HView™ SX Hybrid

Scalable Multiviewer Solution for the Platinum™ Router with IP Decode Capability

Harris introduces the HView™ SX Hybrid multiviewer, designed for baseband or hybrid applications with monitoring of both traditional baseband video and IP signals. Going beyond the capabilities of conventional multiviewers, the HView SX Hybrid offers unrivalled functionality such as baseband and broadband monitoring, integrated test and measurement, remote desktop control via VNC and RSS feeds direct to the display. Integrated within the Platinum platform this multiviewer/router solution is built to reduce integration costs by providing a single system solution and enable a more efficient use of space in today's complex broadcast and A/V monitoring environments.

Available in four chassis sizes (5RU, 9RU, 15RU, 28RU), the HView SX Hybrid multiviewer is a scalable solution for monitoring from 32 to 512 baseband sources, with additional IP input capabilities. Platinum™ output capacity can be expanded by linking the inputs of two frames together using the Platinum distributed input expansion card – increasing the number of multiviewer and/or router outputs. With metadata monitoring, audio metering, rules based alarm management and best in class graphics HView SX Hybrid can provide.

FEATURES

- Multiple IP decodes with associated audio MPEG-2, MPEG-4/H.264 through 1 Gb/s Ethernet connection
- Up to 512 baseband inputs (HD, SD, analog, audio, fiber)
- Outputs up to 128 displays
- Available in four chassis sizes (5RU, 9RU, 15RU, 28RU)
- Full alarming on audio, video and metadata
- Scrolling PiPs
- Overlapping PiPs
- Onscreen control
- CC presence and text
- V-Chip identifiers
- Teletext capabilities
- Clocks and timers
- Aspect ratio markers
- Audio meters and phasev
- Rules Designer — automated action responses
- Integrated test and measurement windows
- VNC client-capable
- RSS support
- Built-in backgrounds
- Ability to control the router

PRODUCT DETAILS

Hardware

The HView SX Hybrid multiviewer is an output module that is added to the 5, 9, 15 and 28RU Harris Platinum chassis. The chassis has multiple input modules — auto-detecting HD/SD, analog and video, as well as a variety of audio cards. Each HView SX Hybrid multiviewer occupies four slots in the output section of the Platinum frame. The 5RU has eight output slots, the 9RU has 16, the 15RU has 32 and the 28RU has 64. In addition, the input sections of two frames can be linked together using the Platinum distributed input expansion card to increase the output capacity.

The HView SX Hybrid multiviewer has access to the entire signal matrix in the Platinum frame. Depending on the size of the frame, up to 16 HView SX Hybrid modules can be placed in one chassis — and each multiviewer is capable of driving two DVI-I outputs or four SDI outputs. As an example, a full 28RU chassis would be able to monitor 512 baseband input signals, and drive 64 independent HD-SDI monitors.

The Platinum chassis also has redundant crosspoint modules, redundant power supplies, redundant resource cards, and tie-line capabilities to increase the number of inputs that this hybrid multiviewer can access and display.

As an output module, the HView SX Hybrid multiviewer can be added to existing Platinum routers in the field, and be part of a system that has the multiviewer, video router and audio router in one frame. HView SX Hybrid also can reside alone in a frame and be used exclusively as a multiviewer with inputs received from an IP network, any router or distribution upstream.

Control

There are a number of options for controlling the HView SX Hybrid multiviewer.

Layout Designer (PC-based setup software) is used to create the layouts by arranging the PiPs on a screen, assigning alarm rules, selecting the resolution and developing the appearance of the screen that the user wishes to have. It can also be used to control the onscreen mouse remotely.

Other methods of control include the Harris NUCLEUS™ control panel, a built-in Web application, or a built-in onscreen control.

Additionally, with the onscreen mouse, the user will be able to call up a test and measurement PiP (video window in the layout on screen) for baseband signals, as well as signal information, or change specific sources to any PiP in a layout.

