





PROFESSIONAL SPEAKERS

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Products Index >>>

NEODYMIUM LF TRANSDUCERS

Model	Туре	Rated Power	Sensitivity	Freq. Range	Voice Coil Diam.	Magnet	EBP	Page
JC6221nd	21" SUBWOOFER	1800 W	97.5 dB	31 ~ 1000 Hz	150mm / 6"	Neo Inside	97	0 1
JC6218nd	18" SUBWOOFER	1300 W	98 dB	30 ~ 1200 Hz	125mm / 5"	Neo Inside	125	0 2
J6318nd/2	18" SUBWOOFER	1500 W	100 dB	31 ~ 1000 Hz	125mm / 5"	Neo Inside	152	03
J6118nd/2	18" SUBWOOFER	1400 W	97 dB	39 ~ 1000 Hz	115mm / 4.5"	Neo Inside	95	04
ND9118s	18" SUBWOOFER	900 W	96 dB	31 ~ 1000 Hz	100mm / 4"	Neo Inside	58	05
ND9315s	15" SUBWOOFER	800 W	98dB	40 ~ 1000 Hz	100mm / 4"	Neo Inside	121	06
ND9415w	15" WOOFER	700 W	97 dB	40 ~ 2500 Hz	100mm / 4"	Neo Inside	122	07
J6115nd	15" WOOFER	600 W	99 dB	37 ~ 2800 Hz	86mm / 3.4"	Neo Inside	122	0 8
ND9015w	15" WOOFER	500 W	99 dB	45 ~ 2900 Hz	76mm / 3"	Neo Inside	112	09
ND9815	15" WOOFER	550 W	100 dB	42 ~ 3100 Hz	76mm / 3"	Neo Inside	93	10
ND9412w	12" WOOFER	550 W	96 dB	61 ~ 2800 Hz	100mm / 4"	Neo Inside	125	11
J6112nd	12" WOOFER	500 W	97 dB	55 ~ 3000 Hz	86mm / 3.4"	Neo Inside	131	1 2
ND9512m	12" MID-BASS	400 W	101 dB	43 ~ 3000 Hz	76mm/3"	Neo Ring	343	13
ND9312	12" MID-BASS	450 W	99 dB	51 ~ 3500 Hz	76mm / 3"	Neo Ring	165	14
ND9012w	12" MID-BASS	400 W	98.5 dB	44 ~ 3500 Hz	76mm / 3"	Neo Inside	177	15
ND9812	12" WOOFER	500 W	98 dB	59 ~ 3600 Hz	76mm / 3"	Neo Inside	135	16
ND9810	10" MID-BASS	400 W	99 dB	71~4100 Hz	76mm / 3"	Neo Inside	292	17
ND9510m	10" MID-BASS	350 W	99 dB	60 ~ 4300 Hz	76mm / 3"	Neo Ring	360	18
ND9310m	10" MID-BASS	400 W	97 dB	63~4100 Hz	76mm / 3"	Neo Ring	203	19
ND9010w	10" WOOFER	350 W	96 dB	62 ~ 3500 Hz	76mm / 3"	Neo Inside	213	20
ND9410m/16	10" MID-BASS	300 W	95 dB	65 ~ 4500 Hz	65mm / 2.5"	Neo Inside	112	2 1
ND9308m	8" MID-BASS	350 W	96.5 dB	92~6000Hz	76mm/3"	Neo Ring	325	22
ND9608m	8" MID-BASS	300 W	96.5 dB	79~4500Hz	65mm / 2.5"	Neo Inside	239	23
ND9006m	6.5" MIDRANGE	100 W	95 dB	19 ~ 5600 Hz	38mm / 1.5"	Neo Ring	243	24

FERRITE SUBWOOFER, WOOFER, MID-BASS

Model	Туре	Rated Power	Sensitivity	Freq. Range	Voice Coil Diam.	Magnet OD	EBP	Page
J6821	21" SUBWOOFER	2500 W	97 dB	42 ~ 700 Hz	215mm / 8.5"	400 mm	131	25
JC6221	21" SUBWOOFER	1800 W	97.5 dB	31 ~ 800 Hz	150mm / 6"	330 mm	102	26
21DM2000	21" SUBWOOFER	2000 W	98 dB	36 ~ 800 Hz	150mm / 6"	330 mm	120	27
J6421	21" SUBWOOFER	1600 W	96 dB	30 ~ 800 Hz	135mm / 5.3"	280 mm	65	28
J6818/2	18" SUBWOOFER	2000W	97 dB	42 ~ 500 Hz	150mm / 6"	330 mm	130	29
JC6218	18" SUBWOOFER	1400 W	97 dB	31 ~ 1200 Hz	125mm / 5"	280 mm	110	30
JC6018	18" SUBWOOFER	1400 W	97 dB	40 ~ 1200 Hz	115mm / 4.5"	245 mm	89	31
J6618	18" SUBWOOFER	1500 W	98 dB	37 ~ 1000 Hz	125mm / 5"	280 mm	112	32
J6218/2	18" SUBWOOFER	1300 W	98 dB	40 ~ 1000 Hz	125mm / 5"	280 mm	133	33
J6418	18" SUBWOOFER	1300 W	96 dB	41 ~ 1000 Hz	125mm / 5"	253 mm	69	34
J6018/3	18" SUBWOOFER	1400 W	97 dB	31 ~ 1000 Hz	115mm / 4.5"	245 mm	96	35
18DM1200	18" SUBWOOFER	1200 W	99 dB	36 ~ 1000 Hz	100mm / 4"	220 mm	100	36
E2018	18" SUBWOOFER	1200 W	97 dB	32 ~ 1000 Hz	100mm / 4"	245 mm	94	37
S7118	18" SUBWOOFER	800 W	98 dB	32 ~ 1000 Hz	100mm / 4"	220 mm	97	38

