

Network Monitoring and Control



Monitoring and Control Family of Products

Centralized and Simplified Monitoring and Control

Broadcasters today require more than the simple ability to control an individual product from one location — they require centralized, real-time monitoring and control of a variety of products at stations across the country and, in some cases, around the world. In the event of a problem, operators must be quickly notified and be able to take immediate corrective action. With a wide range of monitoring and control products — including the CCS Navigator™ advanced graphical navigation application, the NUCLEUS™ user-configurable network control panel and Q-SEE™ customizable HD/SD monitoring technology — Harris enables comprehensive monitoring and control of both Harris and third-party products within a broadcast network.

CCS Navigator — A total software monitoring and control solution that delivers a centralized view of your operations.



NUCLEUS — A next-generation hardware control panel that unifies and streamlines your entire system infrastructure.



Q-SEE — Customizable HD/SD monitoring technology with advanced alarm thresholds, thumbnails and optional MPEG-4 streaming.



CCS Navigator™

CCS Navigator is our most advanced CCS™ software application, empowering the user to have a centralized view of their operations. It is a Windows®-based application that provides real-time control and monitoring of your facilities. CCS Navigator provides an intuitive graphical interface that mirrors your operating environment, and in the event of a problem, operators can quickly drill down to the issue for a faster response time and a quicker MTTR (Mean Time to Repair).



A Single Control System for Harris and Third-Party Equipment

Maintaining full control of their operations is critical for today's broadcasters. CCS Navigator not only allows for comprehensive control of Harris equipment, but also enables full monitoring and control of third-party equipment via IT industry-standard SNMP. No matter how geographically dispersed your network— across the room or across the globe — CCS Navigator allows you to centrally control and monitor your operations.

Real-Time Monitoring and Control

CCS Navigator provides all of the control and monitoring capabilities you'd typically expect with a hardware control panel, including access to every device within the network; the ability to change parameter values in real time; and the ability to monitor alarms generated from each device within the network.



Intuitive and Easy to Use

CCS Navigator permits operators/users to view networks in a more intuitive manner. This is driven by user-supplied GUIs (Graphical User Interfaces) that visually represent operational environments. The GUIs (which can be imported from many sources, including JPEGs, CAD drawings, system schematic diagrams and maps) make it easier to understand what is happening in a network. Alarms flash directly on a graphical representation of a system. Any alarm that originates within the network will be indicated on each page associated with the device. Regardless of which page the operator is on, he will always know when there is something wrong that needs to be addressed.



Threshold Monitoring and Automated Action Responses

Automatic monitoring of Harris and third-party devices is a key benefit of CCS Navigator. Alarm functions can be set to automatically notify the user when equipment goes off-line or is functioning incorrectly. The CCS Navigator alarms and warnings can be filtered differently for each user, and settings are available for each device on the network. Notifications can be shown on-screen, logged to a database and automatically e-mailed to one or more e-mail accounts. Additionally, if certain thresholds are met, automated action can be taken, such as reverting to a backup system or executing a MACRO for multiple action responses.

Rapid Problem Isolation and Repair

To accurately pinpoint any issues that arise, broadcasters need a monitoring and control solution that provides all the necessary details. Harris control and monitoring solutions allow the user to quickly identify the problem with only a few mouse clicks — right down to the specific card in the frame — allowing for a faster response time and ultimately, a shorter MTTR.



FEATURES

- Rich, intuitive graphical views allow operators to quickly identify alarms, thereby reducing MTTR
- Geographic views provide multi-site views
- Operational views provide facility-based views
- Maintenance views provide video path and device views
- Software-based, real-time control and monitoring
- End-to-end monitoring and control system for Harris and third-party products
- Searchable alarm logging
- Secure and restricted user access
- Access to Harris product user manuals
- Network control panel configuration
- Client-Server architecture, allowing centralized administration and streamlined change management
- UNICODE or multi-lingual support (available in version 4.2 and above)
- Ability to embed ActiveX components (e.g., Flash movies or Web browsers)
- GUI supports video thumbnails and MPEG-4 streaming through Q-SEE technology
- Creation and placement of action/status hotspots over user-supplied images
- Wizards enable quick creation of control panel surfaces to control/monitor routers
- Wizards enable quick creation of processing frame views
- Rendering of events across multiple pages
- Single button to launch single or multiple presets
- Single click to launch Web-based applications
- Auto-pilot capabilities using Event-Action Rules Engine
- Ability to create MACROS (stacked actions)

NUCLEUS™ Control Panels

NUCLEUS, a next-generation 2RU network control panel, and NUCLEUS-DM, a deskmount network control panel, unify and streamline the operation of routers, master control products, multiviewers, processing products, remote monitoring products and SNMP-enabled third-party products with a fully user-configurable interface. NUCLEUS is completely user programmable by means of an intuitive panel wizard, ensuring that each network control panel can be tailored to meet the exacting demands of every user.

