

TruLife+™ supported video formats

The range of available input selections depends on the projector model and/or input/output combinations.

The following inputs are supported for each configuration:

- One-port—HDMI, SDI, DisplayPort, SDVoE, Christie Link
- Two-port—DisplayPort, Christie Link
- Four-port quadrants—SDI
- One-port dual-input 3D (3D license-specific)—HDMI, SDI, DisplayPort, SDVoE, Christie Link

Models

This guide applies to the following models.

- Christie Eclipse Series
- Christie M RGB Series
- Griffyn® Series
- Sapphire® 4K40-RGBH

What's new in the document?

The following updates have been made to the document.

- Added the *Models* (on page 1) topic.
- Added additional formats supported by HDMI 2.1 in the *HDMI 2.1 video formats* (on page 5) topic.
- Updated the Two-Port 2D UHD/4K and Two-port 3D UHD/4K sections in the *DisplayPort 1.2 video formats* (on page 21) topic.
- Added the Four-port quadrants 2D UHD/4K, One-port 2D HD HFR, and Two-port 2D HD HFR sections to the *DisplayPort 1.2 video formats* (on page 21) topic.
- Added additional formats supported for DisplayPort 1.4 in the *DisplayPort 1.4 video formats* (on page 26) topic.

HDMI 2.0 video formats

The following image formats are supported by the HDMI 2.0 inputs on the Video Input panel.

One-port 2D HD/2K and UHD/4K

The following one-port 2D HD/2K and UHD/4K HDMI 2.0 image formats are supported on each of the HDMI inputs.



24, 30, 60, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1200	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	1	24, 25, 30, 48, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4K	3840x2160	1	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	—
	3840x2160	1	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	—
	3840x2160	1	50, 60	Y'C _B C _R /RGB/ 4:4:4	8 bpc	—
	3840x2160	1	50, 60	Y'C _B C _R /4:2:2	8/10/12 bpc	—
	3840x2400	1	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	1	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	1	50, 60	Y'C _B C _R /RGB/ 4:4:4	8 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	1	50, 60	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	1	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	4096x2160	1	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
	4096x2160	1	50, 60	Y'C'B'C'R/RGB/ 4:4:4	8 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	4096x2160	1	50, 60	Y'C'B'C'R/4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port 2D 720p and 1080i

The following one-port 2D 720p and 1080i HDMI 2.0 image formats are supported on each of the HDMI inputs.



24, 30, 60, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/ 4:4:4 Y'C'B'C'R/4:2:2	8/10/12 bpc	—
	1920x1080i	1	25, 30	Y'C'B'C'R/RGB/ 4:4:4 Y'C'B'C'R/4:2:2	8/10/12 bpc	1920x1080 interlaced (50/60 Hz field rate)

One-port 2D PC

The following one-port 2D HDMI 2.0 PC image formats are supported on each of the HDMI inputs.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth
PC	640x480	1	60	RGB	8 bpc
	1280x800	1	60	RGB	8 bpc
	1280x960	1	60	RGB	8 bpc
	1280x1024	1	60, 75, 85*	Y'C'B'C'R/4:2:2	8/10/12 bpc
	1280x1024	1	60, 75, 85*	RGB	8 bpc
	1440x900	1	60	RGB	8 bpc
	1680x1050	1	60	RGB	8 bpc
	1600x1200	1	60	RGB	8 bpc
	1920x1200	1	60	RGB	8 bpc

* The purpose of supporting these basic formats is to permit configuration of a source device that initially starts up outputting one of these basic formats. As the purpose is to support menu navigation, it is acceptable to display 75 Hz and 85 Hz frame rates at 60 Hz, dropping frames accordingly.

One-port 3D HD/2K

The following one-port 3D HDMI 2.0 image formats are supported on each of the HDMI inputs.



24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Frame-packing/top-and-bottom
	1920x1080	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Frame-packing
	2048x1080	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Frame-packing

One-port dual-input 3D HD/2K and UHD/4K

The following one-port dual-input 3D HDMI 2.0 image formats are supported where the indicated frame rate is per eye. Dual-input 3D is a fixed configuration where HDMI 1 = left eye input and HDMI 2 = right eye input.



24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1080	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1200	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4K	3840x2160	2	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	—
	3840x2160	2	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	—
	3840x2160	2	60	Y'C _B C _R /RGB/ 4:4:4	8 bpc	—

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
	3840x2160	2	60	Y'C _B C _R /4:2:2	8/10/12 bpc	—
	3840x2400	2	24, 25, 30	Y'C _B C _R /RGB/4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	2	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	2	60	Y'C _B C _R /RGB/4:4:4	8 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	3840x2400	2	60	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	2	24, 25, 30	Y'C _B C _R /RGB/4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	4096x2160	2	24, 25, 30	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	4096x2160	2	60	Y'C _B C _R /RGB/4:4:4	8 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	4096x2160	2	60	Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

HDMI 2.1 video formats

HDMI 2.1 supports all HDMI 2.0 formats .