The HView SX Hybrid multiviewer is CCS-compliant, and can be seamlessly tied together with the Harris network monitoring and control software, CCS Navigator™. HView SX Hybrid and Navigator can generate alarm conditions and respond to system events. Additionally, both have rules engines and can collaborate over CCS — enabling powerful system-level behaviors.

For added flexibility, the HView SX Hybrid offers built-in VNC capabilities that allow the user to view and control other PC-based devices. This feature is activated by simply placing the onscreen mouse on top of the VNC window and clicking. The VNC window can be viewed at full screen or at PiP size with the multiviewer's onscreen mouse now operating as the device mouse over the PiP.

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Design

Simplified system design was a core consideration for the HView SX Hybrid multiviewer. As the number of signals in a facility grows, additional input modules are easily added, allowing the HView SX Hybrid multiviewer to accommodate from eight to 512 baseband inputs in a single chassis.

The rugged design of the system with a solid state drive and built-in redundancy make it ideal for control room applications, as well as OB truck operations.

Flexibility

Due to its inherent design flexibility, HView SX Hybrid can be customized to fit the unique needs of any application. The system can be baseband/broadband multiviewer and video/audio router in one frame, or it can comprise exclusively multiviewers. In all cases, the systems consist of inputs and outputs.

For example, a 72-input 5RU HView SX Hybrid system would consist of the following components:

Part No.	Description
PM-FR-5 (1)	5RU Platinum frame
PM-HS-IB (9)	HD/SD inputs
PM-72x64-3G5 (1)	5RU X-point 64x72

Harris HView SX Hybrid multiviewer (2)

This system would have connectivity for 72 3 Gb/s, HD or SD inputs that can be displayed on either four DVI or eight SDI screens. The input modules can be replaced with audio input modules for discrete audio capabilities or with fiber input modules in the field as needed.

Graphics

Award-winning Harris® Inscriber® graphics are built right into the HView SX Hybrid multiviewer, powering state-of-the-art image layouts. Layouts can be customized for each output using sharp, striking visual elements that result in a more effective, efficient control environment.

These high-quality graphical elements, combined with the monitoring and alarming capabilities, enable quicker response times, preprogrammed reactions, and faster access to video and audio references.

The advanced graphics engine drives multiple screens at independent resolutions with independent layouts.

Display

To maximize a facility's display potential, HView SX Hybrid drives multiple displays with varying resolutions. By driving up to 32 independent DVI outputs or 64 independent HD-SDI outputs from one chassis, HView SX Hybrid is an ideal solution for controlling multiple wall applications in multiple rooms, with multiple layouts.

Monitoring

The HView SX Hybrid multiviewer provides unprecedented access to a vast toolset that enables users to have more information at a glance and more control at their fingertips so they can respond faster to operational needs.

In addition to IP decoding capabilities, HView SX Hybrid goes well beyond traditional offerings by supplying built-in test and measurement capabilities for baseband signals, user rules creation (Rules Designer), onscreen control, VNC capabilities, RSS feed display and programmable events.

Since the HView SX Hybrid multiviewer resides within the Platinum framework, users get unmatched multi-image processing and an unsurpassed level of confidence that comes with using a world-class router.

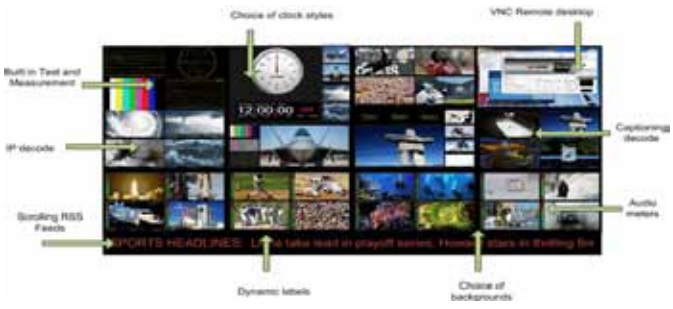
With the ability to access every video and audio input within a facility, HView SX Hybrid delivers a powerful solution that streamlines even the most complex monitoring applications:

