



PHL Audio HP950

5 inches midrange driver

Nominal Diameter	13 cm / 5 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	94 dB SPL
Power Handling Capacity	80 W AES
SPL max (continuous)	109 dB SPL
Usable frequency range	110 - 4000 Hz
Speaker net mass	2.02 kg

Architecture highlights :

- Noiseless natural convection Intercooling System
- Ferrite magnet system with symetric BL(x) and Le(x)
- High definition CCAR vented voice coil
- Critical damping Flat Foam Surround
- Lightweight basket

Motor architecture

Voice coil diameter	mm	38
Voice coil length	mm	7.5
Air gap height	mm	6

Typical characteristics

Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	94
Usable freq. range	-	Hz	110 - 4000
Power handling capacity (AES)	-	W	80
Max Sound Pressure Level	SPL _{max}	dB SPL	109
Min. impedance modulus	Z _{min}	Ω @Hz	6.1@800
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0.599
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.235
BL product	BL	N/A	8.8
Moving mass	Mms	kg	0.008

Thiele-Small parameters

Resonance frequency	Fs	Hz	200 (± 40)
DC Resistance	Re	Ω	5.3 (± 0.5)
Mechanical quality factor	Qms	1	5.99
Electrical quality factor	Qes	1	0.70
Total quality factor	Qts	1	0.62
Suspension compliance	Cms	10 ⁻⁶ .m/N	80
Effective piston area	Sd	m ²	0.0109
Equivalent Cas air load	Vas	m ³	0.0013
Max linear excursion	Xmax	mm	± 2.5
Linear displacement volume	Vd	10 ⁻³ .m ³	0.0273
Reference efficiency	η_0	%	1.4
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	0.5

Absolute maximum ratings

Short term max. input voltage	Vmax	V	50
Max.excursion before damage	Xdam	mm	± 3
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			humidity proof



Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	0.38
Speaker net mass	kg	2.02
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	117.5
Max depth (front mounting)	mm	75.0
Recommended reflex box	Lts / Hz	1.5L sealed
Electrical connection		6.35x0.8 + 4.8x0.5 FASTON

