

Features

- Dual output Network interface
- Powered by Audio Video Bridging
- PoE/12V power scheme

Hardware

- ADSP21489 Sharc DSP
- XMOS XCORE200
- ESS ES9018K2M DAC, 120dB DR
- Toslink/USB audio/AVB inputs
- Dual balanced output, 6Vrms

Software Control

- 1722.1 compatible
- FIR/IIR, Crossovers, PEQ, Gain control from real time GUI
- Firmware upgradeable
- 4 preset memory
- immerGO compliant Object-based immersive audio installs

Power

- PoE powered
- 12V DC input for non PoE switch

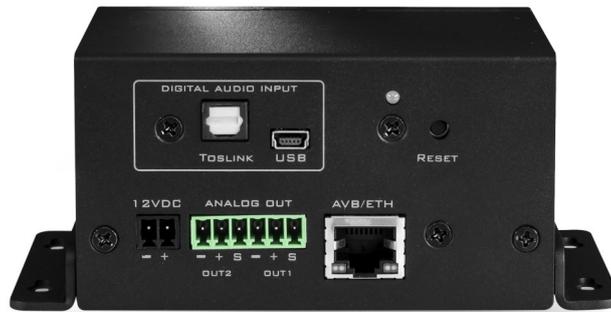
Applications

- Immersive Audio installs
- Commercial AV
- Multi-room audio

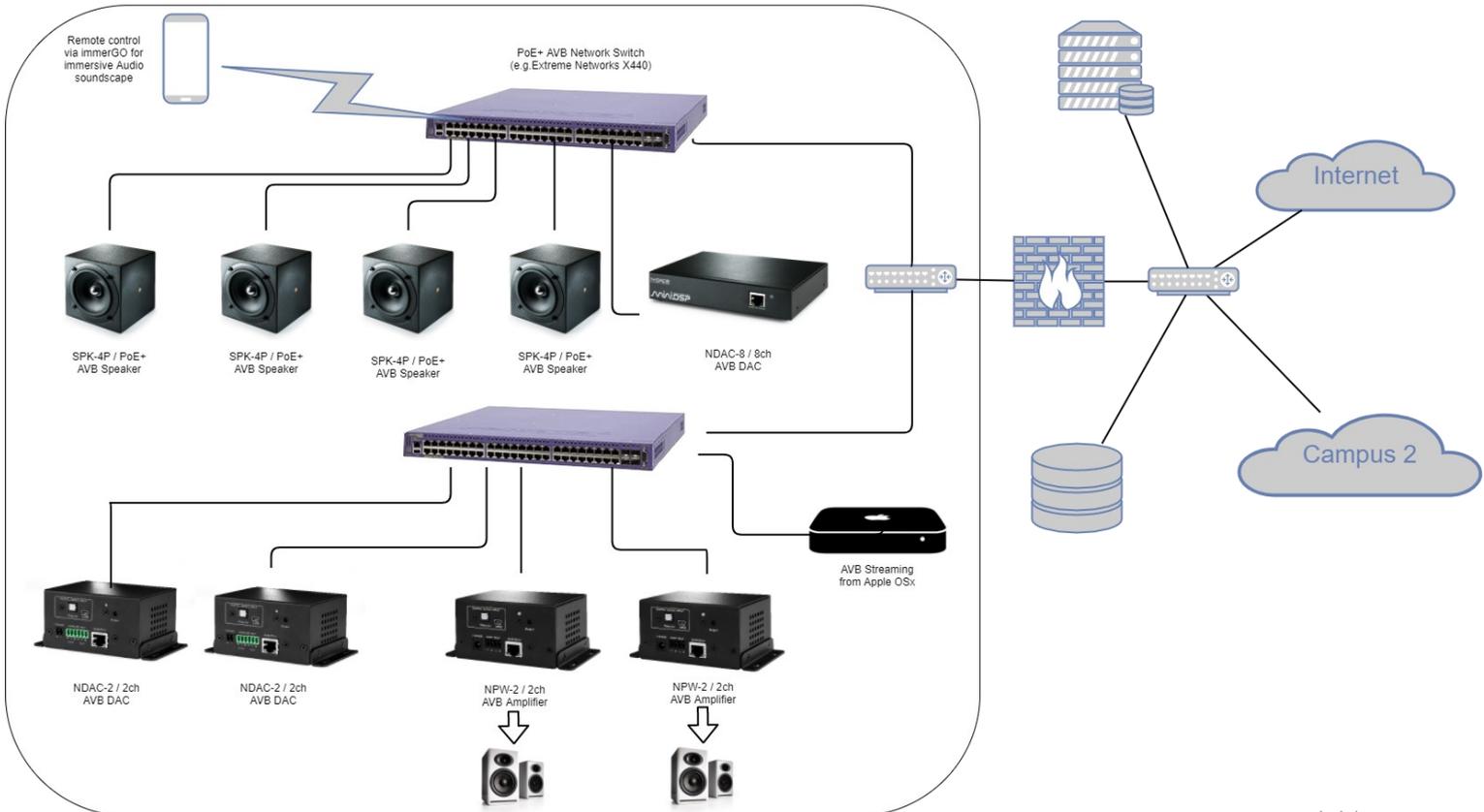
The NDAC-2 is an Audio Video Bridging (AVB) endpoint combining network audio streaming, DAC and Digital Signal Processor (DSP) in a pocket size box. A single CAT5/6 network cable provides power, low latency audio and control for a true Plug&Play experience. The system consists of three key element:

- The Audio Video Bridging (AVB) technology powered by a 500MHz XMOS processor which provides low latency, uncompressed and tightly synchronized streams to each speaker over standard networks. Fully compliant with IEEE 1722.1, it is plug&play with 3rd party AVB devices.
- An on-board 400MHz Analog Devices SHARC processor also enables substantial signal processing for true high-resolution audio capability and equalization, crossover, and room correction capabilities. All to be accessed and programmed with miniDSP's easy-to-use interface software.
- Finally, a stereo DAC powered by ESS Technology ES9018K2M outputs balanced out on phoenix terminal blocks.

With its Power Over Ethernet (POE) capability or external +12VDC supply, the NDAC-2 is easily installed in a matter of minutes with limited knowledge.



TYPICAL APPLICATION / SYSTEM DIAGRAM



HARDWARE SPECIFICATIONS

Item	Description
Digital Signal Processor	32-bit Floating point Analog Devices SHARC ADSP21489 / 400 MHz
USB / AVB Processor	XMOS XCore200 for digital audio streaming <ul style="list-style-type: none"> Asynchronous USB audio UAC2.0, Driverless for Mac OS X, ASIO driver for Windows platforms Audio Video Bridging (AVB) streaming - Gigabit Ethernet
Digital audio input	TOSLINK optical input. The input signal is processed by a high quality onboard Asynchronous Sample Rate Converter for compatibility with most common sample rates (20–216kHz)
Analog outputs	Dual balanced output, 6vrms out, ES9018K2M DAC Dynamic range 118dB, A weighted
DSP capabilities	FIR filtering with number of taps assignable to each output channel. FIR filters are designed by third-party programs. FIR file format: IEEE 754 single-precision binary floating-point. IIR EQ, gain, level, delay. Configured by real time GUI.
Filter storage	Four on-board presets, selectable by IP control
USB port	USB port type Mini-B for audio streaming (USB audio firmware) Real time control and firmware upgrade
Power supply	12 VDC single supply (optional if PoE powered) PoE/PoE+ powered
Dimensions (H x W x D) mm	55 x 100 x 77mm / 0.4kg
Mounting	Metal bracket, see drawings below for details.
Enclosure / Finish	Metal enclosure, black textured paint

MECHANICAL SPECIFICATIONS

