

# Christie Spyder X20

Auditoriums      Houses of worship  
Boardrooms      Media centers  
Broadcast studios      Post-production  
Conference rooms      Rental and staging  
Control rooms      Training rooms



## The Next Generation

The Christie Spyder X20 is a versatile hardware-based video processor combined with the flexibility of a universal routing switcher. Its integrated source monitoring enables simultaneous, real-time, full frame rate monitoring of all inputs.

The Spyder X20 provides users with a 20 megapixel bandwidth to blend, window, mix and scale any source format and then routes the signal to any destination device or combination of display devices – quickly and easily. It is easy to deploy and install because of its advanced architecture and reduces the amount of wires, boxes and rack space traditionally required because everything is all in one unit.

# Christie Spyder X20

## The next generation of video processing and matrix switching

The Spyder X20 offers a unique architecture that allows for a resolution and video format-independent environment. Users are no longer restricted to the resolution of a single computer or video source, or a single display destination. Multiple displays can be combined to generate an enhanced resolution to exceed what any single display can support.

Ideal for live event and broadcast environments, its 20 megapixel bandwidth enables the Spyder X20 to drive multiple displays to achieve greater brightness, image quality and resolution than has been historically possible. The Spyder X20 can be used in many different environments with any display device (projectors, plasma screens, LED walls, rear projection cubes, etc.) or any combination of display devices. The Spyder X20 provides unsurpassed power and functionality in only 4 rack units (4RU).

## This generation of Spyder

The Spyder X20 is designed for users in any environment to take images from unique sources, use a variety of display systems and present the images as intended. It is ideal for applications such as live events, broadcast, high-end boardrooms, command and control, houses of worship and education – any installation that has multi-windowing, multiple displays and processing requirements. The Spyder X20 also offers the flexibility to display 2D and 3D content simultaneously in the same display.

## Software interface

The Microsoft® Windows based control software provides full set-up, configuration, and real-time control with an easy-to-use interface.



- ▲ Vista Advanced is a Windows-based software interface that makes it easy to configure and control the Spyder X20.

### Key features

20 megapixel bandwidth

Internal matrix switching

Universal input/output capabilities – mix and match multiple formats with one piece of equipment

Input capability – either 8 or 16 inputs (depending on model) that can be a mix of analog BNC and DVI signals

Output capability – 8 outputs that natively support any display from component analog 480i to digital 4K

Built-in conversion for analog/digital, interlaced/progressive, resolution, aspect ratio and refresh rate

2D and 3D capabilities

Manages and displays multiple 3D sources

Define properties for each output independent of each signal

Integrated source monitoring – real-time and full frame rate view of all sources connected to the Spyder X20 (either 16 or 8 inputs) on a single output, tiled into either a 4x4 array (X20-1608) or a 4x2 array (X20-0808)

Single point of control for all processing and signal distribution functions from front panel, PC via Ethernet, or external control system

10-bit processing

Small form factor – (LxWxH): 21.9 x 17.3 x 7.0" (556 x 439 x 178mm). Additionally, only one piece of equipment is required so the overall space used in a rack is reduced

Each output individually supports rotation – enabling the creation of vertically-oriented displays

User-definable edge blending and tiling

Create any kind of window border or drop shadow with adjustable color, width, softness, shadow offset and transparency

Online editing mode allows for preset displays to be built and edited in preview mode without affecting what the audience is seeing

### Additional features

Built-in image Still Store functionality

Built in VESA calculator for custom resolution outputs

Intuitive graphical user interface (GUI)

Simple cohesive control of all functions

Redundant hot swappable power supplies

Optional stereoscopic support

Advanced auto-sync functionality

Bitmap borders

Window titling

Optional HDCP support



- ▲ Bitmap borders



- ▲ Reduced rack space



#### ▲ Front panel

With the Spyder X20, layers can be in 'program' and in 'preview' mode. You can build preset displays in preview mode using live layers without affecting the display being viewed by the audience.



#### ▲ Spyder X20-1608 rear panel

The Spyder X20-1608 has 16 inputs and 8 outputs, that can be a mix of analog BNC and DVI signals.



#### ▲ Spyder X20-0808 rear panel

The Spyder X20-0808 has 8 inputs and 8 outputs, and is easy to use and configure.