For more information, see *HDMI 2.0 video formats* (on page 2).

In addition, HDMI input 3 supports the following HDMI 2.1 formats:

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160	1	100	Y'C _B C _R /RGB/4:4:4	8/10/12 bpc	12 bpc requires reduced blanking (CVT-RB)
	3840x2160	1	120	Y'C _B C _R /RGB/4:4:4	8/10/12 bpc	10 and 12 bpc require reduced blanking (CVT-RB)
	3840x2160	1	100, 120	Y'C _B C _R /4:2:2 Y'C _B C _R /4:2:0	8/10/12 bpc	—
	4096x2160	1	100	Y'C _B C _R /RGB/4:4:4	8/10/12 bpc	12 bpc requires reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	120	Y'C'B'C'R/RGB/ 4:4:4	8/10/12 bpc	10 and 12 bpc require reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	100, 120	Y'C'B'C'R/4:2:2 Y'C'B'C'R/4:2:0	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

SDI video formats

Identify the video formats for the 3GIC card for HD and 3G-SDI on the Video Input panel.

Single-link 2D: SD, 720p, and 1080i

The following one-port 2D SD, 720p, and 1080i image formats are supported on each of the SDI inputs.



- 24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.
- For 3Gb/s SDI Inputs only Level A is supported unless otherwise noted.
- For all 4K image formats, only 2SI subdivision is supported.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
SD	720x480	1	30	Y'C _B C _R /4:2:2	10 bpc	SD interlaced component at 270Mb/s (ST 259 level C) interlaced (60 Hz field rate)
	720x576	1	25	Y'C _B C _R /4:2:2	10 bpc	SD interlaced component at 270Mb/s (ST 259 level C) interlaced (50 Hz field rate)
HD	1280x720	1	24, 25, 30, 50, 60	Y'C _B C _R /4:2:2	10 bpc	HD 720p Y'C _B C _R component at 1.5Gb/s (ST 292-1)
	1280x720	1	24, 25, 30, 50, 60	Y'C _B C _R /4:4:4(4)	10 bpc	HD 720p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A
	1920x1080	1	25, 30	Y'C _B C _R /4:2:2	10 bpc	HD 1080i component at 1.5Gb/s

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					(ST 292-1) interlaced (50/60 Hz field rate)
2048x1080	1	25, 30	Y'C'B'C'R/4:2:2	10 bpc	2K 1080i component at 1.5Gb/s (ST 292-1) interlaced (50/60 Hz field rate)

One-port single-link 2D HD and UHD/4K

The following one-port 2D HD and UHD/4K image formats are supported on each of the SDI inputs.



- 24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 rates.
- For 3Gb/s SDI Inputs only level A is supported unless otherwise noted.
- For all 4K image formats only 2SI sub division is supported.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	HD 1080p component at 1.5Gb/s (ST 292-1)
	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	HD 1080p component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /RGB/X YZ/4:4:4(4)	10 bpc	HD 1080p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A and (ST 425-1) level B-DL
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /RGB/X YZ/4:4:4(4)	12 bpc	HD 1080p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A and (ST 425-1) level B-DL
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	HD 1080p Y'C _B C _R component at 3.0Gb/s (ST 425-1) level A and (ST 425-1) level B-DL
	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /RGB/X YZ/4:4:4(4)	10 bpc	HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure II
	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /RGB/X YZ/4:4:4	12 bpc	HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure III

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160 4096x2160	1	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	2160p Y'C _B C _R component at 6.0Gb/s (ST 2081-10) mode 1 structure 1
	3840x2160 4096x2160	1	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	2160p Y'C _B C _R /RGB component at 12.0Gb/s (ST 2082-10) mode 1 structure 1
	3840x2160 4096x2160	1	24, 25, 30	Y'C _B C _R /RGB/X YZ 4:4:4(4)	10 bpc	2160p Y'C _B C _R /RGB component at 12.0Gb/s (ST 2082-10) mode 1 structure 2
	3840x2160 4096x2160	1	24, 25, 30	Y'C _B C _R /RGB/X YZ 4:4:4	12bpc	2160p Y'C _B C _R /RGB component at 12.0Gb/s (ST 2082-10) mode 1 structure 3
	3840x2160 4096x2160	1	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	2160p Y'C _B C _R component at 12.0Gb/s (ST 2082-10) mode 1 structure 4

Single-link 2D 3G level-B DL

The following single-link 2D 3G level-B DL SDI image formats are supported.



