



E20

PROFESSIONAL SERIES

2440 8Ω

2450 16Ω



8" . 20cm
Low Midrange Driver
High SPL . High Sounding Quality

APPLICATIONS

Low midrange transducer dedicated to the reproduction of 80-4000Hz frequencies. The bass midrange version of the 2400. Usable either for direct radiation or for horn loaded application. Its design gives priority to precision in the midrange band.

FEATURES

Power handling capacity	200 W AES
Reference efficiency (1W @ 1m)	96 dB SPL
SPL max (continuous)	115 dB SPL
Usable frequency range	80-4000 Hz
Environmental withstanding	Outdoor

2440 . 2450

8" • 20 cm Low Midrange Driver

2440 2450

TYPICAL CHARACTERISTICS

Rated impedance	Z	8	16	Ω
Reference efficiency (1 W@1 m)	-	96	96	dB SPL
Usable frequency range ¹	-	80-4000	80-4000	Hz
Power handling capacity ²	(AES)	200	200	W
Max Sound Pressure Level ³	SPLmax	115	115	dB SPL
Min. impedance modulus	Zmin	5.4 @ 410Hz	11.0 @ 400Hz	Ω
Voice-coil inductance ⁴ @ 1 kHz	Le1k	0.75	1.65	mH
@ 10 kHz	Le10k	0.42	0.68	mH
Bl product	BL	12.8	17.0	N/A
Moving mass	Mms	0.020	0.020	Kg

THIELE-SMALL PARAMETERS : TYPICAL (QC LIMITS)

Resonance frequency ⁵	Fs	81(±12)	81(±12)	Hz
DC resistance ⁶	Re	5.2 (±0.6)	9.5 (±1.0)	Ω
Mechanical quality factor	Qms	4.1	4.1	1
Electrical quality factor	Qes	0.32	0.34	1
Total quality factor	Qts	0.30	0.31	1
Mechanical suspension compliance	Cms	200	200	10 ⁻⁶ m/N
Effective piston area	Sd	0.0219	0.0219	m ²
Equivalent Cas air load	Vas	0.0130	0.0130	m ³
Max. linear excursion	Xmax	±4.0	±4.0	mm
Linear displacement volume	Vd	0.088	0.088	10 ⁻³ m ³
Half-space efficiency		2.1	2.0	%
Unity load volume	Vas Qts ²	1.2	1.2	10 ⁻³ m ³

ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage ⁷	Vmax	80	110	V
Max. excursion before damage	Xdam	±10	±10	mm
Ambient operating temperature		-10 to +50		°C
Storage temperature ⁸		-20 to +70		°C
Environmental conditions ⁹		Outdoor		

APPLICATION INFORMATION

Air volume occupied by the driver ¹⁰		0.980	0.980	10 ⁻³ m ³
Speaker net mass		4.480	4.480	Kg
Recommended reflex box	Vb/Fb	10 / 80	10 / 80	L / Hz
Electrical polarity		A positive voltage applied on the red terminal produces forward cone motion.		

SPECIFICATION NOTES

Note 1 : Allowing for energy response, excursion capability, Power spectrum, and -3dB low freq. roll-off for standard reflex tuning.

Note 2 : Established at 20°C ambient temp, according to AES2-1984 standard using IEC268-1 simulated programme signal and a 10 liter Bass-Reflex test enclosure tuned at 80Hz.

Note 3 : Established at 1m on axis of the loudspeaker mounted in test enclosure, when driven at full AES Power Handling Capacity, including 4dB of thermal compression loss.

Note 4 : Measured at 20 mA in free air.

Note 5 : Measured at 20 mA and 20°C ambient temp. in free air conditions, after full run and rest.

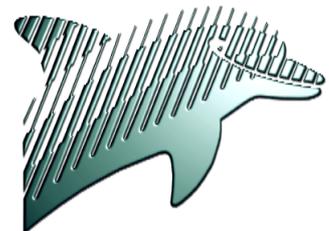
Note 6 : Measured at 20°C ambient temp. QC limits are ±10 %

Note 7 : Stated in RMS voltage according to IEC 268-5.

Note 8 : Includes shipping conditions. The lower limit prevents from demagnetization.

Note 9 : Our products are classified in three categories : Indoor, Outdoor, and Outdoor+ for permanent outdoor use or severe conditions.

Note 10 : Calculated for front mounting on to a 18 mm thick board.



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