Easy Setup and Configuration

NUCLEUS is user configurable with CCS Navigator-Build Mode. (Note – Navigator Build Mode is provided free of charge with the NUCLEUS panel.) An intuitive step-by-step wizard guides the administrator through the configuration of the panel.

Customizable Multi-device Control Panel

NUCLEUS provides flexibility and a streamlined approach to device control. With the ability to control many devices using a logical menu/navigation structure, NUCLEUS allows users to quickly execute a series of complex device control changes with a few simple button presses.

Real-time Monitoring and Control

NUCLEUS provides real-time control with the fastest and smoothest parameter adjustments. With the addition of advanced real-time alarm management capabilities, NUCLEUS provides the most versatile hardware panel in the industry.

Device Control

NUCLEUS control is centered on a full-color display. It provides four knobs for immediate access to continuously variable controls. NUCLEUS also provides four soft keys, as well as assignable LCD keys for immediate access to additional device parameters. All parameters are immediately active as soon as they are displayed. In addition to making use of the Harris CCS-protocol, NUCLEUS also has the unique ability to use industry-standard SNMP (simple network management protocol) to assign parameters directly from a third-party product MIB (management information base). This gives NUCLEUS the unparalleled capability to control any device within a broadcast network while saving cost and reducing complexity.



Virtual Devices

Create virtual devices by linking up to five individual devices together under a common name. Combine separate audio, video and conversion devices together to speed up user access to logically associated functions. Virtual devices may contain multiple products with different IP addresses.

FEATURES

Supports up to five different password-protected configurations

- Fully customizable user interface for processing devices
 - Controls assignable to four knobs and four soft keys
 - User device names downloaded to LCD navigation buttons
 - Preconfigured control layout for IconLogo™ operation
- Real-time control of any Harris processing product
- Advanced SNMP engine for third-party integration and control
- Ability to store up to eight presets per device
- Operator-assigned “Unity” preset per device
- Fully customizable user interface for router control
 - Single-bus operation
 - Multi-bus operation
 - X/Y operation
 - Category/index selection
 - Direct source selection
 - Salvo buttons
- Ability to store up to eight router destination(s), router source or custom router salvo per routing device
- NUCLEUS-TRAX option to automatically track router crosspoint selection
- Operator-assigned “Home” key, which returns user to a specific point within the NUCLEUS configuration
- High-resolution color display
 - View thumbnail generated by any QSEE-enabled products
- Alert when multiple panels try to control the same device
- USB support
- Copy configurations from one panel to another
- Store/load device parameter settings
- Videotek® legalizer support
- Multiviewer support
 - Predator™ II-GX, QVM6800+

Advanced Video Probing and Streaming

Low-Cost MPEG-4 Streaming

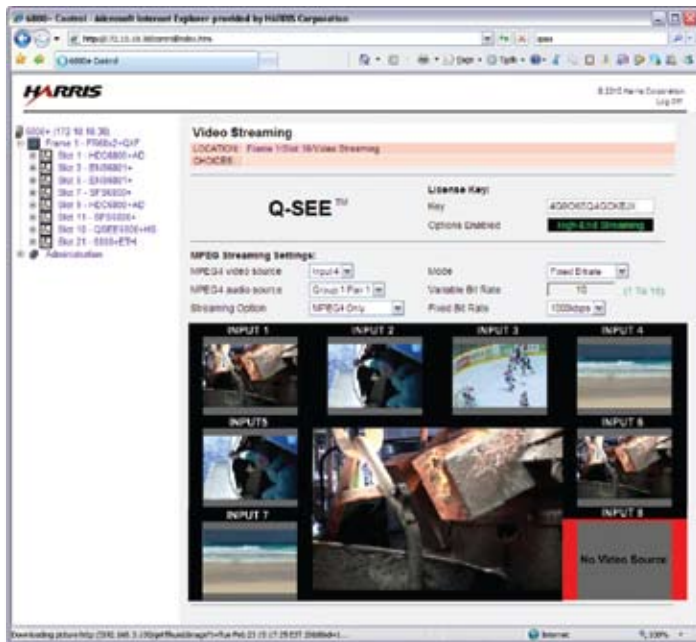
Harris® Q-SEE technology enables live video and audio viewing of onsite or remote video streams at bitrates of 200-1000 kb/s (fixed) or up to 1500 kb/s (variable). Q-SEE can be integrated into CCS Navigator or can be embedded into a Web browser or any media player that uses RTSP streaming.

