

# NUCLEUS™

## User-Configurable Network Control Panel



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: CCS 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. Some licensed features can be set up locally at the panel by selecting a device and setting an IP address.

### 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 is the most versatile hardware panel in the industry.

### 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
- Practical real-time control of any Harris processing product
- Store up to eight presets per processing device
- Operator-assigned Unity preset per processing 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
- 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 returns user to a specific point within the NUCLEUS configuration
- High-resolution color display
  - View thumbnail generated by any Q-SEE™-enabled products
- Alert when multiple panels try to control the same device
- Supports SNMP for controlling third-party products
- USB support
  - Copy configurations from one panel to another
  - Store/load device parameter settings

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### PRODUCT DETAILS

#### Device Navigation/Menuing

NUCLEUS allows users to directly select devices for control purposes in one of three ways:

- Direct device selection: link a device directly to a programmable LCD button
- Category/index device selection: for larger networks, divide devices into logical, intuitive user categories to speed up access to a specific device
- Numeric index device selection: assign a device a numeric index, and use the numeric keypad to select the specific device

#### 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 products with different IP addresses.

#### 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.

#### Operator-Assigned Presets

Users can store device settings as presets and assign them to any of eight separate buttons. Each device can have up to eight presets. Presets can be recalled by pressing the button.

#### Operator-Assigned Unity

In some cases, users may need to quickly restore device parameter settings back to a known zero state. NUCLEUS permits the user to assign a Unity setting for each device. To invoke Unity, one of the LCD programmable buttons must be configured to permit this capability. This is set up with the panel configuration wizard.

#### Routing Switchers

NUCLEUS allows users to gain access to routers of any size. NUCLEUS has been optimized for large router operation.

#### Customized Destination/Source Selection

NUCLEUS is configured with an advanced wizard that makes use of the router database. NUCLEUS operation can be customized, by means of filters, to only show necessary destinations and sources. Operation can be tailored to the exact needs of the user. NUCLEUS supports multiple operational modes.

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### Fully customizable User Interface for Router Control

- Single-bus operation
- Multi-bus operation
- X/Y operation
- Category/index selection
- Direct source selection
- Salvo buttons
- Full breakaway audio control

### Operator-Assigned Presets

Users can store multiple router destinations as a preset, a single source as a preset and/or create a custom salvo and assign them to any of eight separate buttons. Salvos created with a NUCLEUS panel are not globally accessible by all Harris routing control panels. Each routing device can have up to eight presets. Presets can be recalled by pressing the button.

### IconLogo Branding

NUCLEUS allows users to control any IconLogo branding system in a live, operational environment. NUCLEUS has been customized with a specific user interface that allows operators to load logos, manipulate their transparency and position and transition logos to air.



### Consistent Operator User Interface

Users can easily create a NUCLEUS configuration to enable quick and easy access to IconLogo devices. A configuration with multiple IconLogo systems can be created directly from the front panel. Furthermore, it is possible to slave multiple IconLogo systems together so that an operator can control multiple channels simultaneously. The IconLogo user interface is hard coded and cannot be modified by the user.

### SNMP Engine

Users can now transfer MIBs and panel configurations for SNMP third-party devices, allowing NUCLEUS to become an all-in-one multi-device panel. This option requires CCS Navigator (Build Mode) to configure the SNMP and transfer MIBs to the panel.

### USB Support

NUCLEUS supports a USB interface. This interface allows users to copy/load panel configurations (NUCLEUS supports up to five different password-protected configurations) from one panel to another. The interface also permits presets to be saved offline to USB.

### Multiviewer Support

Through the multiviewer option, NUCLEUS is now able to support many of the multiviewer products in the Harris portfolio. Configure the CENTRIO™ multiviewer through CCS Navigator for a combination of routing and parameter control. Setup is a breeze for the QVM6800+ and the Predator II-GX™ multiviewers — users can add IP addresses locally on the panel with no custom setup or configuration!

### ORDERING INFORMATION

NUCLEUS-PROC . . . . .	2RU network control panel with processing control software	NUCLEUS-MV-DM . . . . .	Deskmount network control panel with multiviewer control (QVM6800+, CENTRIO and Predator II-GX)
NUCLEUS-RTR . . . . .	2RU network control panel with routing control software	NUCLEUS-SNMP-DM . . . . .	Deskmount network control panel with SNMP capabilities
NUCLEUS-LOGO . . . . .	2RU network control panel with IconLogo control software	NUC-OPT-PROC . . . . .	Processing control software option
NUCLEUS-MV . . . . .	2RU network control panel with multiviewer control (QVM6800+, CENTRIO and Predator II-GX)	NUC-OPT-RTR . . . . .	Routing control software option
NUCLEUS-SNMP . . . . .	2RU network control panel with SNMP capabilities	NUC-OPT-LOGO . . . . .	IconLogo control software option
NUCLEUS-PROC-DM . . . . .	Deskmount network control panel with processing control software	NUC-OPT-MV . . . . .	Multiviewer control software option (QVM6800+, CENTRIO and Predator II-GX)
NUCLEUS-RTR-DM . . . . .	Deskmount network control panel with routing control software	NUC-OPT-TRAX . . . . .	Router follow software option (must have NUC-OPT-PROC)
NUCLEUS-LOGO-DM . . . . .	Deskmount network control panel with IconLogo control software	NUC-OPT-SNMP . . . . .	SNMP control software option
		NUCLEUS-QSNT . . . . .	1-day NUCLEUS quickstart commissioning (travel expenses additional)