



PHL Audio HP2490

8 inches low - mid coaxial driver

Nominal Diameter	20 cm / 8 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	92.5 dB SPL
Power Handling Capacity	200 W AES
SPL max (continuous)	112 dB SPL
Usable frequency range	70 - 16 000 Hz
Speaker net mass	3.02 kg

Architecture highlights :

- Time aligned coaxial HF driver
- Natural convection Intercooler System
- High compliance double half-roll Fabric Surround



Motor architecture		
Magnet material	-	Fe
Voice coil diameter	mm	51
Voice coil length	mm	13
Air gap height	mm	8

Typical characteristics			
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	92.5
Usable freq. range	-	Hz	70 - 3000
Power handling capacity (AES)	-	W	200
Max Sound Pressure Level	SPL _{max}	dB SPL	112
Min. impedance modulus	Z _{min}	Ω @Hz	6.4@380
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0.896
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.405
BL product	BL	N/A	12.9
Moving mass	M _{ms}	kg	0.0250

Thiele-Small parameters			
Resonance frequency	Fs	Hz	72 (± 12)
DC Resistance	Re	Ω	5.4 (± 0.5)
Mechanical quality factor	Q _{ms}	1	3.77
Electrical quality factor	Q _{es}	1	0.37
Total quality factor	Q _{ts}	1	0.33
Suspension compliance	C _{ms}	10 ⁻⁶ .m/N	200
Effective piston area	S _d	m ²	0.0198
Equivalent Cas air load	V _{as}	m ³	0.0107
Max linear excursion	X _{max}	mm	± 4.5
Linear displacement volume	V _d	10 ⁻³ .m ³	0.0891
Reference efficiency	η_0	%	1.1
Unity load volume	V _{as} .Q _{ts} ²	10 ⁻³ .m ³	1.2

Absolute maximum ratings

Short term max. input voltage	V _{max}	V	80
Max.excursion before damage	X _{dam}	mm	± 10
Ambient operating temperature	T _a	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Humidity proof

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	0.72
Speaker net mass	kg	3.0
Baffle cut-out diameter (front mounting)	mm	185
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	217
Max overall dimension (on ears)	mm	234
Max overall dimension (out of ears)	mm	205
Flange height	mm	9.5
Max magnet diameter	mm	137
Max depth (front mounting)	mm	87
Recommended reflex box	Lts / Hz	10L / 70Hz
Electrical connection	Ø4 mm Push buttons	

