

Network Amplifier Modules

The Smart pi NAM (Network Amplifier Modules) are commercial and industrial amplifiers that can be installed in the field and close to the speaker location, this allows ease of changing audio zoning, sources, priorities and volume for every single speaker within the system.

Indoor and Outdoor (IP66) NAMs are available for each model.

Each NAM has 4 x 12-Watt RMS class D amplifiers, an Ethernet switch with 2 fibre and 2 ethernet ports, and built in DSP (EQ, FIR, delay and gain).





Hardware	
Power	36 – 52 VDC (1.5 A) – with real-time monitoring
Network	2 x Gigabit Ethernet and 2 x Small form-factor pluggable (SFP) ports.
AutoDetecting	– one of each type assigned per LAN in redundancy config.
Amplification	NAM: 4 x 12 W RMS (8 Ω) NAM-HP: 4 x 75 W RMS (8 Ω)
AES-3 IN (PLUS)	24 bit, sample rate conversion, Input Max 7:1, max range 139 DNR.
Analogue I/O (PLUS)	Up to 2 in and 2 out at +4 dBu Line Level
GPIO (PLUS)	Vox sources for GPIO triggers.
Microphone input	48v Phantom, ref level -18 / -20 dBfs, gain -2.5 to +41.5 dB, max in +18 dB
SD card	Audio files = 48k / 16 bit mono (card FAT32 : allocation unit size 512 bytes).
Status	Amp status LED Indicator. AES 'Lock' LED Indicator (PLUS option).
Management	Web browser interface (up to 20 users). API for remote integration. Dante™ Domain Manager (DDM). Backup / Restore Remote update



Audio Features

Linear Dante Support

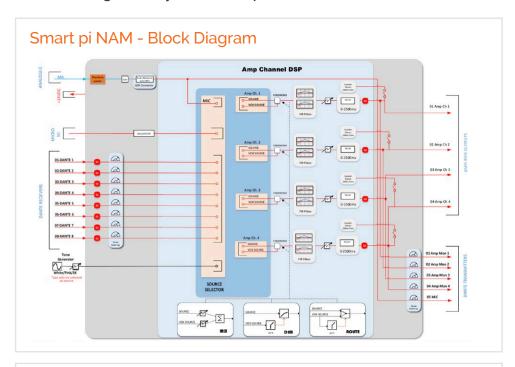
SIP (OPUS) option available for Wide Area and Internet based connectivity

7 Band Paramatric Equalisers

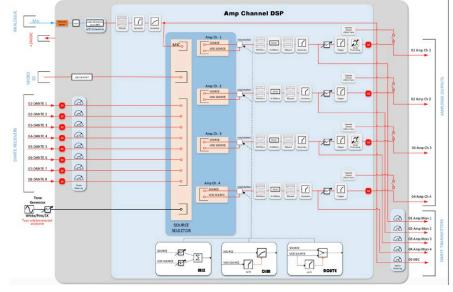
Ambient Noise Sensing Microphone input

Mix, Mute and DIM options built in for smaller installatons

Low Noise High Quality Class D Amplifiers



Smart pi NAM-HP - Block Diagram







Processing

- · Speaker Impedance Measurement with definable tolerance range
- · Amp status with fault codes
- · Onboard tone generator White, Pink, 1 k Sine, 400 Hz Sine adjustable level
- Selectable DSP per output and input AES, Dante[™] 1-8, Mic, AES (L,R),
 Tone and SD Card.
- 2500 ms delay per channel in 1 ms steps.
- VOX control triggers Dante[™] 1-8, Mic, AES (PLUS option)
- Latency settings
- 1000 point FIR filter per channel

Dante Features

Dante Domain Manager (DDM) Ready

Enhanced Dante Wide Area Support for low bandwidth and large systems.

Indoor NAMs

Standard 4 x 24 Watt NAM and NAM-HP 4 x 75 Watt versions available

Supports up to 4 zones with built in DSP (EQ, Dymanics, Mixer)

Speaker Monitoring

Hearing and Inducton Loops (NAM-HP only)



Outdoor IP66 NAMs

NAM and NAM-HP options available NAMplus boards for GPIO, AES/IP and sip available

4 port switch 2 x Ethernet RJ45 and 2 x SFP

Custom Colours Available