Advanced Monitoring and Control

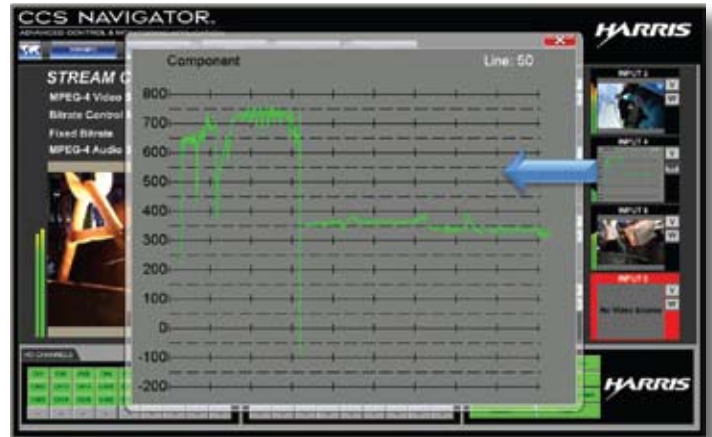
The new QSEE6800+H module for the 6800+™ core processing platform provides detailed quality control measurements for up to eight HD/SD signals with four groups of embedded audio. Each input provides a true aspect ratio thumbnail (three sizes possible) to complement the detailed quality control metrics. Each of these thumbnails can be displayed within CCS Navigator, providing an accurate view of activity within a facility. Signal paths with errors can be singled out for more detailed analysis or corrective action.

Web Browser Control and Thumbnail Viewing of Q-SEE and Q-SEE-Compliant Module Output

This free new feature — using our baseline frame control Ethernet resource module along with the QSEE6800+ or Q-SEE-compliant module — allows quick and easy access to view thumbnail streams using a standard Web browser. The technology is cross platform-capable and allows thumbnail viewing on standard mobile browsers.



Quality Control Signal



Flexibility in Test and Measurement Applications

Q-SEE also provides flexibility in Harris test and measurement solutions, such as the Videotek VTM Series™. In these instruments, Q-SEE enables total customization of the display, allowing the user to choose which of the available signals is being monitored and where the information is being displayed.

6800+ Modular Signal Monitoring Image

Our newest, next-generation 6800+ products support Q-SEE and provide similar sets of alarm thresholds as the QSEE6800+H module. However, in this case, the alarms are specific to the functionality of the module. A 6800+ frame will support a dedicated thumbnail bus to carry thumbnails from each module to an IP-based monitoring network.

FEATURES

- Standalone module that permits user-customizable alarm criteria, scalable thumbnail viewing and MPEG-4 monitoring streaming
- Generate thumbnail for each input; three possible thumbnail sizes
- Generate waveform and vectorscope representations of the signal
- Generate MPEG-4 confidence streaming video
- Scalable up to eight inputs; supports up to four groups embedded audio

ONE Company for Workflow Solutions Throughout the Media Chain

Harris is the ONE company delivering interoperable workflow solutions across the entire media delivery chain — providing today’s broadcaster with a single, integrated approach to capitalize on the benefits of IT and mobile applications. By providing unparalleled interoperability across our product portfolio, Harris is able to offer customers integrated solutions that improve workflows, save money, enable new revenue streams and provide a migration path to emerging media business models. To meet the evolving needs of broadcast, distribution, government agencies and entertainment businesses, Harris is the ONE answer for change.

Service And Support

At Harris, we are committed to customer service excellence. It is our goal to provide the highest level of support by applying a simple rule: We take ownership of helping our customers succeed. Our support teams consist of innovative technical experts who support all situations regarding product performance, integration and operational processing. We are adept at providing proven solutions, making workflows better and ensuring reliability of the product and system. At Harris, our experienced and dedicated teams stand ready to help you meet your goals for premium product performance, 100% up-time and reduced maintenance investment.

Warranty

Because we want to assure you that Harris stands beside its products and system solutions, our products carry a standard set of warranty services, which are competitive with — and in some cases outperform — others in the industry.

Service Packages

We offer value-add services that allow you to customize the level of services you need in meeting mission-critical performance levels. Our service package options offer many ways to upgrade your standard warranty by choosing the All-Inclusive OnePak, or by selecting individual services from our extensive portfolio. Our service and support advisors can assist in the selection of the individual services that best suit your requirements.

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For more information, please visit www.broadcast.harris.com.

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