DL12ST 12-Inch Loudspeaker

17-Dec-01

Description: 12-inch loudspeaker for sound-reinforcement applications from 60-2000 Hz. Ideal for high-power two-way systems, or for mid-bass applications. Good choice for either direct-radiating systems, or for horn loading. EV's Ring-Mode Decoupling (RMD) employed for accurate transient response and low distortion.

Part Numbers:
812-3074: Systems version with front rim of frame painted black, without an EV nameplate, and without packaging (not shipable).
812-PD-1663: Single packaged 812-3074 for shipping.
812-3380: Sales version (over-the-counter) with front rim of frame painted black, EV nameplate, and individual packaging.

Specifications

General Information	Nominal Cone Diameter (in.)	12
	(mm)	305
	Nominal Coil Diameter (in.)	2.5
	(mm)	63.5
	Nominal Impedance (ohms)	8
	Frequency Range (Hz)	60-2000
	Power Rating, as per EIA-RS426A (Watts)	300
	Sensitivity, 1w@1m (db SPL)	98.0
	Maximum Calculated SPL (dB SPL)	122.8
	Nominal Efficiency (%)	5.60
	Max Calculated Acoustic Power (Ac. Watts)	16.8
	Magnetic Material	Ceramic
	Acoustic Polarity for "+" Voltage	Positive
Thiele-Small Parameters	Free Air Resonance, Fs (Hz)	72.73
	Mechanical Q, Qms	7.797
	Electrical Q, Qes	0.312
	Total Q, Qts	0.300
	Moving Mass, Mms (g)	45.87
	Compliance, Cms (mm/N)	0.104
	Equivalent Volume Compliance, Vas (CuFt)	1.633
	(l)	46.25
	Mechanical Resistance, Rms (Mech Ohms)	2.688
	DC Resistance, Re (Ohms)	6.100
	Bl Product, Bl (Tesla-Meters)	20.257
	Maximum Linear Displacement, Xmax (in.)	0.160
	(mm)	4.06
	Maximum Physical Displacement, Xlim (in.)	0.500
	(mm)	12.70
	Effective Radiating Diameter (in.)	10.500
	(mm)	266.7
Figures	Frequency Response, 1w@1m	Figure 1
	Free Air Impedance	Figure 2
	Distortion, 10% Full Power	Figure 3
	Distortion, 115 dB SPL @ 1m	Figure 4
	Polars in Typical Enclosure	
Dimensions	Frame Front Diameter (in.)	12.19
	(mm)	309.6
	Magnet Diameter (in.)	7.50
	(mm)	190.5
	Overall Depth (in.)	5.25
	(mm)	133.4
	Mounting Bolt Circle Diameter (in.)	11.563
	(mm)	293.7
	Baffle Board Cutout Diameter (in.)	11.063
	(mm)	281.0
	Net Weight (lb)	14.7
	(kg)	6.7
	Shipping Weight (lb)	15.9
	(kg)	7.2

Figure 1 - Frequency Response
2.83v (1w) @ 1m, 12 Cubic-Foot Closed Box IEC Standard Baffle

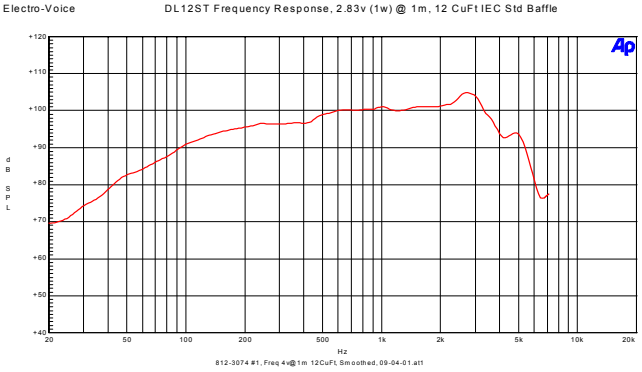


Figure 2 - Free Air Impedance
Woofer In Free Air (No Enclosure)

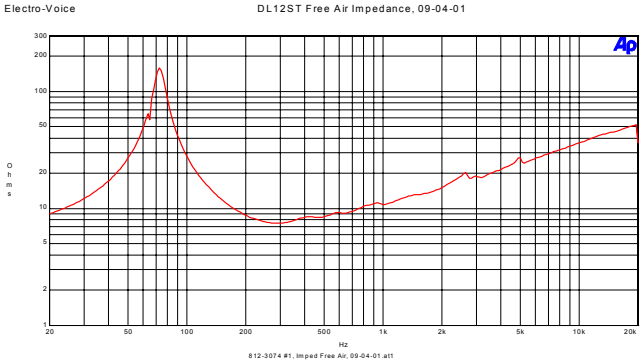


Figure 3 - Distortion, 10% Full Power @ 1m
12 Cubic-Foot Closed Box IEC Standard Baffle
2nd Harmonic: Solid Line, 3rd Harmonic: Dashed Line

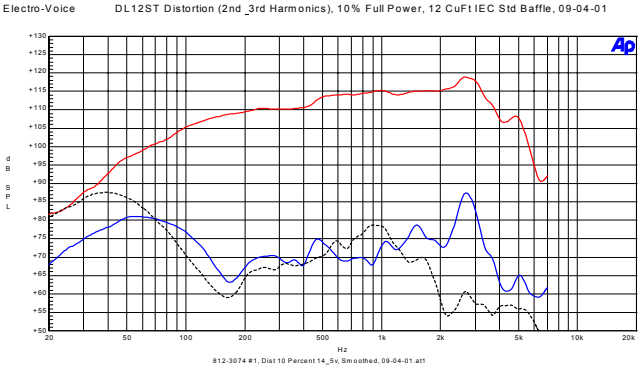
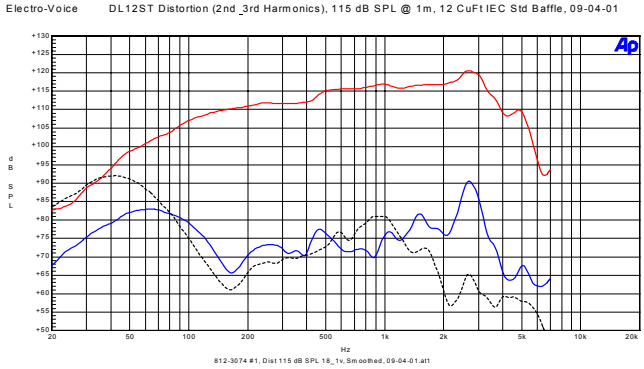


Figure 4 - Distortion, 115 dB SPL @ 1m
12 Cubic-Foot Closed Box IEC Standard Baffle
2nd Harmonic: Solid Line, 3rd Harmonic: Dashed Line



Note: All specifications shown are for typical typical loudspeakers. Specifications are subject to change without notice.