GENELEC 4420A SMART IP LOUDSPEAKERS

With networked audio becoming the new normal in the world of AV, Jon Berry of RG Jones gets to grips with the most compact of Genelec's Smart IP family.

When opening the pair of loaned 4420A Smart IP loudspeakers, the familiar feel of substantial build quality and pleasing form factor produced a heightened anticipation that what would follow would be very enjoyable.

The speakers are based on the same enclosure design as Genelec's classic 8020D studio monitors, but as the Smart IP series is designed specifically for the installation market, the 4420As ship without the rubber Iso-Pod mount of the 8020, with enclosure dimensions of 226 mm high, 151 mm wide and 142 mm deep. A notable difference however is the connections made to the speakers, which in the case of the 4420A are a single RJ45 connector for power, audio and management, with a separate analogue input on a Euroblock connector. There are a myriad of finishes available for this range, from the classic Black or White, to the newer RAW aluminium look, to the possibility of one of 120 RAL matched colours.

The audio spec of the 4420A is slightly improved on the 8020D with less variation in frequency response accuracy and an extended frequency range. The two units match in driver dimensions and amplifier power.

Under the hood

The primary difference that makes the 4420A stand out is the inclusion of its Smart IP technology. This approach builds in the digital audio quality and flexibility achieved with Dante/AES67/ST2110 for routing and patching, PoE powering for ease of deployment, and built in DSP for powerful tuning to its acoustic environment. All these benefits are delivered through a single CATx connection.

To access these facilities, a PoE network switch with a Dante/AES67/ST2110 source and an MS Windows10 PC is required. The Smart IP Manager software from Genelec, although only available at the time for PC, is intuitive to use and discovers the speakers on the network.

The software allows access to the EQ, Level and Delay settings for each speaker, and allows speakers to be grouped into rooms and zones for simultaneous adjustment of multiple speakers' level and mute. The settings made on the speakers can be stored as profiles and recalled for alternate set-ups.

As an alternative or extension to control the loudspeakers through the Genelec software, an API is available for use with 3rd party control systems. This makes integration within an AV system even more powerful.

The sonic experience

As for using the 4420As, the sonic experience is excellent. Genelec always manage to pack high performance SPL across a wide frequency range, with an incredibly flat frequency response, into a compact and aesthetically pleasing form factor. The speakers lend themselves to both nearfield listening and small room coverage, and are able to produce sparkling detail and surprising lows.

The installation bracketry is extensive and there is probably a mounting solution to cater for 99% of locations. For the 1% of the others, designing a bespoke bracket is simple with the standardised threaded connections on the housing, and the manufacturer's own provided CAD drawings.

In summary, these are great little speakers which pack a knockout punch and will become a valuable tool in the AV integration arsenal. I just need an excuse to put some in my house now.... 🌐

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