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FERRITE SUBWOOFER, WOOFER, MID-BASS

Model	Туре	Rated Power	Sensitivity	Freg. Range	Voice Coil Diam.	Magnet OD	EBP	Page
M5118/2	18" SUBWOOFER	750 W	97 dB	36 ~ 1000 Hz	100mm/4"	220 mm	109	39
M5315s	15" SUBWOOFER	800 W	97 dB	40 ~ 1000 Hz	100mm / 4"	220 mm	121	40
S7315s	15" SUBWOOFER	650 W	96 dB	39 ~ 1000 Hz	91mm/3.6"	200 mm	90	41
J6215	15" WOOFER	800 W	98 dB	40 ~ 2800 Hz	100mm / 4"	220 mm	114	42
M5415/2	15" WOOFER	800 W	99 dB	40 ~2800 Hz	100mm / 4"	220 mm	129	43
.16015	15" WOOFER	650 W	99 dB	43 ~ 2800 Hz	86mm / 3 4"	190 mm	143	44
15DM550	15" WOOFER	550 W	100 dB	44 ~ 3200 Hz	76mm / 3"	190 mm	122	45
M5215	15" WOOFER	450 W	99 dB	45 ~ 2800 Hz	76mm/3"	190 mm	109	46
C15-500	15" WOOFER	500 W	99 dB	43 ~ 3000 Hz	76mm / 3"	200 mm	118	47
C15-400	15" WOOFER	400 W	97 dB	38 ~ 3000 Hz	76mm / 3"	190 mm	103	48
15BM400	15" WOOFER	400 W	99 dB	43 ~ 3100 Hz	76mm / 3"	190 mm	100	49
U8215	15" WOOFER	500 W	98.5 dB	45 ~ 3000 Hz	76mm/3"	190 mm	109	50
U8015	15" WOOFER	400 W	99 dB	38 ~ 3000 Hz	76mm / 3"	190 mm	104	51
PS15-76	15" WOOFER	350 W	96 dB	37 ~ 2800 Hz	76mm / 3"	170 mm	79	52
J6212/2	12" WOOFER	550 W	98.5 dB	69 ~ 2800 Hz	100mm / 4"	220 mm	215	53
J6012/2	12" WOOFER	550 W	97.5 dB	55 ~ 3000 Hz	86mm / 3.4"	190 mm	153	54
RS12-76	12" SUBWOOFER	450 W	94 dB	59 ~ 2900 Hz	76mm / 3"	190 mm	123	55
12DM450	12" WOOFER	450 W	98.5 dB	56 ~ 3200 Hz	76mm/3"	180 mm	165	56
S7012	12" MID-BASS	450 W	97 dB	41 ~ 2700 Hz	76mm / 3"	200 mm	128	57
M5212	12" WOOFER	500 W	97.5 dB	45 ~ 3000 Hz	76mm/3"	190 mm	153	58
M5612	12" WOOFER	400 W	98 dB	58 ~ 3000 Hz	76mm / 3"	190 mm	168	59
C12-400	12" WOOFER	400 W	97 dB	49 ~ 3500 Hz	76mm / 3"	180 mm	113	60
U8012	12" WOOFER	400 W	97.5 dB	45 ~ 3000 Hz	76mm / 3"	180 mm	128	61
E2012	12" WOOFER	400 W	98 dB	54 ~ 3000 Hz	76mm / 3"	180 mm	138	62
BL12-65	12" WOOFER	350 W	96 dB	50 ~ 2800 Hz	65mm / 2.5"	170 mm	128	63
IS12-65	12" MID-BASS	300 W	96 dB	47 ~ 5100 Hz	65mm / 2.5"	156 mm	104	64
PS12-65	12" MID-BASS	250 W	95 dB	53 ~ 3000 Hz	65mm / 2.5"	156 mm	95	65
J6010/2	10" MID-BASS	400 W	99 dB	80 ~ 3500 Hz	76mm / 3"	190 mm	235	66
10DM350	10" WOOFER	350 W	96.5 dB	63 ~ 3500 Hz	65mm / 2.5"	156 mm	175	67
M5610	10" MID-BASS	250 W	95.5 dB	57 ~ 4000 Hz	65mm / 2.5"	156 mm	139	68
BL10-65	10" WOOFER	300 W	94 dB	61 ~ 4000 Hz	65mm / 2.5"	156 mm	162	69
U8010	10" MID-BASS	280 W	97 dB	55 ~ 3600 Hz	65mm / 2.5"	170 mm	162	70
E2010	10" MID-BASS	280 W	97 dB	79 ~ 3600 Hz	65mm / 2.5"	170 mm	171	71
M5010	10" MID-BASS	180 W	95 dB	55 ~ 2800 Hz	50mm / 2"	140 mm	148	72
V3010m/16	10" MID-BASS	300 W	96 dB	70 ~ 4800 Hz	65mm/2.5"	170 mm	139	73
V3610m/16	10" MID-BASS	280 W	95.5	54 ~ 4000 Hz	65mm / 2.5"	156 mm	124	74
IS10-65	10" MID-BASS	280 W	95 dB	60 ~ 4500 Hz	65mm / 2.5"	156 mm	139	75
PS10-50	10" MID-BASS	150 W	94 dB	52 ~ 2800 Hz	50mm / 2"	145 mm	122	76
V3608m	8" WOOFER	250 W	96.5 dB	81~4100 Hz	65mm/2.5"	156 mm	231	77
S7008	8" MID-BASS	200 W	96 dB	79 ~ 6000 Hz	50 mm / 2"	140 mm	217	78
V3008m	8" MID-BASS	200 W	96 dB	72 ~ 5800 Hz	50 mm / 2"	140 mm	196	79
V3208m/16	8" MID-BASS	200 W	95 dB	90 ~ 6000 Hz	50mm / 2"	140 mm	144	80
PS08-38	8" MID-BASS	150 W	92 dB	75 ~ 6300 Hz	38mm / 1.5"	120 mm	99	81
V3006m/16	6.5" MID-BASS	100 W	93 dB	81~6000 Hz	38mm / 1.5"	115 mm	156	82
R06-25	6.5" WOOFER	50 W	88 dB	50 ~ 4200 Hz	25mm / 1"	90 mm	76	83
MB06-38	6.5" MID-BASS	100 W	92 dB	125 ~ 9000 Hz	38mm / 1.5"	120 mm	127	84
V3005m	5" MID-BASS	100 W	91 dB	121 ~ 7000 Hz	38mm / 1.5"	100 mm	189	85