The design of Harris hybrid multiviewer makes it the ideal tool to monitor system quality and provide control and facility system management. The multiviewer has the ability to access every video and audio input within a facility — simplifying the system design. This integration of functionality delivers a powerful solution that streamlines even the most complex monitoring applications:

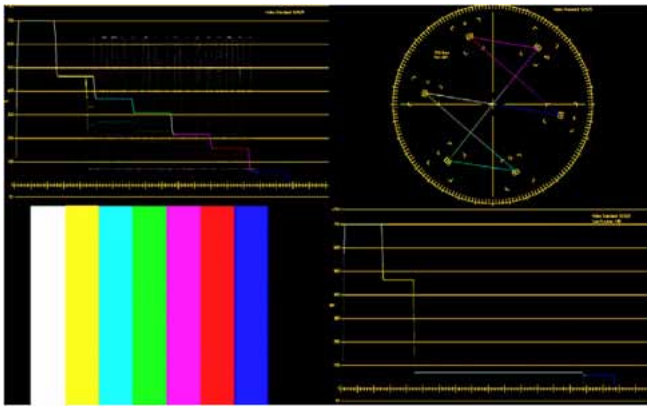
- Reduces cabling requirements — The HView SX Hybrid multiviewer uses the existing router fabric to connect to all signals in the system
- Simplifies expandability — Add another HView SX Hybrid module to the output to increase the number of processed images
- Reduces the rack unit requirements of most systems — No need to use rack space with separate image processors fed from distribution amplifiers or a separate router

IMAGES/DIAGRAMS

Hybrid Layout Hybrid



Test and Measurement Source



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SPECIFICATIONS

Specifications are subject to change without notice.

Output	2 DVI-I or 4 HD-SDI 2 AES audio
Input	Auto-detecting 3G/HD/SD Composite video input module Computer sources via VNC Fiber input module Analog input module Balanced AES audio input module Unbalanced AES audio input module Stereo input module LTC time code
Video Compression Formats	MPEG-2, MPEG-4/H.264
Audio Compression Formats	MPEG-1 Layer 2 AC3 E-AC3 AAC
Redundant Hot-Swappable Modules	Power supplies Crosspoint modules Resource modules
Connectivity	2x 1 Gb Ethernet ports 6 USB ports Serial port and breakout cable with 2 RS-232 and 2 RS-232/422 connections for Tally and UMD

Alarms

Video	Format change SD EDH error Loss of video Video freeze Video black
Audio	Audio channel missing Audio channel peak Audio channel low Audio channel silence Audio group 1 missing Audio group 2 missing Audio group 3 missing Audio group 4 missing Audio format change Dolby® E program change
Metadata	CC missing CC not updating CC not valid V-Chip mismatch Teletext missing Teletext not updating Teletext not valid VITC missing WSS missing WSS format change AFD missing AFD format change
Miscellaneous	GPI
Actions from Alarms	Change layout Change PiP source Counter reset Counter start Counter stop Fire global event Fire GPO Fire layout event Log message Make PiP full screen Router switch Send email Send SMS text message Set info panel alarm state Set label text Set PiP alarm state Set tally alarm state Set window alarm state Show message box Show waveform
Test and Measurement	Displays for any selected input a choice of line (luminance), line parade (luminance and colour difference), waveform (sweep of luminance channel), waveform parade (sweep of luminance and colour difference), vector gamut, or quad view of any four

Electrical

Redundant Power Supply (optional)	100 to 240 V AC 50/60 Hz
Power Consumption	255 W

ORDERING INFORMATION

System

HV-SXH-32x2	4-slot hybrid multiviewer for Platinum frames, 32 baseband inputs x 2 displays (or 4 via HD-SDI), IP decode, remote desktop control over VNC and advanced graphical processing capabilities
Layout Designer	Configuration software included at no charge

Options

All Included	All options are included in the Hybrid system — Tally, UMD, audio, metadata (CC 608/708, VChip, test and measurement)

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