

HX-1 AND HX-2



HX-1



HX-2 Control panel shown. Also includes 1RU electronics chassis.

Rugged, portable, and designed to excel in today's most demanding high-definition production environments, the brand-new HX line of HD video switchers from Focus Enhancements not only meets the highest broadcast standards, but also provides an array of simple-to-operate features. Whether you're conducting a live outside broadcast or shooting inside a production studio, the Focus HX-1 Portable HD Video Switcher and Focus HX-2 HD/SD Video Switcher enable you to switch seamlessly between video sources and blend high-quality digital content on the fly.

HX HD Video Switchers

Designed from the inside out to excel in today's demanding high-definition production environment, HX HD video switchers are easy to set up and operate, feature full 10-bit internal processing, generate superior-quality video effects, and meet the highest broadcast standards.

Models

Focus HX HD video switchers are available in two models—the Focus HX-1 Portable HD Video Switcher and the Focus HX-2 HD/SD Video Switcher.

Key Features

MODEL	HX-1	HX-2
Inputs		
HD-SDI only (each with its own active loop-through output)	4	—
HD-SDI or SD-SDI	—	8
External SD/HD-SDI Key Inputs (DSK and Fill)	—	2
Outputs		
HD-SDI only (2 x Line/Program, 2 x Preview, 2 x Video Effects)	6	—
HD-SDI or SD-SDI (2 x Line/Program, 1 x Preview, 1 x Video Effects, 1 x Utility 1, 1 x Utility 2, 1 x Key Channel)	—	7
Robust Functionality		
2D DVE (see page 2 for a complete list)	—	•
Mixing and Wipes (eight wipe patterns)	•	•
Video Delay	1H	1H
External Reference Signal Integration (active loop-through)	•	•
Frame Synchronizer (all inputs)	•	—
Rugged Construction		
Professional, rugged metal enclosure with high-quality back-lit channel buttons, LCD display, and machined aluminum fader bar with extremely smooth operation	•	•
Easy to Set Up, Learn, and Use		
Simple to integrate into a variety of equipment configurations	•	•
Intuitive layout for easy operation	•	•

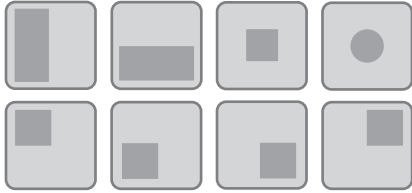
Applications

Broadcast

- News Production
- Outside Broadcast
- Rental
- Small Studio
- Sports

Other

- Education
- Event production
- Government
- House of Worship



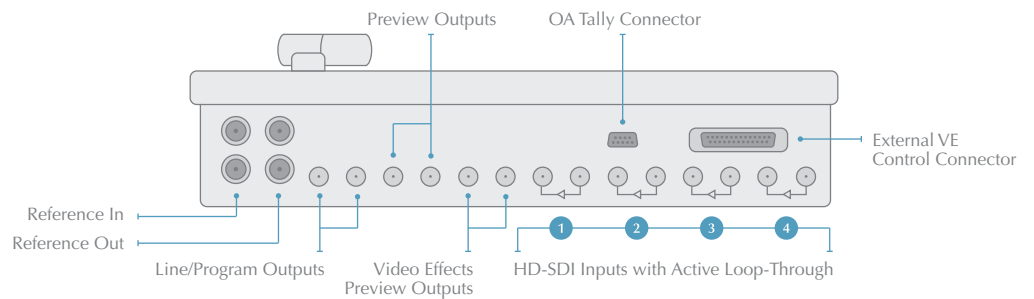
Wipe Patterns

Digital Video Effects

MODEL	HX-1	HX-2
Wipe Patterns		
Vertical	•	•
Horizontal	•	•
Top Left	•	•
Top Right	•	•
Bottom Left	•	•
Bottom Right	•	•
Center Square	•	•
Center Circle	•	•
Wipe Controls		
Aspect Ratio (center circle and center square wipes only)	•	•
Border (adjustable color and size)	•	•
Position (center circle and center square wipes only)	•	•
Soft Edge (adjustable)	•	•
Take Bar Functions (limit, normal, and reverse)	•	•
Key and 2D DVE Functionality		
Chroma Key (slice, gain, trim, fade, and hue adjustment and cursor selection control)	—	•
DSK Key (matt, edge, slice, gain, and fade control)	—	•
Mosaic (adjustable)	—	•
Picture Squeeze and Slide (wipes)	—	•

