

# BrightEye NXT 450

## Clean Streaming Router

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### High Quality – High Profile MPEG Encoder/Decoder

The BrightEye NXT 450 incorporates a high quality, high profile MPEG encoder/decoder to the already formidable feature set of the BrightEye NXT 430-X. Its advanced H.264 coding techniques give superb performance at low bit rates.

### Simultaneous Unicast, Multicast, and DVB-ASI

The BrightEye NXT 450's new encoding functionality produces simultaneous transport streams including one high-resolution and one low-resolution unicast stream, one multicast stream, and a DVB-ASI stream. Sources can be seamlessly routed to the encoder that outputs the various streams to an RJ-45 Ethernet connector on the back of the unit. The DVB-ASI formatter produces a DVB-ASI format stream that can be sent to a BNC or Fiber port for distribution.

### Decoding Done Right

The BrightEye NXT 450 also includes an MPEG decoder. Gigabit Ethernet can be received via the RJ-45 connector as either unicast or multicast, MPEG-2 or MPEG-4 decoded to 3G, HD, SD SDI with embedded audio, and can be mixed or intercut with other sources connected to the router. Decoded and encoded video can be seen in

realtime and full motion on the LCD display on the front of the unit. The full duplex codec allows simultaneous use of the encoder and decoder. Signals arriving via MPEG can be cleanly switched or dissolved alongside SDI/HDMI/Fiber sources and streamed live via the H.264 encoder.

### Flexible Architecture

Dual built-in Up/Down/Cross converters allow inputs to be automatically converted to a common output broadcast standard. This all happens transparently as part of the routing process. Simply set an output standard, select a source, and either take or dissolve. The BrightEye NXT 450 does the rest instantly and cleanly.

### Convert as You Route

Flexible I/O configuration – a hallmark of all the BrightEye NXT series of routers – allows on-the-fly configuration changes to the number of inputs and router destinations. The BrightEye NXT 450 can go from a 9x2 to a 2x9 and anywhere in between. Two SFP ports allow for fiber optic connectivity, HDMI I/O or HD-BNC connections – two I/O connections per SFP portal. A reference BNC is provided if the unit, including encoder/decoder, needs to be genlocked. Two RJ-45 connectors, one for operational control and setup of the router via any web browser enabled device, the other for media network I/O, complete the router connection possibilities.

## Features

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- Router for 3G, HD and SD SDI and HDMI video
- Exceptional built-in high quality, high profile MPEG encoder/decoder
- Advanced H.264 coding techniques give superb performance at low bit rates
- Built in dual Up/Down/Cross converters
- Dissolve and Cut transitions
- 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
- Audio level adjustments
- Mix and Shuffle audio to encoder input
- System wide configuration registers
- Front panel and web-based control
- Built-in test signal generators
- Genlockable and timeable
- Safe driving mode
- 5-Year warranty and free software upgrades forever





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## Assignable I/O and Flexible Architecture:

- 2 dedicated SDI inputs
- 2 dedicated SDI outputs
- 3 SDI ports that can be configured individually as inputs or outputs
- Media Network Port - supports Unicast and Multicast streaming
- 2 dual SFP cages
- 1 reference input