24 and 30 Hz frame rates also include fractional 1/1.001 rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	12 bpc	HD 1080p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level B-DL
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	HD 1080p Y'C _B C _R component at 3.0Gb/s (ST 425-1) level B-DL

Dual-link 3D

The following dual-input 3D SDI image formats are supported where the indicated frame rate is per eye.

The SDI inputs are assigned as follows:

- Input 1: left eye = SDI 1 and right eye = SDI 2
- Input 2: left eye = SDI 3 and right eye = SDI 4.



- 24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 rates.
- For 3Gb/s SDI Inputs only level A is supported unless otherwise noted.
- For all 4K image formats only 2SI sub division is supported.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	2	24, 25, 30, 50, 60	Y'C _B C _R /4:2:2	10 bpc	HD 720p Y'C _B C _R component at 1.5Gb/s (ST 292-1)
	1280x720	2	24, 25, 30, 50, 60	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	HD 720p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	2	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	HD1080p component at 1.5Gb/s (ST 292-1)
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	HD1080p component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	2	24, 25, 30	Y'C _B C _R /RGB/4:4:4(4)	12 bpc	HD 1080p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	2	24, 25, 30	Y'C _B C _R /4:2:2(4)	12 bpc	HD 1080p Y'C _B C _R component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) mode 3 structure II
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /RGB/4:4:4	12 bpc	HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) Mode 2 Structure III
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /4:2:2(4)	12 bpc	HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure IV
4K	3840x2160 4096x2160	2	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	2160p Y'C _B C _R component at 6.0Gb/s (ST 2081-10) mode 1 structure 1
	3840x2160 4096x2160	2	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	2160p Y'C _B C _R component at 12.0Gb/s (ST 2082-10) mode 1 structure 1

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
3840x2160 4096x2160	2	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	2160p Y'C _B C _R /RGB component at 12.0Gb/s (ST 2082-10) mode 1 structure 2
3840x2160 4096x2160	2	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	12 bpc	2160p Y'C _B C _R /RGB component at 12.0Gb/s (ST 2082-10) mode 1 structure 3
3840x2160 4096x2160	2	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	2160p Y'C _B C _R component at 12.0Gb/s (ST 2082-10) mode 1 structure 4

Dual-link 2D HD/2K and UHD/4K

The following one-port, dual-link 2D HD/2K and UHD/4K SDI input formats are supported. Dual-link SDI is a fixed configuration where SDI 1 = link 1 of input1, SDI 2 = link 2 of input 1, SDI 3 = link 1 of input2, and SDI 4 = link 2 of input 2.



24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) level A structure II
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) level A structure III
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3) level A structure IV
	1920x1080 2048x1080	2	48, 50, 60	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3) level A structure IV
4K	3840x2160 4096x2160	2	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3)
	3840x2160 4096x2160	2	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual- link 6Gb/s (ST 2081-11) mode 1

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
3840x2160 4096x2160	2	24, 25, 30	Y'C'B'C'R/RGB/ 4:4:4(4)	10 bpc	Y'C'B'C'R/RGB component at dual-link 6Gb/s (ST 2081-11) mode 1
3840x2160 4096x2160	2	24, 25, 30	Y'C'B'C'R/RGB/ 4:4:4	12bpc	Y'C'B'C'R/RGB component at dual-link 6Gb/s (ST 2081-11) Mode 1
3840x2160 4096x2160	2	24, 25, 30	Y'C'B'C'R/4:2:2	12 bpc	Y'C'B'C'R component at dual- link 6Gb/s (ST 2081-11) mode 1
3840x2160 4096x2160	2	24, 25, 30	Y'C'B'C'R/ 4:2:2(4)	12 bpc	Y'C'B'C'R component at dual- link 6Gb/s (ST 2081-11) mode 1

Dual-link, dual-input 3D

The following dual-link, dual-input 3D SDI image formats are supported where the indicated frame rate is per eye. The SDI input mapping are as follows:

- Left eye = SDI inputs 1 and 2
- Right eye = SDI inputs 3 and 4



24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) structure II
	1920x1080 2048x1080	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) structure III
	1920x1080 2048x1080	4	48, 50, 60	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3) structure IV
	1920x1080 2048x1080	4	48, 50, 60	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3) structure IV
4K	3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual- link 3Gb/s (ST 425-3)
	3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual- link 6Gb/s (ST 2081-11) mode 1

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 6Gb/s (ST 2081-11) mode 1
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 6Gb/s (ST 2081-11) mode 1
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at dual- link 6Gb/s (ST 2081-11) mode 1
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at dual- link 6Gb/s (ST 2081-11) mode 1

One-port, quad-link 2D 2SI UHD/4K

The following one-port, quad-link 2D image formats are supported. This is a fixed configuration where SDI 1 = link1, SDI 2 = link2, SDI 3 = link3, and SDI 4 = link 4 of the quad-link input.



