x2160	30/29.97/25/24/23.98	10	RGB, YCbCr 444	2082-10		2048-1	0xCE
	3840x2160	30/29.97/25/24/23.98	12	RGB, YCbCr 444	2082-10		2036-1 (ITU-R BT.2100)	0xCE
	4096x2160	30/29.97/25/24/23.98	12	RGB, YCbCr 444	2082-10		2048-1	0xCE
	3840x2160	30/29.97/25/24/23.98	12	YCbCr 422, 420	2082-10		2036-1 (ITU-R BT.2100)	0xCE
	4096x2160	30/29.97/25/24/23.98	12	YCbCr 422	2082-10		2048-1	0xCE



Contact us 

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