II

NEO LF	FERRITE LF	MIDRANGE	FULLRANGE	COAXIAL	NEO HF	FERRITE HF

MIDRANGE

Model	Туре	Rated Power	Sensitivity	Freq. Range	Voice Coil Diam.	Magnet	EBP	Page
MR0638	6.5" MIDRANGE	150 W	95.5 dB	273 ~9000 Hz	38mm / 1.5"	120 mm	186	86

FULLRANGE

Model	Туре	Rated Power	Sensitivity	Freq. Range	Voice Coil Diam.	Magnet OD	EBP	Page
FR321	3" FULLRANGE	40 W	88 dB	110 ~ 15kHz	20mm / 0.8"	70 mm	133	87
FC322	3" FULLRANGE	40 W	88.5 dB	138 ~ 20kHz	20mm / 0.8"	70 mm	137	88
FR321nd	3" FULLRANGE	40 W	89 dB	115 ~ 15kHz	20mm / 0.8"	Neo Ring	214	89
FC322nd	3" FULLRANGE	40 W	88.5 dB	138 ~ 20kHz	20mm / 0.8"	Neo Ring	248	90
FR421	4" FULLRANGE	40 W	87 dB	91 ~ 17kHz	20mm / 0.8"	70 mm	83	91
FC422	4" FULLRANGE	40 W	89.5 dB	134 ~ 17kHz	20mm / 0.8"	70 mm	105	92
FR421nd	4" FULLRANGE	40 W	88 dB	90 ~ 17kHz	20mm / 0.8"	Neo Ring	118	93
FC422nd	4" FULLRANGE	40 W	91 dB	134 ~ 18.7kHz	20mm / 0.8"	Neo Ring	174	94

COAXIAL

Model	Size	Rated Power	Sensitivity	Freq.Range	Voice Coil Diam.	EBP(LF) Diaphragm(HF)	Page
CX12441	LF:30cm/12"	450W	97dB	50 ~ 3.0K Hz	76mm / 3"	179	95
	HF:44mm/1.7"	60W	106dB	700 ~ 19K Hz	44mm / 1.7"	Polyimide	
CX10442	LF:25cm/10"	250W	95dB	50 ~ 3.5K Hz	65mm / 2.5"	174	96
	HF:44mm/1.7"	50W	102dB	700 ~19K Hz	44mm / 1.7"	PEEK	
CXN1044	LF:250mm/10"	350W	98dB	73~ 4.1K Hz	76mm/3"	228	97
	HF:44mm/1.7"	50W	106dB	800 ~ 19K Hz	34mm / 1.7"	Polyimide	

NEODYMIUM HF DRIVERS

Model	Rated Power	Voice Coil Diameter	Exit Throat Diameter	Sensitivity	Freq.Range	Diaphragm Material	Page
NDi7409	90W	75mm/3"	36mm/1.4"	109dB	700Hz~18KHz	Titanium	98
NDi6509	75W	65mm/2.5"	36mm/1.4"	108dB	750Hz~18KHz	Titanium	99
NDi4409	50W	44mm/1.7"	25.4mm/1"	106dB	800Hz~19KHz	Polyimide	100
NDi3809	50W	44mm/1.7"	25.4mm/1"	110dB	1200Hz~20KHz	Polyester	101

FERRITE HF DRIVERS

Model	Rated Power	Voice Coil Diameter	Exit Throat Diameter	Sensitivity	Freq.Range	Diaphragm Material	Page
CDi7401	90W	75mm/3"	36mm/1.4"	108dB	500Hz~17KHz	Titanium	102
CDi4401	60W	44mm/1.7"	25.4mm/1"	106dB	900Hz~19KHz	Polyimide	103
CDi4402	50W	44mm/1.7"	25.4mm/1"	105dB	900Hz~19KHz	PEEK	104
CD3401	40W	34mm/1.3"	25.4mm/1"	104dB	1000Hz~20KHz	Titanium	105

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

JC622Ind



* 21 inch * 1800 Watts KLIPPEL 🔆 97.5 dB 🔆 31 ~ 800 Hz



KEY FEATURES:

- 1 3600 W continuous program power capacity
- 2 97.5dB Sensitivity 1w/1m
- ③ 31Hz ~800Hz frequency response range
- ④ 152mm(6") high temperature inside/outside copper voice coil
- (5) High temperature SH grade neodymium magnet
- 6 Ultra strong carbon cone and dust cap
- ⑦ Silicone double Conex damper
- (8) BL/Re maximized for loaded applications

GENERAL SPECIFICATIONS

530mm / 21inch		
8 ohm		
1800 Watts		
3600 Watts		
97.5 dB		
31 ~ 800Hz		
7.2 ohm		
152mm / 6inch		
Copper		
Glass Fiber		
34 mm		
2(inside/outside)		
14 mm		
Cast Aluminum		
1.1 T		
Neodymium		