24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 rates.

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K 3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 3Gb/s (ST 425-5) level A structure 2
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at quad-link 3Gb/s (ST 425-5) level A structure 3
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) level A structure 4
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) level A structure 4
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) level A structure 4
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 6Gb/s

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					(ST 2081-12) mode 2 structure II
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4	12bpc	Y'C _B C _R /RGB component at quad-link 6Gb/s (ST 2081-12) mode 2 structure III
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at quad-link 6Gb/s (ST 2081-12) mode 2 structure IV
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at quad-link 6Gb/s (ST 2081-12) mode 2 structure IV

Quad-link 2D square division UHD/4K

The following quad-link 2D UHD/4K SDI image formats are supported in square division mapping format, so each SDI input represents one quarter of the total image assigned as shown in the following diagram:

Input 1 SDI 1	Input 2 SDI 2
Input 3 SDI 3	Input 4 SDI 4



- 24, 30, 48, and 60 Hz frame rates also include fractional 1/1.001 frame rates.
- For all 4K image formats, only 2SI subdivision is supported.

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K 3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) annex B square division of 2160-image formats, B.1 level A mapping
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 3Gb/s (ST 425-5) annex B square division of 2160-image formats, B.1 level A mapping
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at quad-link 3Gb/s

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					(ST 425-5) annex B square division of 2160-image formats, B.1 level A mapping
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /4:2:2(4)	12 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) annex B square division of 2160-image formats, B.1 level A mapping
3840x2160 4096x2160	4	24, 25, 30	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at quad-link 3Gb/s (ST 425-5) annex B square division of 2160-image formats, B.1 level A mapping
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 6Gb/s (ST 2081) mode 2 structure II
3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/4:4:4	12 bpc	Y'C _B C _R /RGB component at quad-link 6Gb/s (ST 2081) mode 2 structure II

Where each SDI Input corresponds to one of the following input signal formats.

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /4:2:2	10 bpc HD 1080p component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /RGB/4:4:4(4)	12 bpc HD 1080p Y'C _B C _R /RGB component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	1	24, 25, 30	Y'C _B C _R /4:2:2(4)	12 bpc HD 1080p Y'C _B C _R component at 3.0Gb/s (ST 425-1) level A
	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /RGB/4:4:4(4)	10 bpc HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) structure II
	1920x1080 2048x1080	1	48, 50, 60	Y'C _B C _R /RGB/4:4:4	12 bpc HD 1080p Y'C _B C _R /RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure III

Single-link 2D HD/2K HFR

The following single-link 2D HD/2K HFR SDI image formats are supported.



96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	1	96, 100, 120	Y'C _B C _R /4:2:2	10 bpc	HD 1080p Y'C _B C _R component at 6Gb/s (ST 2081-10) mode 3
	1920x1080 2048x1080	1	96, 100, 120	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	HD 1080p Y'C _B C _R /RGB component at 12Gb/s (ST 2082-10) mode 2 structure II
	1920x1080 2048x1080	1	96, 100, 120	Y'C _B C _R /RGB/4:4:4	12 bpc	HD 1080p Y'C _B C _R /RGB component at 12Gb/s (ST 2082-10) mode 2 structure III
	1920x1080 2048x1080	1	96, 100, 120	Y'C _B C _R /4:2:2(4)	1 2bpc	HD 1080p Y'C _B C _R component at 12Gb/s (ST 2082-10) mode 2 structure IV

One-port dual-link 2D HD/2K HFR

The following one-port, dual-link 2D HD/2K HFR SDI image formats are supported.

Dual-link SDI is a fixed configuration where SDI 1 = link 1 of input 1, SDI 2 = link 2 of input 1, SDI 3 = link 1 of input 2, and SDI 4 = link 2 of input 2.



96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	2	96, 100, 120	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 6Gb/s (ST 2081-11) mode 2 (ST 425-3) level A structure II
	1920x1080 2048x1080	2	96, 100, 120	Y'C _B C _R /RGB/4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 6Gb/s (ST 2081-11) mode 2
	1920x1080 2048x1080	2	96, 100, 120	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at dual-link 6Gb/s (ST 2081-11) mode 2

Quad-link 2D UHD/4K HFR 2SI

The following quad-link SDI 2D UHD/4K HFR 2SI image formats are supported.



