BrightEye NXT 410 and 410-H
Clean HDMI Routers

Instantaneous HDMI Clean Switching

The BrightEye NXT 410 Clean HDMI Routers cleanly and instantly switch your HDMI sources. The HDMI output switches instantaneously, never a glitch or pop. Feed the NXT 410 with cameras and other HDMI sources and take the output to projectors, flat screens and production equipment. The built-in frame synchronizer provides two clean switched outputs. The HDMI output always clean switches and you can assign the NXT's second clean switch to one of the SDI or SFP outputs. These new BrightEyes have incredible power in a small 1RU high by 1/3 RU wide footprint – about the size of a club sandwich. The exclusive front panel LCD displays realtime full motion video of your HDMI and SDI router sources.

Integrate HDMI and SDI I/O

With both HDMI and SDI inputs and outputs, the NXT 410 makes it easy to integrate and switch signals from all types of equipment, regardless of the video format. Cameras with HDMI outputs can be used directly alongside SDI sources, and seamlessly routed to either HDMI or SDI outputs. The SFP (small format plugable) cage can be populated with dual SFPs. Adding SFPs gives you true flexibility in combining electrical BNC, HDMI and fiber optic inputs and outputs.

Control From Third Party Devices

BrightEye NXTs can be controlled from third party devices using serial protocols via TCP/IP, RS-232 and SNMP. If RS-232 control is desired, please specify at time of purchase and your unit will come with the connector cable pre-installed. Field installation after the fact is not supported.

Use Encrypted and Non-Encrypted HDMI Alongside SDI Sources

For the ability to use HDMI, HDCP and SDI sources alongside one another, choose the BrightEye NXT 410-H. Devices such as set top boxes and Blu-ray players can be switched and mixed with SDI devices and HDMI cameras to the HDMI output seamlessly and instantaneously.

Convert While You Route

The BrightEye NXT 410-H Compact Router with U/D/C Conversion and Clean and Quiet Switching allows format conversion to take place while routing signals to destinations. Now, various formats of high definition and standard definition content can be converted to a common format and routed seamlessly to destinations. Standard definition sources can be upconverted to high definition as part of the routing process, as well as cross converting from one HD format to another. All you have to do is select a SMPTE standard for a particular destination, and all sources routed to that destination will be converted to that format.

Control From Anywhere

The unique web-browser user interface allows control and setup from virtually anywhere via any web-browser enabled device, while front panel controls allow complete configuration and control of the router without the use of a computer. In addition, they can be externally controlled through either TCP/IP or DB9 connector under automation control.

Features

- **Cleanly switch HDCP encrypted content**
- **Built-in dual Up/Down/Cross converters**
- **Router for 3G, HD, SD SDI, fiber and HDMI video**
- **Salvo Registers – Save/Recall from your tablet and computer**
- **Flexible I/O – You configure BNCs and SFPs as inputs or outputs**
- **RS-232 and TCP/IP interfaces – use with any 3rd party device**
- **LCD display with realtime full motion video of your sources**
- **Clean switching of video and embedded audio**
- **5-Year warranty and free software upgrades forever**

- **Dissolve and Cut transitions**
- **Audio level adjustments**
- **Direct Take mode**
- **System wide configuration registers**
- **Front panel and web-based control**
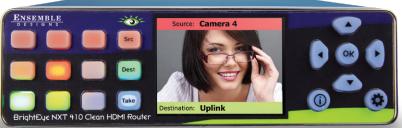- **Built-in test signal generators**
- **Genlockable and timeable**

ENSEMBLE
D E S I G N S

Designed and built in California
5 YEAR WARRANTY

2014 BEST of SHOW digital VIDEO

2014 BEST of SHOW TVTechnology

Source: **Camera 4**

Src

Dest

Take

OK

Destination: **Uplink**

BrightEye NXT 410 Clean HDMI Router

In 6   In 7   In 8   In 9   Out 10   SFP I/O 11/12

Ethernet

In 1   In 2   I/O 3   Out 4   Out 5   Ref In   GND +12VDC 2.5A

BE NXT 410

Order Info – Two great choices:
BrightEye NXT 410 Clean HDMI Router
BrightEye NXT 410-H Clean HDMI Router with HDCP

HDMI to SDI Conversion **HDCP**

HDMI to SDI Conversion **HDCP**

HDMI to SDI Conversion **HDCP**

HDMI to SDI Conversion **HDCP**

HDCP SDI to HDMI Conversion

Dual SFP

Fiber, Coax, HDMI, and more

SD/HD/3G-SDI & DVB-ASI Crosspoint Matrix

TCXO Internal Precision Ref

Video & Audio Clock Gen

Reference Processing

Test Signal Generators

Clean Switch
Cut / Mix Transitions

Up/Down/Cross Converter

Clean Switch
Cut / Mix Transitions

Up/Down/Cross Converter

NXT 410-H Includes UDC Conversion

Graphics

Thumbnail Processing

Live Output

Source **Live Cam 1**   1080i/59.94

Dest **Monitor**

System Control

HTTP / Web Server   TCP/IP

Ethernet   10/100

Command & Control

Resources
Interconnected by agile Crosspoint Matrix

Ports
SD/HD/3G SDI, DVB-ASI, & HDMI

2	BNC Input
2	BNC Output
1	BNC Bi-Directional
4	HDMI Inputs (converted to SDI)
1	HDMI Output (converted from SDI)
1	Dual SFP Positions
	Up to 2 simultaneous signals possible
	Bi-Directional according to chosen SFP Module
12	Total

Clean & Quiet Switches
Full Frame Synchronization, Mix & Cut Transitions

2	Independent Clean Switches
	Up/Down/Cross Conversion - NXT 410-H only
	Assign to any Destination (output)

2 Test Signal Generators
Patterns, ID, Cyclops, 16 channels Audio

Genlock Reference
Locks Clean Switches and TSGs to common Ref

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