THIELE – SMALL PARAMETERS ⁵							
Resonance frequency	Fs	31 Hz					
DC resistance	Re	5.7 ohm					
Mechanical factor	Qms	17.5					
Electrical factor	Qes	0.321					
Total factor	Qts	0.315					
Mechanical compliance	Cms	0.068 mm/N					
Mechanical resistance of total-driver losses	Rms	4.33 kg/s					
Effective Moving Mass	Mms	390 g					
Half-space efficiency	Eff	2.4 %					
BL Factor	BL	37 T.m					
Equivalent Cas air load	Vas	267 liters					
Effective piston area	Sd	0.1669 m ²					
Max. linear excursion ⁶	Xmax	±13.5 mm					
Max. excursion before damage	Xdam	±32 mm					
Voice coil inductance(1kHz)	Le	1.85 mH					
Efficiency Bandwidth Product	EBP	97					

dB

-12

-18 -24

-30

-36

5 Hz

MOUNTING INFORMATION						
Overall Diameter	545 mm					
Bolt Circle Diameter	520 mm					
Bolt Hole Diameter	8.5 mm					
Baffle Cutout Diameter	495 mm					
Overall Depth	251 mm					
Air volume occupied by driver	13 liters					
Net Weight	21 kg					
Shipping Weight	23 kg					
Shipping Box	570x570x290mm					



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

92L/37H

100

Vb/Fb = 92L/37Hz

Vb/Fb

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.

50

7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=190L/30Hz,

Vb/Fb = 190L/30Hz

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

JC62I8nd



* 18inch * 1300 Watts KLIPPEL



KEY FEATURES:

- 1 2600 W continuous program power capacity
- 2 98dB Sensitivity 1w/1m
- ③ 30Hz ~1200Hz frequency response range
- ④ 125mm(5") high temperature inside/outside copper voice coil
- (5) High temperature SH grade neodymium magnet
- 6 Aluminum demodulating ring for lower distortion
- ⑦ Ultra strong carbon cone and dust cap 8 Silicone double Conex damper
- (9) BL/Re maximized for loaded applications

GENERAL SPECIFICAT	IONS	THIELE - SMA
Nominal Diameter	460mm / 18inch	Resonance freque
Rated Impedance	8 ohm	DC resistance
Nominal Power handling ¹	1300 Watts	Mechanical factor
Program Power ²	2600 Watts	Electrical factor
Sensitivity(1w/1m) ³	98 dB	Total factor
Frequency Range⁴	30 ~ 1200Hz	Mechanical comp
Minimum Impedance(Zmin)	6.8 ohm	Mechanical resistance of total-driver losse
Voice Coil Diameter	125mm / 5inch	Effective Moving N
Voice Coil Material	Copper	Half-space efficier
Former Material	Glass Fiber	BL Factor
Voice Coil Winding Depth	34 mm	Equivalent Cas ai
Number of layers	2(inside/outside)	Effective piston ar
Magnet gap depth	14 mm	Max. linear excurs
Basket	Cast Aluminum	Max. excursion be
Flux Density	1.2 T	Voice coil inducta

THIELE - SMALL PARAMETERS°			
Resonance frequency	Fs	30 Hz	
DC resistance	Re	5.4 ohm	
Mechanical factor	Qms	14.7	
Electrical factor	Qes	0.24	
Total factor	Qts	0.24	
Mechanical compliance	Cms	0.097 mm/N	
Mechanical resistance of total-driver losses	Rms	3.65 kg/s	
Effective Moving Mass	Mms	279 g	
Half-space efficiency	Eff	2.4 %	
BL Factor	BL	35.8 T.m	
Equivalent Cas air load	Vas	205 liters	
Effective piston area	Sd	0.1225 m^2	
Max. linear excursion ⁶	Xmax	±13.5 mm	
Max. excursion before damage	Xdam	± 23 mm	
Voice coil inductance(1kHz)	Le	1.46 mH	
Efficiency Bandwidth Product	EBP	125	

dB

-12

-18 -24 -30 -36

5 Hz

MOUNTING INFORMATION		
Overall Diameter	461 mm	
Bolt Circle Diameter	439 mm	
Bolt Hole Diameter	6.5x9.5 mm	
Baffle Cutout Diameter	424 mm	
Overall Depth	228 mm	
Air volume occupied by driver	9.6 liters	
Net Weight	13.5 kg	
Shipping Weight	14.8 kg	
Shipping Box	490x490x255mm	



500

1000

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber -----Impedance magnitude curve measured in free air

Neodymium

NOTES:

1. AES standard

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

50

Vb/Fb=47L/42Hz

100

Vb/Fb = 47L/42Hz

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=75L/35Hz

Vb/Fb = 75L/35Hz

2

Turbosonic

FERRITE WOOFER **MID-BASS**

NEO

HF

J63I8nd/2 Code:23043



🔆 18 inch 🔆 1500 Watts KLIPPEL ★ 100 dB ★ 31 ~ 1000 Hz



KEY FEATURES:

- ① 3000 W continuous program power capacity
- 2 High sensitivity: 100dB 1w/1m
- 3 31Hz ~1000Hz frequency response range
- ④ 125mm(5") inside/outside voice coil for improved power handling and durability
- 5 High temperature SH grade neodymium magnet
- 6 Aluminum demodulating ring for lower distortion
- ⑦ U−SONIC paper cone
- 8 Silicone double Conex dampers with optimized compliance
- 9 BL/Re maximized for loaded applications

