



PHL Audio HP3840

10 inches low-mid frequency driver

Nominal Diameter	25 cm / 10 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	96.5 dB SPL
Power Handling Capacity	250 W AES
SPL max (continuous)	116 dB SPL
Usable frequency range	60 - 3000 Hz
Speaker net mass	8.2 kg

Architecture highlights :

- Natural convection Intercooler System
- High compliance double half-roll Fabric Surround
- Ultra light CCAR voice coil



Motor architecture			
Voice coil diameter	mm	77	
Voice coil length	mm	15	
Air gap height	mm	10	

Typical characteristics			
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	96.5
Usable freq. range	-	Hz	60 - 3000
Power handling capacity (AES)	-	W	250
Max Sound Pressure Level	SPL _{max}	dB SPL	116
Min. impedance modulus	Z _{min}	Ω @Hz	6.9@320
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.060
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.501
BL product	BL	N/A	20.9
Moving mass	Mms	kg	0.045

Thiele-Small parameters			
Resonance frequency	Fs	Hz	62 (± 18)
DC Resistance	Re	Ω	5.6 (± 0.6)
Mechanical quality factor	Qms	1	5.01
Electrical quality factor	Qes	1	0.22
Total quality factor	Qts	1	0.22
Suspension compliance	Cms	10 ⁻⁶ .m/N	150
Effective piston area	Sd	m ²	0.0356
Equivalent Cas air load	Vas	m ³	0.0260
Max linear excursion	Xmax	mm	± 5.0
Linear displacement volume	Vd	10 ⁻³ .m ³	0.1782
Reference efficiency	η_0	%	2.7
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	1.2

Absolute maximum ratings			
Short term max. input voltage	Vmax	V	90
Max.excursion before damage	Xdam	mm	12.0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			humidityproof

Mounting information			
Air volume occupied by the driver	10 ⁻³ .m ³	2.0	
Speaker net mass	kg	8.2	
Baffle cut-out diameter (front mounting)	mm	229.0	
Bolt number & Metric diameter	-	6x M5	
Bolt circle diameter	mm	266.0	
Max overall dimension (on ears)	mm	283.5	
Max overall dimension (out of ears)	mm	255.0	
Flange height	mm	11.0	
Max magnet diameter	mm	204.0	
Max depth (front mounting)	mm	113.0	
Recommended reflex box	Lts / Hz	15L / 80Hz	
Electrical connection	$\varnothing$ 4 mm Push buttons		

