



PHL Audio HP970Nd

5 inches low - mid coaxial driver

Nominal Diameter	13 cm / 5 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	90 dB SPL
Power Handling Capacity	120 W AES
SPL max (continuous)	108 dB SPL
Usable frequency range	60 - 16 000 Hz
Speaker net mass	1.04 kg

Architecture highlights :

- Time aligned coaxial HF driver
- Noiseless natural convection Intercooling System
- Neodymium magnet system with symetric BL(x) and Le(x)
- Long excursion suspension with linear behavior for large signal
- Lightweight basket

Motor architecture

Voice coil diameter	mm	38
Voice coil length	mm	16
Air gap height	mm	6

Typical characteristics

Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	90
Usable freq. range	-	Hz	60 - 3000
Power handling capacity (AES)	-	W	120
Max Sound Pressure Level	SPL _{max}	dB SPL	108
Min. impedance modulus	Z _{min}	Ω @Hz	6.2@550
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0.346
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.212
BL product	BL	N/A	8.1
Moving mass	Mms	kg	0.011

Thiele-Small parameters

Resonance frequency	Fs	Hz	67 (± 10)
DC Resistance	Re	Ω	5.7 (± 0.6)
Mechanical quality factor	Qms	1	3.75
Electrical quality factor	Qes	1	0.39
Total quality factor	Qts	1	0.35
Suspension compliance	Cms	10 ⁻⁶ .m/N	530
Effective piston area	Sd	m ²	0.0092
Equivalent Cas air load	Vas	m ³	0.0062
Max linear excursion	Xmax	mm	± 6.5
Linear displacement volume	Vd	10 ⁻³ .m ³	0.0595
Reference efficiency	η_0	%	0.5
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	0.8

Absolute maximum ratings

Short term max. input voltage	Vmax	V	60
Max.excursion before damage	Xdam	mm	± 12
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Outdoor+

Coaxially mounted HF Unit

Rated impedance	Z	Ω	4
Half space sensitivity (1W@1m)	-	dB SPL	97.0
Usable freq. range	-	Hz	2k - 16k
Power handling capacity (AES)	-	W	30



Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	0.18
Speaker net mass	kg	1.04
Baffle cut-out diameter (front mounting)	mm	124.5
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	147.0
Max overall dimension (on ears)	mm	163.0
Max overall dimension (out of ears)	mm	136.0
Flange height	mm	12.5
Max magnet diameter	mm	-
Max depth (front mounting)	mm	76.0
Recommended reflex box	Lts / Hz	8L / 60Hz
Electrical connection	6.35x0.8 + 4.8x0.5 FASTON	

