

QuadCane

Ultra Slim Array Speaker

100 W

POWER RMS

95 dB

SENSITIVITY

8 Ω

IMPEDANCE

21 mm

DEPTH

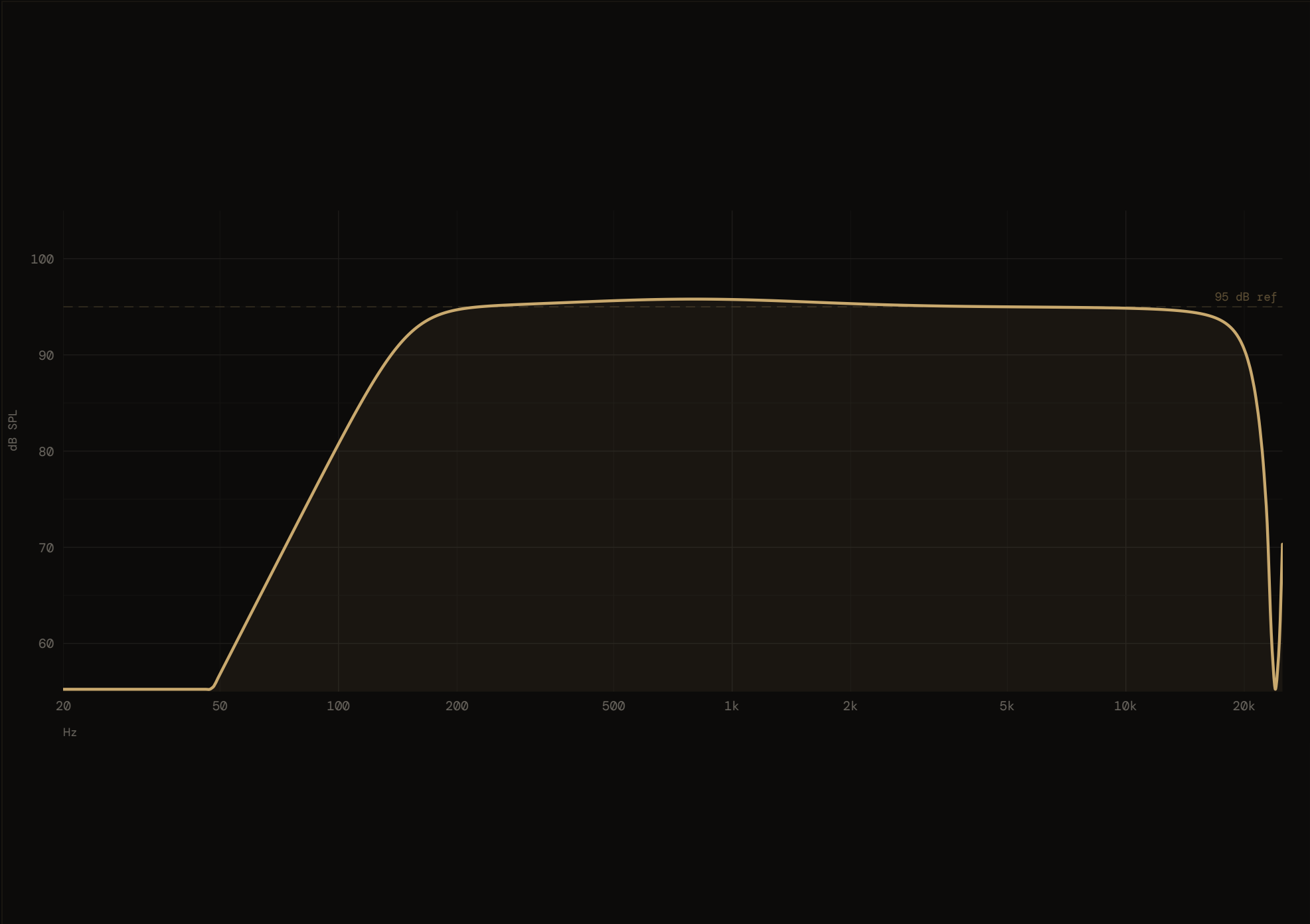
Technical Specifications

ACOUSTIC PERFORMANCE	
Power RMS	100 W
Power Peak	120 W
Sensitivity	95 dB / 1W / 1m
Impedance	8 Ω
Max SPL	116 dB
THD+N	≤0.2% @ 1W/1m
Frequency Range	150 Hz - 20 kHz ±3dB
Directivity H	140° (-6 dB, 1 kHz)
Directivity V	25° (-6 dB, 1 kHz)
Driver Config	16 × Power Dense Custom Woofers
Crossover	Built-In Passive Crossover
Crossover Freq	200 Hz
EQ Profile	Default
CONNECTIVITY	
Connector	—
Wire Gauge	14 AWG or thinner

PHYSICAL	
Dimensions	H 763 × W 43 × D 21 mm
Weight	0.8 kg
Housing	Aerospace Grade Aluminium
Grille	Mild Steel
Paintable Grille	No
ENVIRONMENTAL	
IP Rating	—
Mounting	Corner, Floorstand, In-Wall
COLOUR & FINISH	
Finishes	Matte Champagne, Black, White · Custom RAL
PRODUCT	
Series	Slim Array Series
SKU	XSP-SA-QAD
Variants	XSP-SA-QAD-W · White XSP-SA-QAD-B · Black XSP-SA-QAD-CH · Champagne XSP-SA-QAD-CC · Custom +20%
Since	2022

Frequency Response

On-axis · 1W / 1m · anechoic · 150Hz - 20kHz ±3dB · 95dB sensitivity · raw acoustic, no EQ



Directivity Pattern

Normalised polar response · H 140° / V 25° at -6 dB · 1 kHz · multi-frequency overlay