GENERAL SPECIFICATIONS THIELE - SMALL PARAMETERS⁵ MOUNTING INFORMATION Nominal Diameter 460mm / 18inch 31 Hz **Overall Diameter** Resonance frequency Fs Rated Impedance 8 ohm DC resistance Re 5.3 ohm **Bolt Circle Diameter** Nominal Power handling 1500 Watts Mechanical factor Qms 14.1 Bolt Hole Diameter Program Power² 0 17 3000 Watts Electrical factor Qes **Baffle Cutout Diameter** 0.168 Sensitivity(1w/1m)³ 100 dB Total factor Qts **Overall Depth** Frequency Range⁴ 31~1000Hz Mechanical compliance Cms 0.104 mm/N Mechanical resistance Minimum Impedance(Zmin) 7.5 ohm Rms 5.1kg/s Net Weight of total-driver losses Voice Coil Diameter 125mm / 5inch Effective Moving Mass Mms 251 g Shipping Weight Voice Coil Material Half-space efficiency Eff 2.1% Shipping Box Copper Former Material Glass Fiber **BL** Factor ΒL 39 T.m Voice Coil Winding Depth 225 liters 25 mm Equivalent Cas air load Vas 0 1238 m² Number of layers Sd 2(inside/outside) Effective piston area Magnet gap depth 14 mm Max. linear excursion Xmax ±9.5mm Basket Cast Aluminum Max. excursion before damage Xdam ±28 mm

Voice coil inductance(1kHz)

Efficiency Bandwidth Product





1000

500



1.1 T

Neodymium

NOTES:

AES standard 1

Flux Density

Magnet Material

- Program Power is defined as 3 dB greater than the nominal power handling 2
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

-50

Vb/Fb=50L/Sealea

Vb/Fb = 50L/Sealed

- Hg is the gap depth. . Vb: Net internal volume of box after subtracting the volume of internal objects
- 8. Total internal volume of empty box

Vb/Fb = 48L/44Hz

2.2 mH

Vb/Fb=481/44Hz

Computer predicted low frequency response⁽⁷⁾

152

Le

dB

-12

-18 -24 -30

3

5 Hz

EBP

urbosoni

FERRITE WOOFER MID-BASS

NEO

HF

J6118nd/2 Code:19092



🔆 18 inch 🔆 1400 Watts **♦ 97 dB ★ 39 ~ 1000 Hz**



KEY FEATURES:

- 1 2800 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- ③ 39Hz ~1000Hz frequency response range
- ④ 4.5" inside/outside voice coil for improved power-handling and durability
- ⑤ Forced air ventilation on U-yoke for minimum power compressoin
- 6 Neodymium magnet allows a very light yet powerful motor assembly
- ⑦ Double silicone spider with optimized compliance
- 8 Ideal for compact subwoofer application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	IATION
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	39 Hz	Overall Diameter	461 mn
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	439 mn
Nominal Power handling ¹	1400 Watts	Mechanical factor	Qms	11	Bolt Hole Diameter	6.5x9.5
Program Power ²	2800 Watts	Electrical factor	Qes	0.41	Baffle Cutout Diameter	424 mn
Sensitivity(1w/1m) ³	97 dB	Total factor	Qts	0.39	Overall Depth	220 mn
Frequency Range⁴	39 ~ 1000Hz	Mechanical compliance	Cms	0.06 mm/N	Air volume occupied by driver	9.6 liter
Minimum Impedance(Zmin)	7.0 ohm	Mechanical resistance of total-driver losses	Rms	5.5 kg/s	Net Weight	11.6 kg
Voice Coil Diameter	115mm / 4.5inch	Effective Moving Mass	Mms	253 g	Shipping Weight	12.9 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	2.0%	Shipping Box	490x49
Former Material	Glass Fiber	BL Factor	BL	28.8 T.m		
Voice Coil Winding Depth	31 mm	Equivalent Cas air load	Vas	137 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1238 m ²	回路後援	ΠŪ
Magnet gap depth	14 mm	Max. linear excursion ⁶	Xmax	±11 mm		É a c
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±28 mm		100

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

Le

dB

-12

-18 -24 -30

-36

5 Hz

EBP

439 mm 6.5x9.5 mm 424 mm 220 mm 9.6 liters 11.6 kg 12.9 kg 490x490x245mm

461 mm



500

1000

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSP 100.0 90.0 80 MU Impedance magnitude curve measured in free air

1.1 T

Neodymium

NOTES:

1. AES standard

Flux Density

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 104L/38Hz

2.4 mH

Computer predicted low frequency response⁽⁷⁾

95

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb=104L/38Hz

- - 4

FERRITE WOOFER MID-BASS

NEO

HF

ND91185







KEY FEATURES:

- 1800 W continuous program power capacity
- 2 96.5dB Sensitivity 1w/1m
- 3 36Hz ~1000Hz frequency response range
- ④ 100mm(4") inside/outside copper voice coil
- (5) Double silicone spider with optimized compliance
- 6 Neodymium magnet allows a very light yet powerful motor assembly
- ⑦ Ventilated voice coil gap for reduced power compression
- 8 Ideal for compact subwoofer application

GENERAL SPECIFICATIONS THIELE - SMALL PARAMETERS⁵ MC Nominal Diameter 460mm / 18inch Fs 36 Hz Ove Resonance frequency Rated Impedance 8 ohm DC resistance Re 5.5 ohm Bol Nominal Power handling 900 Watts Mechanical factor Qms 12 Bol Program Power² Qes 0 46 Raf 1800 Watts Electrical factor 0.445 Sensitivity(1w/1m)³ 96.5 dB Total factor Qts Ove Frequency Range⁴ 36~1000Hz Mechanical compliance Cms 0.083 mm/N Air v Mechanical resistance Minimum Impedance(Zmin) 6.6 ohm Rms 4.4 kg/s Net of total-driver losses Voice Coil Diameter 100mm / 4inch Effective Moving Mass Mms 231 g Shi Shipping Box Voice Coil Material Half-space efficiency Eff 1.8% 490x490x250mm Copper Former Material Glass Fiber **BL** Factor ΒL 25.1 T.m Voice Coil Winding Depth Equivalent Cas air load 174 liters 26.5 mm Vas 0.1219 m^2 Number of layers Sd 2(inside/outside) Effective piston area Magnet gap depth 12 mm Max. linear excursion Xmax ±10.3 mm Basket Cast Aluminum Max. excursion before damage Xdam ±25 mm Flux Density 1.15 T Voice coil inductance(1kHz) 1.5 mH Le

