D.A.S. SOUND PRODUCTS

Cone Speakers

MODEL	G-45	G-35	B-30	B-20	B-10	CX-32	P-15	P-12
General Characteristics								
Nominal Diameter	18"	15"	15"	12"	10"	15"	15"	12"
RMS AES Power [1] Programme Power [2]	600 W 1,200 W	600 W 1,200 W	400 W 800 W	400 W 800 W	300 W 600 W	300 W 600 W	400 W 800 W	400 W 800 W
Sensitivity 1 W/1 m	98 dB SPL	97 dB SPL	100 dB SPL	99 dB SPL	99 dB SPL	98 dB SPL	98 dB SPL	98 dB SPL
Nominal Impedance	- 8 Ω -							
Effective Diameter	382 mm	330 mm	329 mm	261 mm	214 mm	329 mm	329 mm	263 mm
Effective Projected Area	0.1164 m²	0.086 m²	0.085 m²	0.053 m²	0.036 m²	0.0855 m²	0.0855 m²	0.054 m²
Displacement Limit (p-p)	21.7 mm	21.7 mm	18.7 mm	18.7 mm	18.7 mm	18.7 mm	21.7 mm	21.7 mm
Flux Density	- 1.4 T -					0.95 T	1.14 T	1.14 T
Polarity	- Positive voltage to red terminal moves cone forward -							
Replacement Diaphragm	GM G-45	GM G-35	GM B-30	GM B-20	GM B-10	GM CX-32	GM P-15	GM P-12

[1]RMS Power figures based on tests complying to the AES standard, continuously applying a 6 dB crest factor signal, bandlimited according to the speaker's frequency characteristics.
[2]Programme power is conventionally twice the RMS power.

Constructional Details								
Overall Diameter	457 mm	391 mm	391 mm	320 mm	265 mm	391 mm	391 mm	320 mm
Overall Depth	183 mm	140 mm	140 mm	124 mm	111 mm	174 mm	128 mm	112 mm
Voice Coil Diameter	102 mm	102 mm	102 mm	102 mm	102 mm	102 mm	77 mm	77 mm
Voice Coil Depth	15 mm	15 mm	12 mm	12 mm	12 mm	12 mm	15 mm	15 mm
Voice Coil Length	26.0 m	26.0 m	23.0 m	23.0 m	23.0 m	23.0 m	23.7 m	23.7 m
Top Plate Thickness	7 mm	7 mm	7 mm	7 mm	7 mm	7 mm	7 mm	7 mm
Diaphragm Profile	curved	straight, ribbed	curved	curved	curved	curved	curved	curved
Net Weight	11.05 kg	10.4 kg	10.4 kg	9.9 kg	9.7 kg	10.65 kg	6.2 kg	5.7 kg
Shipping Weight	12.5 kg	11.0 kg	11.0 kg	10.15 kg	9.85 kg	12.4 kg	7.75 kg	6.85 kg
Material Details								
Basket material	- Cast Aluminium -							
Voice Coil Material	Cu, flat	Cu, flat	Al, flat	Al, flat	Al, flat	Al, flat	Cu	Cu
Diaphragm Material	- Paper -							
Small Signal Parameters								
Fs (Hz)	31	32	38	46	58	45	33	36
Re (Ω)	7.0	6.8	5.7	5.5	5.6	5.6	6.6	6.65
Zmin (Ω)	7.5 at 185 Hz	7.35 at 205 Hz	6.4 at 250 Hz	6.5 at 350 Hz	7.5 at 340 Hz	5.9 at 200 Hz	6.8 at 200 Hz	7.4 at 265 Hz
Z at Fs (Ω)	37	33	70	119	107	74	29	30
Qms	2.0	1.54	3.8	5.7	4.3	5.7	1.8	1.55
Qes	0.42	0.39	0.34	0.27	0.24	0.46	0.53	0.43
Qts	0.35	0.31	0.31	0.26	0.22	0.43	0.41	0.34
Vas (l)	385	205	180	66	30	180	290	112
Cms (mm/N)	200	194	176	164	161	173	280	270
Mms (gr)	131	126	98	71	47	74	85	74
Le (mH)	1.0	1.0	0.9	1.0	0.8	0.9	0.8	0.9
BL (T.m)	20.0	21	19.9	20.4	20.1	15.8	14.7	15.9
η_o (%)	2.6	1.7	2.9	2.3	2.3	3.3	1.85	1.1
Xmx	± 4.5	± 4.5	± 2.5	± 2.5	± 2.5	± 2.5	± 4.5	± 4.5

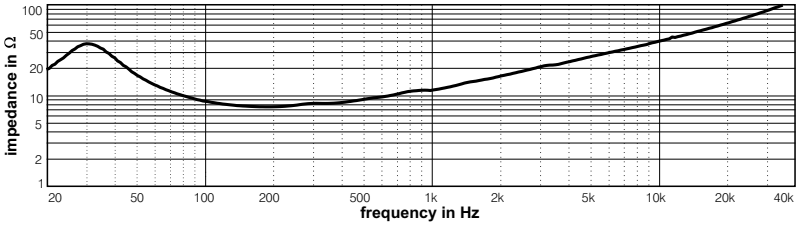
All the above parameters are extracted or derived from impedance curves. Where applicable, delta mass method was used. Curves measured with drivers suspended in free air, and subtracted from cable impedance (in practice, this must be added to all impedance values).
Preconditioning : 1 hour, pink noise at -5 dB rated power.

