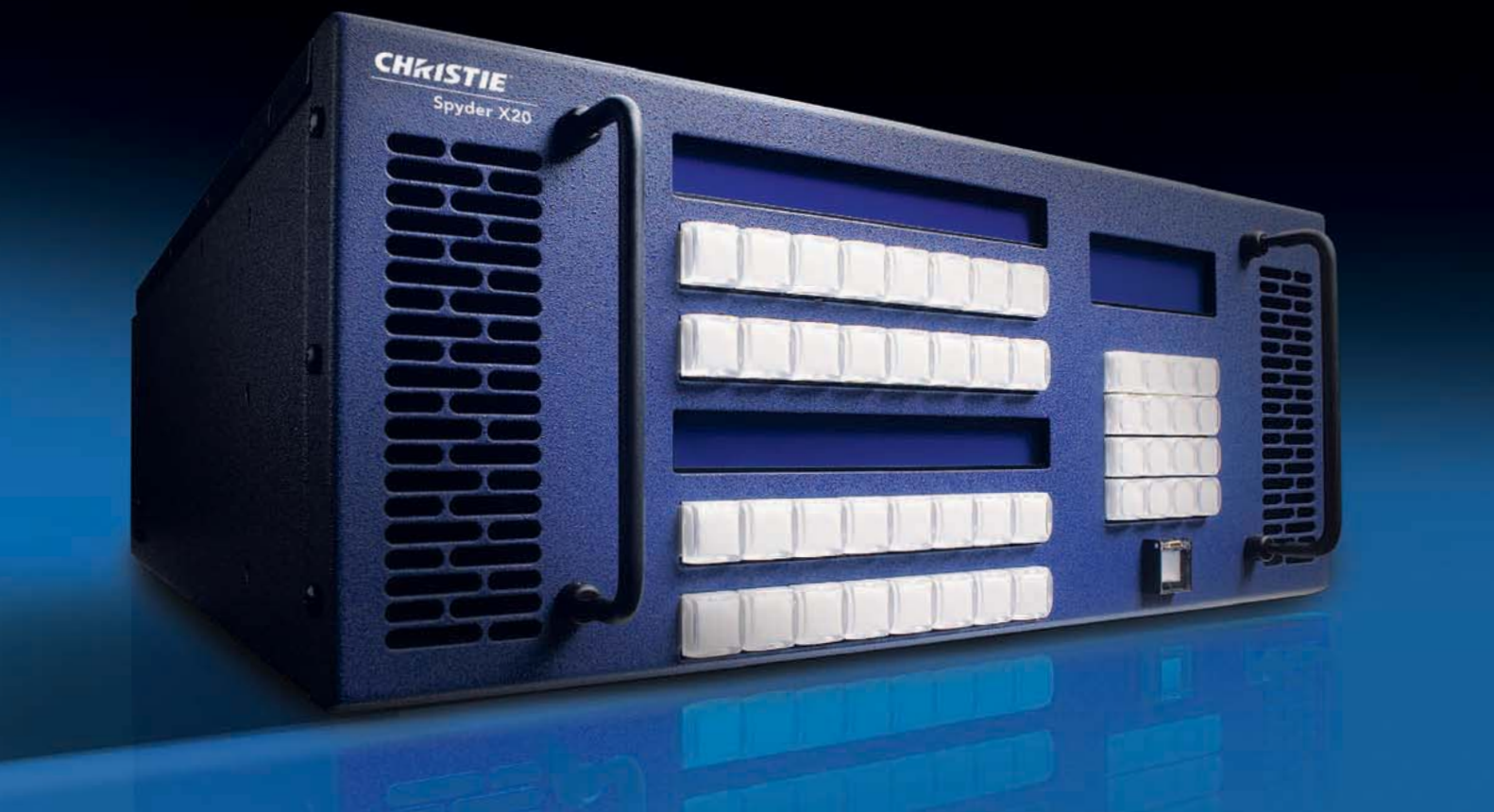
CHRISTIE®

Spyder X20

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



The next generation of video processing and matrix switching

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.

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.

With its 20 megapixel bandwidth, the Spyder X20 can 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).

The next generation of Spyder

This newest version of the Spyder is designed for users in any environment to take images from unique sources, with different appearances and the final display turns out as intended – automatically. It is ideal for applications such as high-end boardrooms, command and control, education, houses of worship and live events - any installation that has multi-windowing, multiple displays and processing requirements.