96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160 4096x2160	4	96, 100, 120	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at quad-link 6Gb/s (ST 2081-12) mode 3
	3840x2160 4096x2160	4	96, 100, 120	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 12Gb/s (ST 2082-12) mode 2 structure II
	3840x2160 4096x2160	4	96, 100, 120	Y'C _B C _R /RGB/4:4:4	12 bpc	Y'C _B C _R /RGB component at quad-link 12Gb/s (ST 2082-12) mode 2 structure III
	3840x2160 4096x2160	4	96, 100, 120	Y'C _B C _R /4:2:2(4)	12 bpc	Y'C _B C _R component at quad-link 12Gb/s (ST 2082-12) mode 2 structure IV

Dual-link 2D UHD/4K (12G)

The following dual-link 12G-SDI 2D UHD/4K image formats are supported. The following input combinations are supported:

- Input 1: SDI 1 and SDI 2
- Input 2: SDI 3 and SDI 4



48, 60, 96, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160 4096x2160	2	48, 50, 60	Y'C _B C _R /RGB/4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 12Gb/s (ST 2048-11) mode 2 structure II
	3840x2160 4096x2160	2	48, 50, 60	Y'C _B C _R /RGB/4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 12Gb/s (ST 2082-11) mode 2 structure III
	3840x2160 4096x2160	2	48, 50, 60	Y'C _B C _R /4:2:2(4)	12 bpc	Y'C _B C _R component at dual-link 12Gb/s (ST 2082-11) mode 2 structure IV
	3840x2160 4096x2160	2	96, 100, 120	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual-link 12Gb/s

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					(ST 2082-11) mode 3 structure IV

Dual-link dual-input 3D UHD/4K (12G)

The following dual-input, dual-link 12G-SDI 3D UHD/4K image formats are supported, where the indicated frame rate is per eye (synchronous sources only). The SDI inputs are assigned as follows:

- Left eye = SDI 1 and 2
- Right eye = SDI 3 and 4



48, 60, 96, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 12Gb/s (ST 2048-11) mode 2 structure II
	3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 12Gb/s (ST 2082-11) mode 2 structure III
	3840x2160 4096x2160	4	48, 50, 60	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at dual- link 12Gb/s (ST 2082-11) mode 2 structure IV

Quad-link 2D 8K 2SI (12G)

The following 12G-SDI 2D 8K 2SI image formats are supported.



24 and 30 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
8K	7680x4320 8192x4320	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at quad-link 12Gb/s (ST 2082-12) mode 1
	7680x4320 8192x4320	4	24, 25, 30	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at quad-link 12Gb/s (ST 2082-12) mode 1
	7680x4320 8192x4320	4	24, 25, 30	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at quad-link 12Gb/s (ST 2082-12) mode 1

Dual-input 2D HD/2K and UHD/4K HFR temporal interleave

The following 2D HD/2K and UHD/4K HFR image formats are supported as dual-input temporal Interleave, where separate odd/even frame input signals are required (synchronous sources only).

The SDI inputs are assigned as follows:

- Input 1 = SDI 1 (odd) and SDI 2 (even)
- Input 2 = SDI 3 (odd) and SDI 4 (even)



- 96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.
- For all 3Gb/s SDI Inputs only level A is supported.
- For all 4K image formats only 2SI subdivision is supported.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	2	96, 100, 120	Y'C'B'C'R/4:2:2	10 bpc	HD 1080p Y'C'B'C'R component at 3.0Gb/s (ST 425-1) level A presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	2	96, 100, 120	Y'C'B'C'R/RGB/4:4:4(4)	10 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) structure II presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	2	96, 100, 120	Y'C'B'C'R/RGB/4:4:4	12 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure III presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	2	96, 100, 120	Y'C'B'C'R/RGB/4:2:2(4)	12 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure IV presented as separate odd/even 48, 50, 60 fps input signals
4K	3840x2160 4096x2160	2	96, 100, 120	Y'C'B'C'R/4:2:2	10 bpc	2160p Y'C'B'C'R component at 6.0Gb/s (ST 2081-10) mode 1 structure 1 presented as separate odd/even 48, 50, 60 fps input signals

Dual-input 3D HD/2K and UHD/4K HFR temporal interleave

The following 3D HFR image formats are supported as dual-input temporal Interleave, where separate odd/even frame input signals are required (synchronous sources only).

