Conversion of embedded SDI audio to Livewire and Livewire audio to SDI with compensating video delay.

SDI xNode
IP Audio Interface

Introducing SDI xNode.

SDI xNode builds upon the success of the popular Axia xNode by de-embedding two separate SD, HD, or 3 Gb/s SDI inputs (up to 8 channels each) and converting the audio to the Livewire or AES67 formats. The audio is available as a Livewire network source or can be re-embedded into two separate SDI output streams. Compensating video delay for each SDI input ensures audio/video synchronization is maintained.

SDI xNode features:

• Two relay-bypassed SDI inputs

• Eight channels of audio extracted/inserted per SDI input

• Compensating video delay

• Includes all standard xNode controls including front panel and web interface

• Livewire and AES67 compatibility

SDI xNode

SDI xNode brings the power and flexibility of the Axia Livewire AoIP (audio over IP) format to broadcast television for the first time by de-embedding two incoming SDI streams and making that audio available on a Livewire network.

Stations can now easily and efficiently route and share up to 8 channels of de-embedded audio per SDI input (for a total of 16 channels) anywhere within their facility.

Additionally, it is possible to take audio from either of the two incoming SDI streams, shuffle pairs, and create two unique outgoing SDI streams with matched audio/video latency.

More about Livewire and xNode

Radio broadcast facilities have been using Axia Livewire AoIP (audio over IP) technology to route hundreds of audio channels around for over a decade on a standard Ethernet cable.

Livewire is lightning fast, simple to implement, easy to manage, reliable, and conforms to the AES67 standard. It also significantly reduces the number of cables and wires needed to transport and share audio throughout the broadcast plant, and for the first time, makes it possible to uses Axia broadcast consoles for television.

Nearly any audio source - be it analog or AES - from phone systems to codecs to satellite receivers - can be made a part of the Livewire network.

The xNode hardware itself a 1RU half-width audio interface that includes the 2 BNC SDI Inputs, 2 BNC SDI outputs, and a pair of 100Base-T Ethernet connections which provide network connectivity and Poe (Power over Ethernet) from the network switch should power from the internal, fanless, switching power supply.

SDI xNode Specifications:

HD/SD/3Gb/s SDI Auto-Sensing Input and Output

De-embedding for up to 8 channels from each SDI input for a total of 16 channels; de-embedded audio can be routed to Livewire output and/or re-embedded to either SDI output with SMPTE 292M (HD-SDI) and SMPTE 259M (SD-SDI) support.

Livewire/AES67

Full Livewire and AES67 compatibility.

Reference

Livewire at audio input, SDI-derived audio clock at output.

Ethernet

Two RJ-45 100Base-T connections.

Power Requirements and Consumption

95-240 VAC, 50/60 Hz, 15W maximum. Redundant power sourcing available via Power over Ethernet (PoE).

Dimensions and Weight

8.5" W x 1.72" H x 11.75" D (1RU high x 1/2 rack width). Weight (shipping) 7lbs.