Efficiency Bandwidth Product

EBP

78

Computer predicted low frequency response⁽⁷⁾



Neodymium

NOTES:

1. AES standard

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and represent the expected long term parameters after a short term of use
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 5

DUNTING INFORMATION		
erall Diameter	461 mm	
t Circle Diameter	439 mm	
t Hole Diameter	6.5x9.5 mm	
fle Cutout Diameter	424 mm	
erall Depth	212 mm	
olume occupied by driver	8.3 liters	
Weight	9.6 kg	
pping Weight	11 kg	



- dB Vb/Fb=188L/32H -12 Vb/Fb=150L/34Hz -18 -24 -30 5 Hz 50 500 1000 Vb/Fb = 188L/32Hz Vb/Fb = 150L/34Hz

FERRITE WOOFER MID-BASS

NEO

HF

ND93I5s







KEY FEATURES:

- ① 1600 W continuous program power capacity
- 2 98dB sensitivity 1w/1m
- 3 40Hz ~ 1000Hz frequency response range
- ④ 100mm(4") inside/outside winding copper voice coil
- ⑤ Triple-roll cloth edge with deep corrugations for extended Xmax
- ⑥ Neodymium magnet allows a very light yet powerful motor assembly
- ⑦ Corrugated cone geometry
- ⑧ Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS THIELE - SMALL PARAMETERS⁵ Nominal Diameter 380mm /15inch Fs 40 Hz Resonance frequency Rated Impedance 8 ohm DC resistance Re 5.2 ohm Nominal Power handling 800 Watts Mechanical factor Qms 9.2 0.33 Program Power² Qes 1600 Watts Electrical factor 98 dB 0.32 Sensitivity(1w/1m)³ Total factor Qts Frequency Range⁴ 40~1000Hz Mechanical compliance Cms 0.1 mm/N Mechanical resistance Minimum Impedance(Zmin) 6.6 ohm Rms 4.36 kg/s of total-driver losses Voice Coil Diameter 100mm /4inch Effective Moving Mass Mms 159 g Voice Coil Material Half-space efficiency Eff 1.9 % Copper Former Material Glass Fiber **BL** Factor ΒL 24.9 T.m Voice Coil Winding Depth Equivalent Cas air load 102 liters 25 mm Vas $0.0855 \,\mathrm{m}^3$ Number of layers Sd 2(inside/outside) Effective piston area Magnet gap depth 12 mm Max. linear excursion Xmax ± 9 mm Basket Cast Aluminum Max. excursion before damage Xdam ±25.5mm

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

MOUNTING INFORMATION		
Overall Diameter	393 mm	
Bolt Circle Diameter	275 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	355 mm	
Overall Depth	182 mm	
Air volume occupied by driver	5.3 liters	
Net Weight	8.3 kg	
Shipping Weight	9.4 kg	
Shipping Box	430x430x205mm	

urb@soni



Frequency response measured in a closed enclosure of 600L in an anechoic chamber

1.2 T

Neodymium



NOTES:

1. AES standard

Flux Density

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling.
- 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test.
 The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

1.4 mH

121

Le

EBP

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

ND94I5w



* 15 inch * 700 Watts **★ 40 ~ 2500 Hz** 🔆 97 dB



KEY FEATURES:

- ① 1400 W continuous program power capacity
- 2 97dB sensitivity 1w/1m
- ③ 100mm(4") high temperature inside/outside voice coil with copper clad aluminum wire
- ④ Ventilated voice coil gap for reduced power compression

(5) Neodymium magnet allows a very light yet powerful motor assembly

- 6 Aluminum demodulating ring for low distortion
- ⑦ Weather protected cone for outdoor usage
- 8 Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	700 Watts
Program Power ²	1400 Watts
Sensitivity(1w/1m) ³	97 dB
Frequency Range⁴	40 ~ 2500Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	22 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet Material	Neodymium

I FILLE - SIVIALL FARAIV	ETERS	
Resonance frequency	Fs	40.5 Hz
DC resistance	Re	5.7 ohm
Mechanical factor	Qms	9.3
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of total-driver losses	Rms	3.9 kg/s
Effective Moving Mass	Mms	142 g
Half-space efficiency	Eff	2.0%
BL Factor	BL	25 T.m
Equivalent Cas air load	Vas	104 liters
Effective piston area	Sd	0.0830 m ²
Max. linear excursion ⁶	Xmax	± 7 mm
Max. excursion before damage	Xdam	±26mm
Voice coil inductance(1kHz)	Le	1.35 mH
Efficiency Bandwidth Product	EBP	122

dB

-12

-18 -24

-30 -36

> 5 Hz 10

MOUNTING INFORMATION		
Overall Diameter	393 mm	
Bolt Circle Diameter	375 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	355 mm	
Overall Depth	182 mm	
Air volume occupied by driver	5.3 liters	
Net Weight	8.3 kg	
Shipping Weight	9.4 kg	
Shipping Box	430x430x205mm	

Turb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSPI 100.0 90.1 80 70.1 60.0 L -----¥ | ||| 500 1k 2k Hz 5k 10k 20k Impedance magnitude curve measured in free air 200 100

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 60L/42Hz

50 100

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

Vb/Fb=60L/42Hz

500

1 K

5 K 10 K 20 K

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 7

FERRITE WOOFER MID-BASS

COAXIAL

NEO

HF

J6115nd



🔆 15 inch 🔆 600 Watts **★ 37 ~ 2800 Hz ♦ 99 dB**



KEY FEATURES:

- ① 1200 W continuous program power capacity
- 2 99dB sensitivity 1w/1m
- ③ 86mm(3.4") inside/outside winding copper clad aluminum voice coil
- 4 Forced air ventilation on U–yoke for minimum power compression ⑤ Neodymium magnet allows a very light yet powerful motor assembly
- 6 Paper cone made in the USA
- ⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

