FSN Series Multi-format Production Switchers

The Fusion of Production Switching and Barco Image Processing Expertise



The FSN series is a new high-resolution, 3G ready production switcher that combines advanced video switching functionality with the power and flexibility of Barco image processing. By seamlessly integrating video and computer graphics formats, the FSN series provides a streamlined multi-format package that's modular, easy to operate, and easy on your budget.

Imagine the power —

- Native HD or SD operation, cross-conversion, frame synchronization and selectable native output formats (480i, 576i, 720p. 1080i).
- Unprecedented input and output flexibility, using the power of Barco's Athena scalers. The system's architecture enables you to install up to five dual-channel universal input cards, and up to two dual-channel universal output cards. By seamlessly integrating analog, digital, and computer resolutions into your workflow, the FSN series places serious input and output power at your fingertips.
- Internal storage of 100 still frames (with up to three frame buffers on line simultaneously), up to four channels of optional internal 2D DVEs, and integration with the Encore Presentation System.
- · A minimum two lines of delay for native genlocked inputs.
- · 3G ready

The FSN series delivers — with a highly configurable multi-format system that enables users to adapt to today's continuously demanding live production environment — at an extremely economical price point. As the industry's next generation switcher, the FSN series represents the perfect fusion of production switching, Athena scaling, and the roadworthiness you've come to expect from Barco.



Custom Control Section

Buttons can be programmed to perform functions such as GPO triggers, macros, freeze, menu access and more. The FSN-150 includes eight custom buttons; the FSN-250 includes 24.

USB

Enables users to backup and restore the system, download stillstores, and update system code.

Memory Section

Enables users to store and recall complete or partial switcher setups using 1000 memory registers. This advanced memory system includes high-end features such as enables/disables.

Aux Section

Assigns sources to native or (optional) scaled Aux bus outputs. Buttons are provided for 16 Aux outputs. Additional Aux outputs are switched on the GUI.

M/E Transition Section

Provides controls for creating cuts, mixes, wipes and keys. The LCD display indicates key sources, the transition rate and the active memory register.

LCD Displays

Programmable hi-resolution LCD displays show all source names. All displays are angled for easy viewing.

Instant Transitions

This section provides instant CUT or MIX functions for both keyers, regardless of T-Bar position.

M/E Banks

Each M/E includes Background (BG), Preset (PST), and Key buses. Buttons can be assigned to inputs, color backgrounds, stills and test patterns. A dedicated BLACK button is provided.

PGM/PST Bank

The PGM/PST bank includes PGM and PST buses plus a phantom key bus. Programmable hi-resolution LCD displays are also included. All buses operate in "flip-flop" mode.

PGM/PST Transition Section

Provides controls for creating cuts, mixes, wipes, a downstream key (DSK) and a fade to black (FTB). The LCD display indicates the DSK source, transition rates for DSK and FTB, and the active memory register.

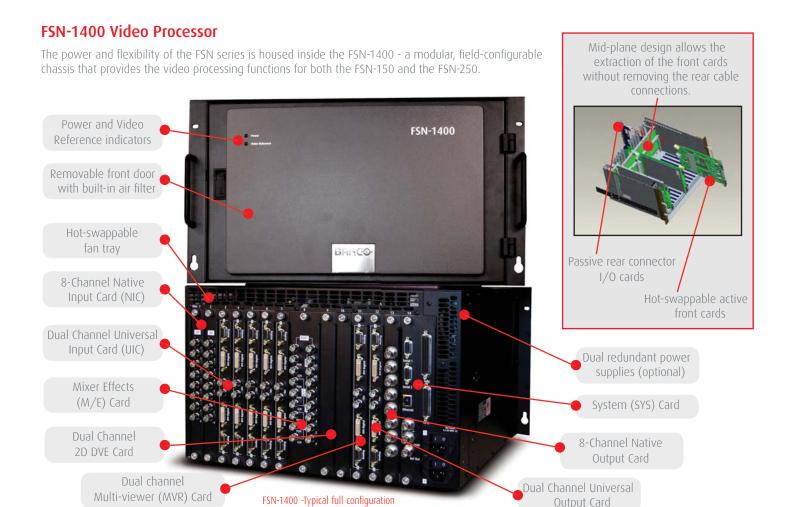
FSN-250



FSN-250 (Future Release)

In addition to the FSN-150 functions, the FSN-250 provides:

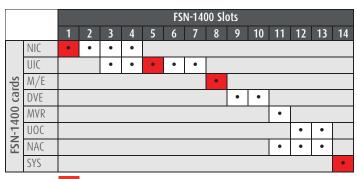
- · An additional full M/E bank with 2 dedicated keyers
- 52 assignable crosspoints (26 buttons plus SHIFT)
- 16 Custom buttons
- Expanded Aux Output section with four programmable banks



Fusion Power

Standard Cards — Within the FSN-1400 chassis, four standard cards provide the system's raw horsepower:

- One **Native Input Card** (NIC) provides eight native HD-SDI or SD-SDI inputs, plus frame synchronization and auto-timing.
- One dual-channel Universal Input Card (UIC) provides the power
 of two Barco Athena scalers. The card offers frame synchronization,
 auto-timing and seamless integration of analog, digital (DVI, SD-SDI,
 HD-SDI), and computer resolutions up to UXGA or 1920x1080.
- One Mix Effects Card (M/E) provides PGM, PVW and CLEAN outputs for each M/E. The card also provides native Aux outputs 1 through 6, plus dedicated DSK cut/fill inputs.
- One System Card (SYS) provides video reference connections, Ethernet and dual serial communications ports, a tally connector (24 tallies) and a GPIO connector (four input and eight output ports).



Provided with the Base system

Optional Cards — You can create a precise multi-format configuration for every event, using the flexibility of the system's powerful options:

- Install up to three additional Native Input Card (NIC), for a maximum of 32 native inputs.
- Install up to four additional dual-channel Universal Input Cards (UIC), each card providing the power of two Barco Athena scalers.
- Install up to two dual-channel **Universal Output Cards** (UOC) each card providing the power of two Barco Athena scalers, with selectable output resolutions up to UXGA,1920x1080 and 2048x1080p (Future release).
- Install up to two dual-channel 2D Digital Video Effects Cards (DVE), enabling you to create up to four high-resolution PIPs (picture-inpicture effects) using Athena Scalers (Future release).
- Install one 16-channel Multi-viewer card (MVR) allowing you to monitor up to 16 sources or outputs on one or two monitors. All connections to the card are internal to the FSN-1400, simplifying setup and minimizing costs (Future release).
- Install up to three eight-channel Native Aux Output Cards (NAC), enabling you to switch additional outputs (Future release).

Note: You can install only one Universal Output Card with a Multi-viewer Card.

Graphical User Interface (GUI)

An essential part of the FSN's ease-of-use is the graphical menu system. The menus provide an intuitive, user-friendly environment that allows operators to efficiently set up the unit and perform quick modifications.

The entire display includes a high-resolution color touch screen that also includes four rotary knobs that allow users to easily modify switcher parameters.







Specifications

	ТҮРЕ	FORMAT
INPUTS	8 standard SD/HD SDI Inputs and up to 30 additional inputs with optional cards	SMPTE 424M, 292M, 259M-C
	2 standard universal Inputs (SD/HD, DVI, Analog) and up to 8 additional universal inputs with optional cards	SMPTE 424M, 292M, 259M-C DDWG 1.0 RGBHV/RGBS/RGSB, YPbPr video, S-video, Composite
	Dedicated Native Cut and Fill SD/HD SDI Inputs	SMPTE 424M, 292M, 259M-C
OUTPUTS	1.5ME: 7 SD/HD SDI Native outputs for Program/Preset/Clean 2.5ME: 13 SD/HD SDI Native outputs for Program/Preset/Clean	SMPTE 424M, 292M, 259M-C
	6 standard Native SD/HD SDI Aux Outputs and up to 8 additional native outputs with optional card	SMPTE 424M, 292M, 259M-C
	Up to 4 optional universal outputs (SD/HD, DVI, Analog)	SMPTE 424M, 292M, 259M-C DDWG 1.0 RGBHV/RGBS/RGSB, YPbPr video, S-video, Composite
	Multi-viewer: Up to 16 windows on one or two SD/HD, DVI, Analog outputs	SMPTE 424M, 292M, 259M-C DDWG 1.0 RGBHV/RGBS/RGSB, YPbPr video, S-video, Composite
CONTROL	Analog Ref Input/Loop/Output on a BNC connector	Bi-level and Blackburst at SD Tr-level at HD
	GPIO: 4 Inputs and 8 outputs on DB25	
	Tally Outputs: 24 contacts on DB50 up to 30VDC at 1 Amp	
	Ethernet communication between FSN150 and FSN1400	10/100Base-T

Resolutions

VGA (640x480)through UXGA (1600x1200), HDTV (720p,1080i, 1080p), 2048x1080, Plasma Display Resolutions

Mechanical			
FSN-1400	6RU: 19" W x 10.5" H x 20.75" D (max) (48.26cm W x 26.67cm H x 52.7cm D (max))	58 lbs (26.5 Kg)	
FSN150	22" W x 7" H x 24" D (55.88cm W x 17.78cm H x 60.96cm D)	26 lbs (12 Kg)	
Display	11.6" W x 9.7" H x 2.67" D max with knobs (29.46cm W x 24.64cm H x 6.78cm D with knobs)	5 lbs (2.5 Kg)	
Stand	14" W x 13" H x 10" D (35.56cm W x 33.02cm H x 25.4cm D)	8 lbs (3.75 Kg)	

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