The SDI inputs are assigned as follows:

- Left eye = SDI 1 (odd) and 2 (even)
- Right eye = SDI 3 (odd) and 4 (even)



- 96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.
- For all 3Gb/s SDI Inputs only level A is supported.
- For all 4K image formats only 2SI subdivision is supported.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	4	96, 100, 120	Y'C'B'C'R/4:2:2	10 bpc	HD 1080p Y'C'B'C'R component at 3.0Gb/s (ST 425-1) level A presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C'B'C'R/RGB/4:4:4(4)	10 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) structure II presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C'B'C'R/RGB/4:4:4	12 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure III presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C'B'C'R/RGB/4:2:2(4)	12 bpc	HD 1080p Y'C'B'C'R/RGB component at 6.0Gb/s (ST 2081-10) mode 2 structure IV presented as separate odd/even 48, 50, 60 fps input signals
4K	3840x2160 4096x2160	4	96, 100, 120	Y'C'B'C'R/4:2:2	10 bpc	2160p Y'C'B'C'R component at 6.0Gb/s (ST 2081-10) mode 1 structure 1 presented as separate odd/even 48, 50, 60 fps input signals presented as separate odd/even 48, 50, 60 fps input signals

Dual-link dual-input 2D HD/2K and UHD/4K HFR temporal interleave

The following 2D HD/2K and UHD/4K HFR image formats are supported as dual-input temporal Interleave, where separate odd/even frame input signals are required (synchronous sources only).

The SDI inputs are assigned as follows:

- Odd = SDI 1 and SDI 2
- Even = SDI 3 and SDI 4



96 and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1920x1080 2048x1080	4	96, 100, 120	Y'C _B C _R /RGB/ 4:4:4(4)	10 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) structure II presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C _B C _R /RGB/ 4:4:4	12 bpc	Y'C _B C _R /RGB component at dual-link 3Gb/s (ST 425-3) structure III presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C _B C _R /4:2:2	12 bpc	Y'C _B C _R component at dual-link 3Gb/s (ST 425-3) structure IV presented as separate odd/even 48, 50, 60 fps input signals
	1920x1080 2048x1080	4	96, 100, 120	Y'C _B C _R / 4:2:2(4)	12 bpc	Y'C _B C _R component at dual-link 3Gb/s (ST 425-3) structure IV presented as separate odd/even 48, 50, 60 fps input signals
4K	3840x2160 4096x2160	4	96, 100, 120	Y'C _B C _R /4:2:2	10 bpc	Y'C _B C _R component at dual-link 6Gb/s (ST 2081-11) mode 1 presented as separate odd/even 48, 50, 60 fps input signals

DisplayPort 1.2 video formats

The following image formats are supported by the DisplayPort inputs on the Video Input panel.

One-port 2D HD/2K and UHD/4K

The following one port 2D/2K and UHD/4K DisplayPort 1.2 image formats are supported on each of the DP 1.2 inputs.



24, 30, 60, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	—
	1920x1080	1	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	—
	1920x1200	1	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	1	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4K	3840x2160	1	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	—
	3840x2400	1	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	1	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port 3D HD/2K and UHD/4K

The following one-port 3D DisplayPort image formats are supported in a frame sequential transmission format.



- Frame rates are expressed per-eye.
- 24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	—
	1920x1080	1	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10/12 bpc	—

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	1920x1200	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
	3840x2160	1	25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	—
4K	3840x2400	1	25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	1	25, 30	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port, dual-input 3D HD/2K and UHD/4K

The following one-port, dual-input 3D HD/2K and UHD/4K DisplayPort 1.2 image formats are supported. Dual-input 3D is a fixed configuration where DisplayPort 1 = left eye input and DisplayPort 2 = right eye input.



- Frame rates are expressed per-eye.
- 24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	—
	1920x1080	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	—
	1920x1200	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4K	3840x2160	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	—
	3840x2400	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	2	24, 25, 30, 60	Y'C _B C _R /RGB/ 4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

Two-port 2D UHD/4K

The following two-port 2D DisplayPort 1.2 image formats are supported in two-column mode where each DisplayPort 1.2 input provides one half of the overall image width such that DisplayPort 1 = left half of the total image and DisplayPort 2 = right half of the total image.

For example:

- **For 3840x2160:**
DP 1 = 1920 x 2160 (left side[pixels 0 - 1919]) and DP 2 = 1920 x 2160 (right side [pixels 1920 - 3839])
- **For 3840x2400:**
DP input 1 = 1920 x 2400 (left side [pixels 0 - 1919]) and DP input 2 = 1920 x 2400 (right side [pixels 1920 - 3839])
- **For 4096x2160:**
DP 1 = 2048 x 2160 (left side[pixels 0 - 2047]) and DP 2 = 2048 x 2160 (right side [pixels 2048 - 4095])



120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	1920x2160 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	
	1920x2400 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only. DP inputs 3 and 4 only (requires VOM-HBI)
	2048x2160 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

Two-port 3D UHD/4K

The following two-port 3D DisplayPort image formats are supported in a 3D frame sequential, two-column transmission format where each DisplayPort 1.2 input provides one half of the overall image width such that DisplayPort 1 = left half of the total image and DisplayPort 2 = right half of the total image. All frame rates are expressed per eye.