Mounting								
Baffle Cutout Diameter	425 mm	358 mm	358 mm	289 mm	236 mm	358 mm	358 mm	289 mm
Number of Mounting holes	8	8	8	4	4	8	4	4
Mounting Hole Diameter	- 6 mm -							

NOTE : The CX-32 is made up of a 15" low frequency speaker and a 2" exit/4" titanium diaphragm high frequency compression driver mounted co-axially. The data stated on this sheet correspond to the low frequency speaker.
All specifications subject to change without notice.

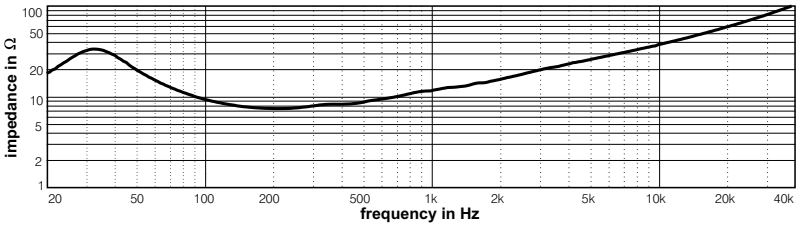
G-45
Figure 1 shows the impedance with frequency curve of a G-45 speaker suspended in free air.

FIG. 1



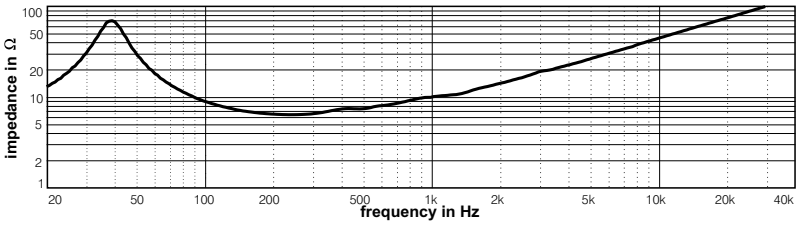
G-35
Figure 2 shows the impedance with frequency curve of a G-35 speaker suspended in free air.

FIG. 2



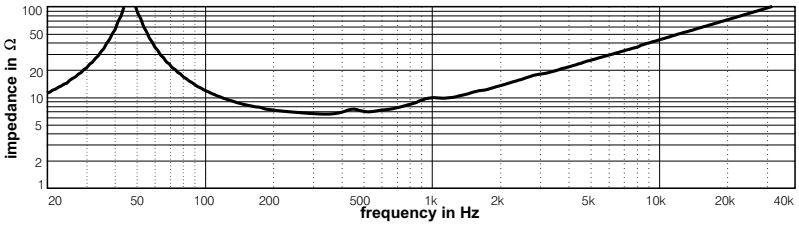
B-30
Figure 3 shows the impedance with frequency curve of a B-30 speaker suspended in free air.

FIG. 3



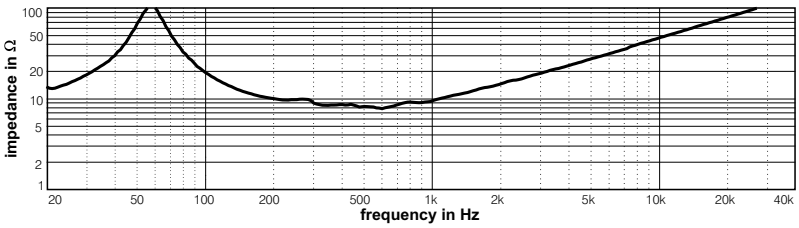
B-20
Figure 4 shows the impedance with frequency curve of a B-20 speaker suspended in free air.

FIG. 4



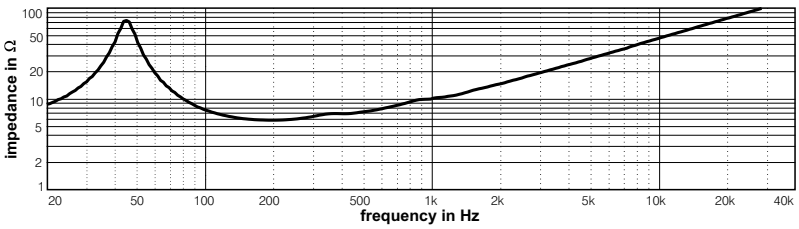
B-10
Figure 5 shows the impedance with frequency curve of a B-10 speaker suspended in free air.

FIG. 5



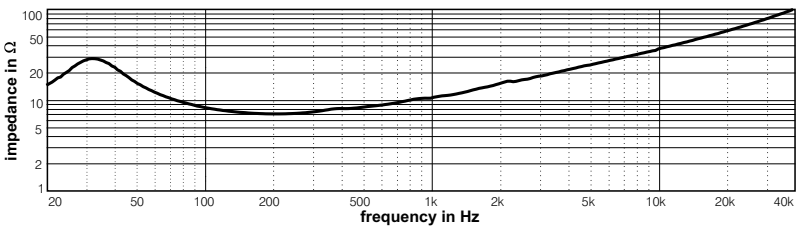
CX-32
Figure 6 shows the impedance with frequency curve of the low end of a CX-32 coaxial speaker suspended in free air.

FIG. 6



P-15
Figure 7 shows the impedance with frequency curve of a P-15 speaker suspended in free air.

FIG. 7



P-12
Figure 8 shows the impedance with frequency curve of a P-12 speaker suspended in free air.

FIG. 8

