S-series
the second generation of Passive End Fire Technology

aura audio

S1

S1 is a compact passive 3.5-way speaker system. It consists of folded horn-loaded 10" neodymium magnet cone driver, two side-firing reflex tuned 6.5" cone drivers, 6.5" neodymium magnet cone driver loaded with a multi-path waveguide coaxially mounted with two 1" exit compression drivers loaded with dual exit waveguides.

Horn-loaded 10" driver and side-firing 6.5" drivers create cardioid polar pattern utilising patented Passive End Fire Technology. This is due to carefully matching the sound wave travel distances between side-firing drivers to the internal propagation delay of the horn sound paths. This arrangement of the two bands overlapping increases the sound pressure level at low frequencies.

S1 features coaxially mounted HF section combined with the M6 waveguide with wide horizontal and narrow vertical beam width helps when creating arrays of multiple S1 enclosures with very precise directivity character and high MF cut off frequency of 3kHz makes it possible to use small diaphragm lightweight compression drivers for high frequencies for increased sensitivity and HF resolution.

S1 is powered by Aura Audio D80DSP powered controllers. Bespoke rigging and pole mount adapters enable easy and safe deployment from single unit on top of a subwoofer to a larger flown arrays.

SPECIFICATIONS
Frequency Response (-6 dB): 85 Hz–20000 Hz
Horizontal Coverage (-6 dB): 80 degrees
Vertical Coverage (-6 dB): 10 degrees
Max SPL: 138 dB (half space)
Sensitivity, 1w/1m: 107 dB (half space)
Impedance: 6 ohms
Power handling: 300 W(rms) 1200W(peak)

DRIVERS
LF: (1) 10" horn-loaded cone driver
LF Side: (2) 6.5" reflex-loaded cone drivers
MF: (1) 6.5" horn-loaded cone driver
HF: (2) 1" exit horn-loaded compression driver

ENCLOSURE
Enclosure material: Birch plywood, textured black paint finish
Grille: Steel grille, black paint finish
Connectors: (2) x NL4, +/-1: Input, +/-2: link
Dimensions: 550 mm x 430 mm x 450 mm
Weight: 34 kg

S18 Subwoofer System

"S28 split in two"
S18 is a second generation subwoofer featuring patented *Passive End Fire Technology*, a loudspeaker system in which loading in front radiating sound source with internal propagation time difference compensates the time difference of the sound wave radiated from opposite direction radiating sound source arriving to the front. This is achieved with horn-like loading at the front side, which has the same phase behavior as the reflex- loaded enclosure facing back. No additional delays or processing is needed so only amplifier channel isenough to drive the whole subwoofer!

S18 is driven with Aura Audio D-series controller amplifiers.

FEATURES
Low frequency directivity control without DSP Patented Passive End Fire Technology hybrid- enclosure design in two enclosures
Double 18" neodymium magnet drivers

APPLICATIONS
Low frequency extension for all S-series tops
Noise sensitive installations
Medium to large-scale touring

S18 – SPECIFICATIONS (S18F + S18R)
Frequency Response (-6 dB): 30 Hz – 250 Hz
Horizontal Coverage (-6 dB): 150 degrees
Vertical Coverage (-6 dB): 150 degrees
Max SPL : 134/140 dB (free space)
Sensitivity, 1w/1m: 101 dB (free space)
Impedance: 4 ohms (8+8)
Crossover: 80 Hz – 100 Hz active
Power handling: 2400 W(AES), 10000 W(peak)
Recommended HP-filter: 30 Hz, 12 dB/octave

DRIVERS
S18F Front: (1) x 18" neodymium driver, 4" VC
S18R Rear: (1) x 18" neodymium driver, 4" VC

ENCLOSURE (Single unit)
Enclosure material: Birch plywood, textured black paint finish
Grille: Cold rolled steel grille, black paint finish
Connectors: (2) x NL4, +/-1: Input
Dimensions: 600 mm x 500 mm x 800 mm (930 w/wheels)
Weight: 40 kg

D80DSP

D80DSP is a combination of signal processing and amplifier channels with aux DSP outputs. Easy access control via front panel is combined with PC and iPad remote controls and wall panel for installation use.

High fidelity, high efficiency class-D power amplifier stages are powered by a switch-mode power supply.

The build-in speaker preset library for all Aura Audio speaker models with highest definition DSP processing.

SPECIFICATIONS

- Number of amplifier channels: 4
- Output Power: (per channel)
- 8 ohms 1000W
- 4 ohms 2000W
- 2.7 ohms 2200W
- 2 ohms 2000W
- Output Power: (bridged)
- 8 ohms 4000W
- 4 ohms 4000W
- Processing: 24bit (ADC and DAC)
- Internal sample rate: 96kHz
- System THD: <0.08% (2kW, 1k)
- Freq. resp.: 3Hz-30kHz -3dB
- Gain; Delay; Polarity; IIR EQ (PEQ, shelving, variQ, all pass, phase, notch, band pass) for each input and output (4 per output, 8 per input)

CONNECTIONS

- Input connectors: 4 x XLR (two for AES)
- Output connectors: 4 x Speakon
- AUX DSP outputs: 4 XLR
- Mains connector: PowerCon
- Remote Control: USB (front panel)
- Rear Panel: RS485 bus, Direct Ethernet, GPIO Port Dante Audio Network (optional) Up to 32 units can be connected into a closed control network

DIMENSIONS:(mm)

- Amplifier 2U/88(h) x 482(w) x 428(d)
- Weight: 10kg
- Shipping weight 12kg
- Shipping box: 250 x 610 x 600

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