380mm /15inch
8 ohm
600 Watts
1200 Watts
99 dB
37 ~ 2800Hz
6.6 ohm
86mm /3.4inch
CCAW
Glass Fiber
16.5 mm
2(inside/outside)
10 mm
Cast Aluminum
1.2 T
Neodymium

Resonance frequency	Fs	38 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	7.8
Electrical factor	Qes	0.31
Total factor	Qts	0.3
Mechanical compliance	Cms	0.18 mm/N
Mechanical resistance of total-driver losses	Rms	3 kg/s
Effective Moving Mass	Mms	98 g
Half-space efficiency	Eff	3.1%
BL Factor	BL	20.4 T.m
Equivalent Cas air load	Vas	187 liters
Effective piston area	Sd	0.0866 m^2
Max. linear excursion ⁶	Xmax	±6 mm
Max. excursion before damage	Xdam	±19mm
Voice coil inductance(1kHz)	Le	1.4 mH
Efficiency Bandwidth Product	EBP	122

dB

-12

-18 -24 -30 -36

5 Hz

MOUNTING INFORMATION		
Overall Diameter	393 mm	
Bolt Circle Diameter	275 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	355 mm	
Overall Depth	172 mm	
Air volume occupied by driver	5.2 liters	
Net Weight	6.1 kg	
Shipping Weight	7.2 kg	
Shipping Box	430x430x205mm	



500

1000

2000





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 58L/47Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=58L/47Hz

100

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FERRITE WOOFER MID-BASS

NEO

HF

ND90I5w



🔆 15 inch 🔆 500 Watts **★ 45 ~ 2900 Hz ※ 99 dB**



KEY FEATURES:

- 1 1000 W continuous program power capacity
- 2 99dB sensitivity 1w/1m
- ③ 76mm(3") inside/outside winding copper clad aluminum voice coil
- ④ FEA optimized neodymium magnet assembly allows the highest force factor and excursion capability
- ⑤ Paper cone made in the USA
- 6 Optimized for the use in compact bass reflex enclosure or line array systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	500 Watts
Program Power ²	1000 Watts
Sensitivity(1w/1m) ³	99 dB
Frequency Range ^₄	45 ~ 2900Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glassfiber
Voice Coil Winding Depth	17 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

THIELE - SMALL PARAMETERS		
Resonance frequency	Fs	46 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10.4
Electrical factor	Qes	0.41
Total factor	Qts	0.39
Mechanical compliance	Cms	0.13 mm/N
Mechanical resistance of total-driver losses	Rms	2.6 kg/s
Effective Moving Mass	Mms	92 g
Half-space efficiency	Eff	3.4%
BL Factor	BL	18.7 T.m
Equivalent Cas air load	Vas	145 liters
Effective piston area	Sd	0.0903 m ²
Max. linear excursion ⁶	Xmax	± 6 mm
Max. excursion before damage	Xdam	±18mm
Voice coil inductance(1kHz)	Le	0.99 mH
Efficiency Bandwidth Product	EBP	112

-12

-18 -24

-30 -36

-42 -48

9

5 Hz

MOUNTING INFORMATION **Overall Diameter** 393 mm Bolt Circle Diameter 275 mm **Bolt Hole Diameter** 6.5 mm 355 mm **Baffle Cutout Diameter Overall Depth** 166 mm Air volume occupied by driver 4.8 liters Net Weight 5.5 kg Shipping Weight 6.6 kg Shipping Box 430x430x205mm

Also available in 16ohm, data upon request.



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 98L/46Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=981/46H

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=70L/50Hz

100

Vb/Fb = 70L/50Hz

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE WOOFER **MID-BASS**

NEO

HF

ND9815



* 15 inch * 550 Watts KLIPPEL ★ 100 dB ★ 42 ~ 3100 Hz



KEY FEATURES:

- 1 1100 W continuous program power capacity
- 2 High efficiency : 10dB 1w/1m
- 3 42 ~ 3100Hz frequency response range
- ④ 76mm(3") high temperature copper clad aluminum voice
 - coil wounded on fiberglass former
- (5) The advanced motor structure is built with an aluminum heat radiator, it also acts as demodulating ring. The structure allows an extreme heat dispersion and a very low distortion figure
- 6 Neodymium magnet system with symmetric BL(X) and Le(X) characteristics
- ⑦ Optimized for the use in high quality bass reflex systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	550 Watts
Program Power ²	1100 Watts
Sensitivity(1w/1m) ³	100 dB
Frequency Range ^₄	42 ~ 3100Hz
Minimum Impedance(Zmin)	6.3 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glassfiber
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

I HIELE - SWALL PARAMETERS		
Resonance frequency	Fs	42 Hz
DC resistance	Re	5.5 ohm
Mechanical factor	Qms	6.5
Electrical factor	Qes	0.45
Total factor	Qts	0.42
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of total-driver losses	Rms	3.6 kg/s
Effective Moving Mass	Mms	88 g
Half-space efficiency	Eff	2.7%
BL Factor	BL	17.1 T.m
Equivalent Cas air load	Vas	166 liters
Effective piston area	Sd	$0.0855 m^2$
Max. linear excursion ⁶	Xmax	± 6 mm
Max. excursion before damage	Xdam	±18mm
Voice coil inductance(1kHz)	Le	0.72 mH
Efficiency Bandwidth Product	EBP	93

MOUNTING INFORMATION		
Overall Diameter	393 mm	
Bolt Circle Diameter	275 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	355 mm	
Overall Depth	166 mm	
Air volume occupied by driver	5.3 liters	
Net Weight	5.9 kg	
Shipping Weight	7.0 kg	
Shipping Box 430x430x205mm		
Also available in 160hm, data upon request.		



