



# AXIA AUDIO

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## Axia IP-Audio Networking Puts Economies of Ethernet to Work



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Imagine wiring a studio in just hours, not days! Now you can, with Axia IP-Audio Networking.

Axia networks use a standard Switched Ethernet backbone to transport low-latency, real-time uncompressed digital audio throughout your facility using patent-pending Livewire™ technology. One 100Base-T Ethernet segment can carry 25 stereo channels of 48 kHz, 24-bit linear PCM Livewire audio in both directions; a Gigabit link can carry hundreds. An Axia network can handle up to 32,000 stereo channels! Thanks to the economies of Ethernet, Axia IP-Audio networks are about half the cost of traditional routing switchers.

Ethernet's modularity makes for a flexible networked system. Place Axia Audio Nodes next to your sources and destinations and use CAT-6 cable to connect any studio device to any other, anywhere in your broadcast plant. Because the Axia architecture is scalable, your network can grow as your facilities do.

Axia Analog Line Nodes have eight balanced stereo inputs and outputs. Inputs are switchable to accommodate consumer -10dBv or professional +4dBu levels; protected outputs deliver up to +24 dBu before clipping. Becomes a professional PC sound card replacement when used in conjunction with the Axia IP-Audio driver for Windows®.

Axia AES/EBU Audio Node provides eight AES3 inputs and outputs. It can also be used as a 1x8 AES distribution amplifier — one AES input feeds eight AES outputs. Create an Ethernet audio snake with AES/EBU Nodes at each end, or analog at one end and AES at the other for an A/D converting snake. Accepts AES house master clock to synchronize the network.

The Axia Microphone Node has eight Phantom-powered mic inputs. It also contains eight balanced analog line outputs for backfeeds to headphones and monitors. And the specs are so good you can use it as a standalone multi-port microphone preamp. Or connect it with a crossover cable to an AES/EBU node for multiple mic-level A/D converters.

Axia GPIO Nodes have eight assignable logic ports. Each contains five opto-isolated inputs and five opto-

isolated outputs that can be associated with sources and/or destinations to provide machine start/stop pulses, lamp drivers and remote channel controls.

The Axia Router Selector Node adds to the traditional router selector panel. More than a controller, it contains stereo audio inputs and outputs — both AES-3 and analog — and a front-panel headphone jack. Scroll a list of sources, or use the programmable “radio buttons” to access frequently used sources. Excellent for news or production rooms.

Axia iPlay PC software can be installed on any Windows® PC to listen to networked audio; anyone in the facility can monitor your IP-Audio streams. .

PathfinderPC Router Control Software provides control of every Axia Node, allowing you to build and control facility-wide routing applications. Pathfinder can change between presets via manual selection (on a PC), on a day-part schedule, or in response to an external trigger from an automation system or other source. Can be programmed to sense problems such as silence at a particular audio port and patch around it without user intervention.

Axia Windows® IP-Audio Driver connects PC audio directly to the network via a standard Ethernet NIC, eliminating the need for sound cards. Works with delivery systems and editors that support standard Windows audio; provides one stereo input and one stereo output via the Livewire network. Multi-channel versions of the IP-Audio Driver are available from Axia development partners.

The SmartSurface Studio Control Surface provides 16 faders, four program busses, monitoring and communication capabilities and a GPIO interface for logic control of devices. Support for phones and codecs includes auto-assigned mix-minus on each channel, talkback for remote talent cueing, one-button off-air phone recording mode and optional integrated Telco line switching. Save profiles for each user with different preferences, layouts and defaults. Works with the Axia StudioEngine, a network-based DSP mixing engine running real-time Linux for 24/7 operation.

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