For example:

- **For 3840x2160:**
DP 1 = 1920 x 2160 (left side[pixels 0 - 1919])and DP 2 = 1920 x 2160 (right side [pixels 1920 - 3839])
- **For 3840x2400:**
DP input 1 = 1920 x 2400 (left side [pixels 0 - 1919]) and DP input 2 = 1920 x 2400 (right side [pixels 1920 - 3839])
- **For 4096x2160:**
DP 1 = 2048 x 2160 (left side[pixels 0 - 2047]) and DP 2 = 2048 x 2160 (right side [pixels 2048 - 4095])



- 120 Hz frame rates also include fractional 1/1.001 frame rates.
- External 3D frame synchronization signal is required for correct operation.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	1920x2160 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	
	1920x2400 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only. DP inputs 3 and 4 only (requires VOM-HBI)
	2048x2160 (per input)	2	120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port 2D PC

The following one-port 2D DisplayPort 2.0 PC image formats are supported on each of the two DisplayPort inputs.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth
PC	1280x800	1	60	RGB	8 bpc
	1280x960	1	60	RGB	8 bpc
	1280x1024	1	60	RGB	8 bpc
	1440x900	1	60	RGB	8 bpc
	1680x1050	1	60	RGB	8 bpc
	1600x1200	1	60	RGB	8 bpc
	1920x1200	1	60	RGB	8 bpc

Four-port quadrants 2D UHD/4K

The following four-port quadrants UHD/4K DisplayPort 1.2 image formats are supported on DisplayPort inputs 1, 2, 3, and 4.

In this mode, each DP input represents one quarter of the total image assigned as shown in the following table:

Input 1 DP1	Input 2 DP2
Input 3 DP4	Input 4 DP 4

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160	4	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	1920x1200 per input Christie M RGB Series only

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
					Christie M RGB Series, and Griffyn® Series only Christie M RGB Series, Christie Eclipse, Griffyn® Series, and Sapphire® 4K40-RGBH only
3840x2400	4	24, 25, 30, 50, 60	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	1920x1200 per input Christie M RGB Series only Christie M RGB Series, and Griffyn® Series only Christie M RGB Series, Christie Eclipse, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	4	24, 25, 30, 50, 60, 120	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	1920x1200 per input Christie M RGB Series only Christie M RGB Series, and Griffyn® Series only Christie M RGB Series, Christie Eclipse, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port 2D HD HFR

The following one-port 2D HD DisplayPort 1.2 image formats are supported on DisplayPort inputs 1 or 2.



- 240 Hz frame rates also include fractional 1/1.001 frame rates.
- Requires a Mirage Pro license.

	Format	Cables	Frame rate (Hz)	Sampling	Bit depth	Notes
HD	1920x1080	1	240	Y'C' _B C' _R /RGB/ 4:4:4	8/10 bpc	—
	1920x1200	1	240	Y'C' _B C' _R /RGB/ 4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	1	240	Y'C' _B C' _R /RGB/ 4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn [®] Series, and Sapphire [®] 4K40-RGBH only

Two-port 2D HD HFR

The following two-port 2D HD DisplayPort 1.2 image formats are supported in a two-column transmission format where each DisplayPort 1.2 input provides one half of the overall image width such that DisplayPort 1 = left half of the total image and DisplayPort 2 = right half of the total image.

For example:

- **For 1920x1080:**
DP input 1 = 960 x 1080 (left side [pixels 0 - 959]) and DP input 2 = 960 x 1080 (right side [pixels 960 - 1919])
- **For 1920x1200:**
DP input 1 = 960 x 1200 (left side [pixels 0 - 959]) and DP input 2 = 960 x 1200 (right side [pixels 960 - 1919])
- **For 4096x2160:**
DP input 1 = 1024 x 1080 (left side [pixels 0 - 1023]) and DP 2 = 1024 x 1080 (right side [pixels 1024 - 2047])



- 240, 360, and 480 Hz frame rates also include fractional 1/1.001 frame rates.
- All sources must be frame synchronous.
- Requires a Mirage Pro license.

	Format	Cables	Frame rate (Hz)	Sampling	Bit depth	Notes
HD	960x1080 (per input)	2	240, 360, 480	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	—
	960x1200 (per input)	2	240, 360*	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only * DisplayPort inputs 3 and 4 only (require VOM-HBI)
	960x1080 (per input)	2	240, 360, 480	Y'C'B'C'R/RGB/4:4:4	8/10 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

DisplayPort 1.4 video formats

DisplayPort 1.4 supports all DisplayPort 1.4 formats .