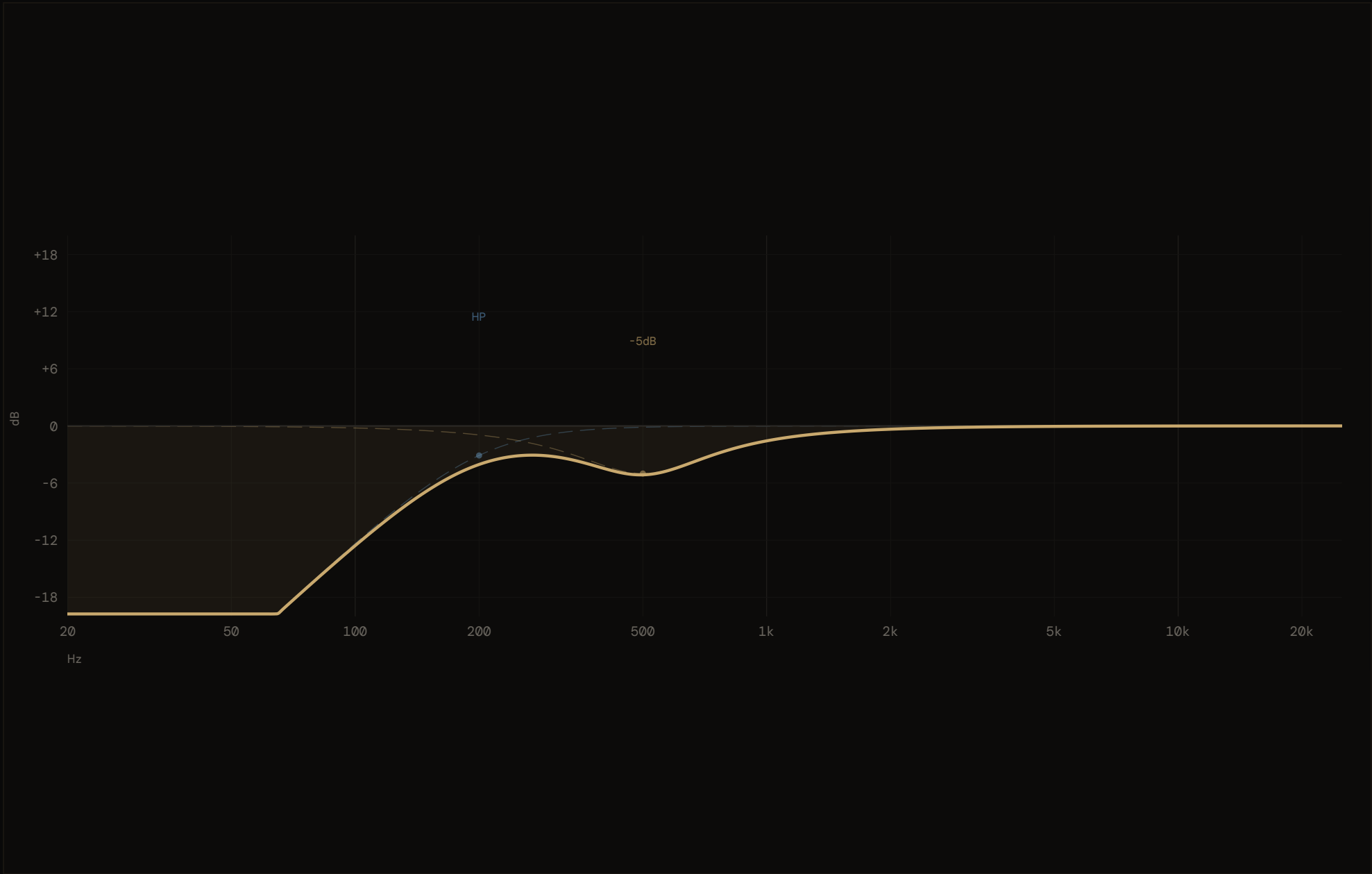
SPL vs Distance

Inverse square law · Ref: 95 dB / 1W / 1m · free field anechoic · 100W RMS / 120W Peak



Recommended EQ

Profile: Default · combined biquad cascade (bold) with individual filter contributions (dashed)



#	TYPE	FREQUENCY	GAIN	Q
1	PK	500 Hz	-5 dB	1
2	HP	200 Hz	-	0.7

Profile: Default · RBJ biquad cascade · fs = 48 kHz (ADAU1701 DSP)

Proprietary Technologies



PsySculpt

ADAU1701 DSP implementing Fletcher-Munson equal-loudness compensation. Pre-Comp □ Loudness L&H □ Post-Comp □ Log-Decay Peak Detector □ Dynamic Bass □ DAC. Tonal balance stays consistent from background levels to concert SPL.



XS-Flow

Micro-waveguide geometry precision-machined into the enclosure interior. Channels the rearward acoustic wave around the magnet structure, reducing compression and harmonic distortion at high excursion.



Nano Resonance

Intentionally heavy cone mass forces the natural resonant frequency well below the target passband — genuine low-frequency extension from an enclosure only 12–23 mm deep, defying Hoffman's Iron Law.



PrecisionXover Array

Air-core inductors, polypropylene film capacitors and metal-film resistors. Component matching held to ± 0.5 dB for inaudible channel-to-channel variation across the array.



AeroFrame Chassis

6061 aerospace aluminium machined as the structural chassis, acting as a passive heatsink drawing heat away from the voice coil through direct thermal coupling — no fans, no thermal compression.



PowerDense Dynamics

Copper-silver composite voice coil conductor. Significantly higher continuous power in the same former diameter — higher thermal ceiling without increasing coil mass or inductance.