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 frame rate – seamlessly route any source to any user-configurable output
- 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)
- Overlay (key) capability – up to four sources can be layered onto each output for a multitude of needs, including background/ foreground transitions, PIP windows, bugs, lower-third titling, tickers, messaging, sign windows and more
- Single point of control for all processing and signal distribution functions from front panel, PC via Ethernet, or external control system
- 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 on a rack is reduced
- Each output individually supports rotation; enabling the creation of vertically-oriented displays
- 10-bit processing
- 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 in preview mode without affecting what the audience is seeing

Additional features

- Built-in image capture/Still Store functionality
- Auto set-up feature
- Intuitive graphical user interface (GUI)
- Simple cohesive control of all functions
- Redundant hot swappable power supplies
- Optional stereoscopic support
- Advanced auto-sync functionality

Software interface

The Microsoft ® Windows XP/Vista 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.

		Spyder X20-0808	Spyder X20-1608
Input	number	· 8 inputs · 4 supporting composite, S-video, component analog, HDSDI ,SDI , and 3G SDI (SMPTE 424M) · 4 supporting progressive DVI and progressive RGB HV	· 16 inputs · 8 supporting composite, S-video, component analog, HDSDI , SDI , and 3G SDI (SMPTE 424M) · 8 supporting progressive DVI and progressive RGB HV
	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 165MHz · DVI up to 265MHz	
	resolutions	· Up to 2560 x 1600 (any resolution greater than 2048 x 1200 uses 2 input channels)	
	scan rates	· Up to 120 Hz dependant on pixel clock rate maximum	
Output	number	· 8 @ (< 2048 x 1200) or 4 @ (2560 x 1600) or combination	
	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 165MHz · DVI up to 265MHz	
	resolutions	· Up to 2560 x 1600 (any resolution greater than 2048 x 1200 uses 2 output channels)	
	scan rates	· Up to 120Hz dependant on pixel clock rate maximum	
Control and networking		· RS-232 in/out · Ethernet (10/100)	
Enhanced feature sets		· Independent aspect ratio and frame rate set-up · Overlays · Transitions · Aspect ratio conversions · Integrated source monitoring · Built-in image capture · Output rotation (portrait) · Optional stereoscopic support	
Accessories	standard	· User manual (CD-ROM and quick manual) · 2 AC power cords · URS control software · Rack hardware	
Power requirements	operating voltage	· 100 VAC to 240 VAC @ 50/60 Hz	
	operating current	· 9.0A @ 100 VAC	
	power	· 900W	
	dissipation	· 3075B TU/hr max	
Dimensions	size	· 4 RU	
	dimensions	· (LxWx H): 21.9 x 17.3 x 7.0 " (556 x 439 x 178mm)	
	shipping dimensions	· (LxWx H) 28.0 x 24.3 x 13.0 " (711 x 617 x 330mm)	
	volume	· 2652in ^{3}	
	weight	· 59lb (27kg)	
	shipping weight	· 70.5lb (32kg)	
Operating environment		· Temperature: 5-40° C (40-105° F) · Humidity: 20-80% non-condensing	
Regulatory approvals		· This product conforms to the following regulations related to product safety, environmental requirements and electromagnetic compatibility (EMC): · UL/C SA/IEC 60950 (3rd Edition) · FCC Class A, CE, CCC · RoHS, WEEE	
Limited warranty		· 1 year parts and labor · Contact an authorized Christie representative for full details of our limited warranty	

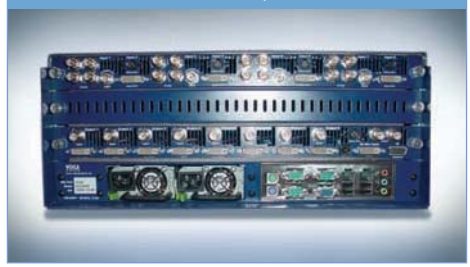
Front panel

▲ 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.

Rear panel

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

URS-0808 rear panel



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

Minimum PC Requirements

Microsoft Windows Vista Based Computers

Microsoft's Windows Vista 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 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 2 or later
· Microsoft .Net framework, Version 2.0 or later
· 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, and Vista cannot provide support for users using an emulator of any kind.