For more information, see *DisplayPort 1.2 video formats* (on page 21).

In addition, DisplayPort inputs 3 and 4 support the following DisplayPort 1.4 formats:

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
4K	3840x2160	1	100	Y'C'B'C'R/RGB/4:4:4	8 bpc	Requires reduced blanking (CVT-RB)
	3840x2160	1	120	Y'C'B'C'R/RGB/4:4:4	8 bpc	Requires V2 reduced blanking (CVT-RBv2)
	3840x2160	1	100	Y'C'B'C'R/4:2:2	8/10/12 bpc	12 bpc requires reduced blanking (CVT-RB)
	3840x2160	1	120	Y'C'B'C'R/4:2:2	8/10bpc	10 bpc requires reduced blanking (CVT-RB).
	3840x2160	1	100	Y'C'B'C'R/4:2:0	8/10/12 bpc	—

Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
3840x2160	1	120	Y'C _B C _R /4:2:0	8/10/12 bpc	12 bpc requires reduced blanking (CVT-RB)
4096x2160	1	100	Y'C _B C _R /RGB/4:4:4	8 bpc	Requires reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	100	Y'C _B C _R /4:2:2	8/10/12 bpc	10 and 12 bpc require reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	120	Y'C _B C _R /4:2:2	8/10bpc	10bpc require reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	100	Y'C _B C _R /4:2:0	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4096x2160	1	120	Y'C _B C _R /4:2:0	8/10/12 bpc	12 bpc requires reduced blanking (CVT-RB) Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

Christie Link video formats

The supported video formats for the Christie Link input on the Video Input panel are the same as the 2D and 3D HDMI 2.0 and DisplayPort 1.2 video formats..

For more information, see *HDMI 2.0 video formats* (on page 2) and *DisplayPort 1.2 video formats* (on page 21).

SDVoE video formats

The following image formats are supported by the SDVoE input on the Video Input panel.

One-port 2D HD/2K and UHD/4K

The following 2D image formats are supported by the SDVoE input.



24, 30, 60 and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1080i	1	25, 30	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	1920x1080 Interlaced (50/60 Hz field rate)
	1920x1080	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1200	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	2048x1080	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only
4K	3840x2160	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8 bpc	—
	3840x2400	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8 bpc	Christie M 4K+15 RGB and Christie M 4K+25 RGB only
	4096x2160	1	24, 25, 30, 50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8 bpc	Christie Eclipse, Christie M 4K15 RGB, Christie M 4K25 RGB, Griffyn® Series, and Sapphire® 4K40-RGBH only

One-port 2D 720p and 1080i

The following one-port 2D 720p and 1080i image formats are supported by the SDVoE input.



24, 30, 60, and 120 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
HD	1280x720	1	24, 25, 30, 50, 60, 120	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	—
	1920x1080i	1	25, 30	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	1920x1080 interlaced (50/60 Hz field rate)

One-port 2D PC

The following one-port 2D PC image formats are supported by the SDVoE input.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth
PC	1280x800	1	60	RGB	8 bpc
	1280x960	1	60	RGB	8 bpc
	1280x1024	1	60	RGB	8 bpc
	1440x900	1	60	RGB	8 bpc
	1680x1050	1	60	RGB	8 bpc
	1600x1200	1	60	RGB	8 bpc
	1920x1200	1	60	RGB	8 bpc

One-port 3D HD

The following one-port 3D HD image formats are supported by the SDVoE input.



24, 30, and 60 Hz frame rates also include fractional 1/1.001 frame rates.

	Format	Cables	Frame rate (Hz)	Sampling	Bit-depth	Notes
3D	1280x720	1	50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Frame-packing/top-and-bottom
	1920x1080	1	24, 25, 30 ,50, 60	Y'C _B C _R /RGB/ 4:4:4 Y'C _B C _R /4:2:2	8/10/12 bpc	Frame-packing

Technical support

Technical support for Christie Enterprise products is available at:

- North and South America: +1-800-221-8025 or Support.Americas@christiedigital.com
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or Support.EMEA@christiedigital.com
- Asia Pacific (support.apac@christiedigital.com):
 - China: +86 10 6561 0240 or tech-supportChina@christiedigital.com
 - India: +91 (80) 6708 9999 or tech-India@christiedigital.com
 - Japan: 81-3-3599-7481
 - Singapore: +65 6877-8737 or tech-Singapore@christiedigital.com
 - South Korea: +82 2 702 1601 or tech-Korea@christiedigital.com