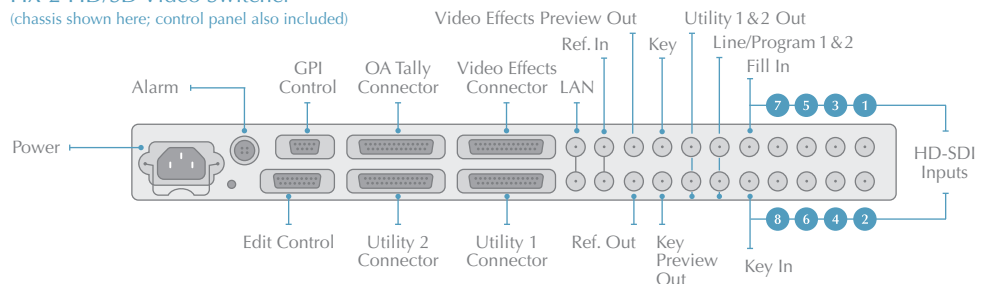
Ports

HX-1 Portable HD Video Switcher



HX-2 HD/SD Video Switcher

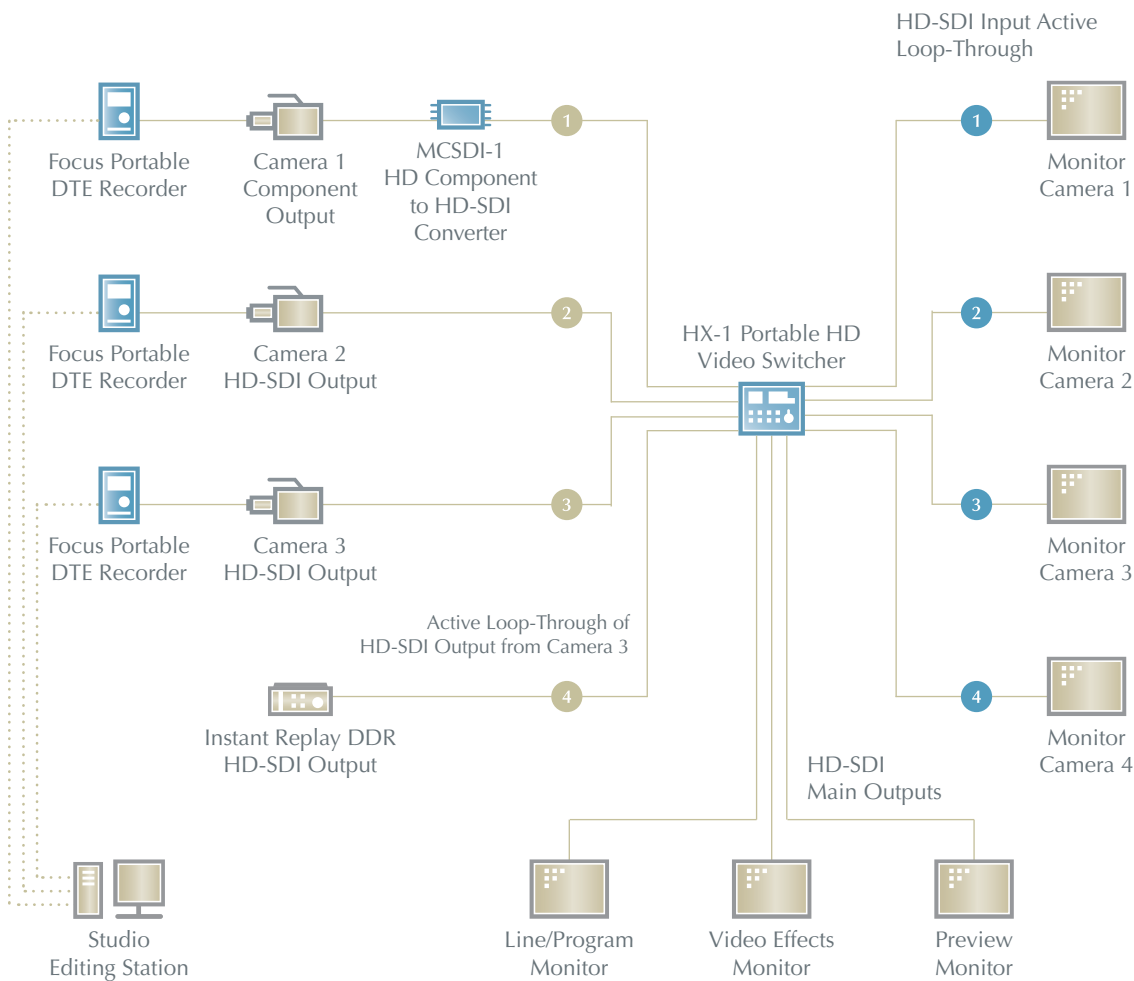
(chassis shown here; control panel also included)