		Spyder X20-0808	Spyder X20-1608
<b>Input</b>	number	<ul style="list-style-type: none"> <li>• 8 inputs</li> <li>• 4 supporting composite, S-video, component analog, HDSDI, SDI, and 3G SDI (SMPTE 424M)</li> <li>• 4 supporting progressive DVI and progressive RGBHV</li> </ul>	<ul style="list-style-type: none"> <li>• 16 inputs</li> <li>• 8 supporting composite, S-video, component analog, HDSDI, SDI, and 3G SDI (SMPTE 424M)</li> <li>• 8 supporting progressive DVI and progressive RGBHV</li> </ul>
	signals	• Analog RGB composite, component • DVI, single-link and dual-link (8 inputs are dual-link capable) • SDI, HD-SDI and 3G-SDI (SMPTE 424M)	
	pixel clock	• Analog up to 165 MHz • DVI up to 330 MHz	
	resolutions	• Horizontal resolutions up to 2560 and vertical resolutions up to 2160 within 330 MHz (any resolution greater than 2048 x 1200 uses 2 input channels)	
	scan rates	• Up to 120Hz dependant on pixel clock rate maximum	
<b>Output</b>	number	• 8 @ (< 2048 x 1200) or 4 @ (2560 x 1600) or a combination of 4 dual-link and 4 single-link resolutions	
	signals	• Analog RGB, component • DVI, single-link and dual-link (4 outputs are dual-link capable) • SDI, HD-SDI and 3G-SDI (SMPTE 424M)	
	pixel clock	• Analog up to 165 MHz • DVI up to 330 MHz	
	resolutions	• Horizontal resolutions up to 2560 and vertical resolutions up to 2160 within 330 MHz	
	scan rates	• Up to 120Hz dependant on pixel clock rate maximum	
<b>Control and networking</b>		• RS-232 in/out • Ethernet (10/100/1000)	
<b>Enhanced feature sets</b>		<ul style="list-style-type: none"> <li>• Independent aspect ratio and frame rate set-up • Overlays</li> <li>• Transitions • Aspect ratio conversions • Integrated source monitoring</li> <li>• Output rotation (portrait) • Optional stereoscopic support</li> <li>• Optional HDCP support • 2D and 3D capabilities</li> </ul>	
<b>Accessories</b>	standard	<ul style="list-style-type: none"> <li>• User manual (CD-ROM) • 2 AC power cords</li> <li>• Vista Advanced 2009 software • Rack hardware</li> </ul>	
<b>Power requirements</b>	operating voltage	• 100-240 VAC @ 50/60Hz	
	operating current	• 9.0A @ 100 VAC	
	power	• 900W	
	dissipation	• <750 BTU/hr	
<b>Dimensions</b>	space requirements	• 4RU	
	size	• (LxWxH): 21.9 x 17.3 x 7.0" (556 x 439 x 178mm)	
	shipping size	• (LxWxH): 32.3 x 25.5 x 15.0" (820 x 648 x 381mm)	
	volume	• 2652in <sup>3</sup>	
	weight	• 59lbs (27kg)	
	shipping weight	• 70.5lbs (32kg)	
<b>Operating environment</b>		• Temperature: 40-95°F (5-35°C) • Humidity: 20-80% non-condensing	
<b>Regulatory approvals</b>		<ul style="list-style-type: none"> <li>• This product conforms to the following regulations related to product safety, environmental requirements and electromagnetic compatibility (EMC):</li> <li>• UL/CSA/IEC 60950 (3rd edition) • FCC Class A, CE, CCC • RoHS, WEEE</li> </ul>	
<b>Limited warranty</b>		<ul style="list-style-type: none"> <li>• 1 year parts and labor</li> <li>• Contact an authorized Christie representative for full details of our limited warranty</li> </ul>	

## Minimum PC requirements

**Microsoft Windows® 7 Based Computers**  
Microsoft's Windows® 7 platform provides a rating called the 'Windows Experience Index', which measures the capability of your computer's hardware and software configuration and expresses this measurement as a number called a base score. A higher base score generally means that your computer will perform better and faster than a computer with a lower base score, and makes it simple to purchase a PC with confidence that it will work properly with the Vista Advanced software interface.

### Requirements

'Windows Experience Index' of 4.0 or greater

**Microsoft Windows XP Based Computers**  
Computers running the Windows XP user interface do not support the 'Windows Experience Index' provided in Windows Vista and Windows® 7, and therefore the hardware profile listed below can be used as a base hardware configuration.

### Requirements

Pentium 4, 2.5Ghz or equivalent

512MB of RAM

128MB, DirectX 9.0 compatible video card (Nvidia preferred)

Windows XP Professional, Service Pack 3

Microsoft .NET framework, Version 4.0

Microsoft DirectX 9.0c or later

Note: MAC or PC emulators such as VMWare and Microsoft Virtual PC should not be used to run Vista Advanced; support cannot be provided for users using an emulator of any kind.

#### Corporate offices

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Christie Digital Systems USA, Inc  
USA – Cypress  
ph: 714 236 8610

Christie Digital Systems Canada Inc.  
Canada – Kitchener  
ph: 519 744 8005

#### Independent sales consultant offices

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Italy  
ph: +39 (0) 2 9902 1161

South Africa  
ph: +27 (0) 317 671 347

#### Worldwide offices

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United Kingdom  
ph: +44 (0) 118 977 8000

Germany  
ph: +49 2161 664540

France  
ph: +33 (0) 1 41 21 44 04

Spain  
ph: +34 91 633 9990

Eastern Europe and  
Russian Federation  
ph: +36 (0) 1 47 48 100

United Arab Emirates  
ph: +971 (0) 4 299 7575

India  
ph: (080) 41468940

Singapore  
ph: +65 6877 8737

China (Shanghai)  
ph: +86 21 6278 7708


China (Beijing)  
ph: +86 10 6561 0240

Japan (Tokyo)  
ph: 81 3 3599 7481

Korea (Seoul)  
ph: +82 2 702 1601



For the most current specification information, please visit [www.christiedigital.com](http://www.christiedigital.com)

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