Live HD Switching Solution

The Focus HX series of switchers is perfect for a variety of workflow solutions. For instance, the HX-1 is ideal for location shoots—such as news, sports, and live music events, plays, musicals, and conferences—that require up to four sources, including HD cameras, video-tape recorders, and digital disk recorders. The following diagram depicts a typical configuration for a truck-based broadcast that uses the HX-1 Portable HD Video Switcher.

Live Production Example



FS-4 HD and FS-4Pro HD recorders enable you to edit instantly. When you use cameras with time code in/out, all FS units will have matching time code.

Support

When you purchase video production solutions from Focus Enhancements, you not only receive reliable products that deliver superior performance every day, you also receive unconditional service and support from a team of seasoned video professionals. All products are backed by comprehensive warranties and optional support contracts that cover installation, training, 24/7 phone support, and priority parts replacement.

Consultation

With extensive experience in designing, configuring, and integrating video production solutions for leading companies around the world, the Focus team can help you select the right products for your business. If you have special requirements, solution consultation and custom configuration services are available.

Technical Specifications

MODEL	Focus HX-1	Focus HX-2
	Portable HD Video Switcher	HD/SD Video Switcher
Video Formats	1080i/59.94i; 1080i/50; 720p/59.94i	1080i/59.94i; 1080i/50; 525/60
Video Inputs	4 x HD-SDI (SMPTE 292M* 720p/1080i; 75-ohm; BNC); 2 x reference video inputs (BNC); 2 x tri-level sync (0.6 Vpp) or BB (0.429 Vpp) with loop-through (BNC)	8 x HD-SDI (SMPTE 292M* 1080i/525i; 75-ohm; BNC); 2 x HD-SDI (SMPTE 292M* external key and fill inputs; BNC); 2 x reference video input (BNC); 1 x tri-level sync (0.6 Vpp) or BB (0.429 Vpp) with loop-through (BNC)
Video Outputs (SMPTE 292M*; 75-ohm; BNC)	4 x HD-SDI (one active loop-through per input); 2 x HD-SDI line/program outputs; 2 x HD-SDI preview outputs; 2 x HD-SDI video effects preview outputs	7 x HD-SDI outputs: 1 x video effects; 1 x key; 1 x preview, 2 x utility; 2 x line/program
Processing	10-bit internal processing	10-bit internal processing
Control and Tally	1 x video effects control port (25-pin D-sub); 1 x tally output (1 channel red; negative true logic open-collector output; DB-9)	1 x video effects control port (25-pin D-sub); 1 x tally output (1 channel red; channel green) (DB-25); 1 x external control panel port (BNC); 2 x utility 1 and 2 control port (25-pin D-sub)
Power Source	12V DC; 48VA	90-240V AC 50Hz/60Hz
Power Consumption	20W	Main unit: 45W (50W with dual power supplies) Control panel: 15W
Output Signal Amplitude	800mV (+/- 10%)	—
Video Delay	1H	1H
Dimensions (length x width x height)	3.37" x 11" x 8.7" (221.5mm x 280mm x 86.5mm)	Control panel: 8.7" x 10.7" x 4" (221.5mm x 272mm x 101mm); Optional external controller: 1.7" x 8.4" x 2" (43.7mm x 215mm x 51.6mm); Main chassis: 1.7" x 18.9" x 17.7" (44mm x 480mm x 450mm)
Weight	Approximately 6.6 lbs. (3 kg)	Main unit: 17.6 lbs. (8 kg) Control panel: 6.6 lbs. (3 kg)
Operating Temperature	0°–40°C (32°–104°F)	0°–40°C (32°–104°F)
Accessories Included	External AC power adapter; IEC power cable (region specific)	IEC power cable (region specific); BNC chassis-control panel cable

* HD-SDI signals are SMPTE 292M compliant; return loss is ARIB004 compliant

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