Frequency response measured in a closed enclosure of 600L in an anechoic chamber dese 100 200 20 Impedance magnitude curve measured in free air

Computer predicted low frequency response⁽⁷⁾ dB Vb/Fb=85L/42Hz -12 -18 -24 -30 -36 5 Hz 50 100 500 1000 2000 Vb/Fb = 85L/42Hz

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module AFTER a high level 20Hz sine wave preconditioning test and present the expected long term parameter after a long term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

* 12 inch * 550 Watts

ND9412w





KEY FEATURES:

- ① 1100 W continuous program power capacity
- 2 Sensitivity: 97.5dB 1w/1m
- ③ 61~2800Hz frequency response range
- ④ 100mm(4") high temperature inside/outside copper clad aluminum voice coil
- (5) Special treatment on cone in house for excellent performance
- 6 Neodymium magnet allows a light yet powerful motor assembly
- ⑦ Aluminum demodulating ring for lower distortion
- 8 Inverted dust cap to minimize the cone distortion and for better coupling to a phase plug
- (9) Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	550 Watts
Program Power ²	1100 Watts
Sensitivity(1w/1m) ³	97.5 dB
Frequency Range ^₄	61 ~ 2800Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	20.8 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

I TIELE - SWALL PARAWETERS		
Resonance frequency	Fs	64 Hz
DC resistance	Re	5 ohm
Mechanical factor	Qms	18
Electrical factor	Qes	0.35
Total factor	Qts	0.34
Mechanical compliance	Cms	0.07 mm/N
Mechanical resistance of total-driver losses	Rms	2.0 kg/s
Effective Moving Mass	Mms	93 g
Half-space efficiency	Eff	2.0%
BL Factor	BL	23.3 T.m
Equivalent Cas air load	Vas	28.4 liters
Effective piston area	Sd	0.0552 m ²
Max. linear excursion ⁶	Xmax	± 7.4 mm
Max. excursion before damage	Xdam	±19.5mm
Voice coil inductance(1kHz)	Le	1.0 mH
Efficiency Bandwidth Product	EBP	185

MOUNTING INFORMATION **Overall Diameter** 313 mm Bolt Circle Diameter 294 mm Bolt Hole Diameter 6.5 mm 285 mm **Baffle Cutout Diameter Overall Depth** 133 mm Air volume occupied by driver 2.8 liters Net Weight 7.6 kg Shipping Weight 8.3 kg Shipping Box 345x345x180mm Also available in 16ohm, data upon request.

lurb@sonic



500

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=13L/71Hz

100

Vb/Fb = 13L/71Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=25L/60Hz

Vb/Fb = 25L/60Hz

11

-12 -18 -24 -30 -36

5 Hz

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

J6II2nd



* 12 inch * 500 Watts KLIPPEL 🔆 97 dB ★ 55 ~ 3000 Hz



KEY FEATURES:

- ① 1000 W continuous program power capacity
- 2 97dB sensitivity 1w/1m
- ③ 86mm(3.4") inside/outside winding copper clad aluminum voice coil
- ④ Forced air ventilation on U-yoke for minimum power compression
- ⑤ Neodymium magnet allows a vrey light yet powerful motor assembly
- 6 RDM paper cone, made in USA
- ⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	500 Watts
Program Power ²	1000 Watts
Sensitivity(1w/1m) ³	97 dB
Frequency Range ^₄	55 ~ 3000Hz
Minimum Impedance(Zmin)	6.4 ohm
Voice Coil Diameter	86mm /3.4inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Material	Neodymium

Resonance frequency	Fs	55 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	18.3
Electrical factor	Qes	0.42
Total factor	Qts	0.41
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of total-driver losses	Rms	1.47 kg/s
Effective Moving Mass	Mms	77.6 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	18.8 T.m
Equivalent Cas air load	Vas	44 liters
Effective piston area	Sd	0.0531 m^2
Max. linear excursion ⁶	Xmax	±6 mm
Max. excursion before damage	Xdam	±19 mm
Voice coil inductance(1kHz)	Le	0.96 mH
Efficiency Bandwidth Product	EBP	131

dB

-12

-18 -24

-30 -36

5 Hz

MOUNTING INFORMATION		
Overall Diameter	316 mm	
Bolt Circle Diameter	297 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	283 mm	
Overall Depth	153 mm	
Air volume occupied by driver	3.1 liters	
Net Weight	5.1 kg	
Shipping Weight	5.8 kg	
Shipping Box	345x345x180mm	

Turb@sonic



500

1000

2000





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

50

Hg is the gap depth.

Vb/Fb = 25L/54Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

- 12
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

Vb/Fb=25L/54H

FERRITE WOOFER MID-BASS

NEO

HF

ND9512m



* 12 inch * 400 Watts ★ 101 dB ★ 43 ~ 3000 Hz



KEY FEATURES:

- ① 800 W continuous program power capacity
- 2 High efficiency: 101dB 1w/1m
- ③ Smooth frequency response up to 3kHz
- ④ 76mm(3") aluminum voice coil wounded on Kapton former
- ⑤ High grade neodymium magnet allows a very light yet powerful motor assembly
- 6 Special treated cloth edge for reducing distortion
- ⑦ Optimized for the use in line array systems or compact reflex enclosure

GENERAL SPECIFICAT	IONS	THIELE – SMALL PARAM	IETERS	
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	55 Hz
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	8.1
Program Power ²	800 Watts	Electrical factor	Qes	0.17
Sensitivity(1w/1m) ³	101dB	Total factor	Qts	0.15
Frequency Range⁴	43 ~ 3000Hz	Mechanical compliance	Cms	0.24 mm/N
Minimum Impedance(Zmin)	7.6 ohm	Mechanical resistance of total-driver losses	Rms	1.84 kg/s
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	53 g
Voice Coil Material	Aluminum	Half-space efficiency	Eff	5.12%
Former Material	Polyimide	BL Factor	BL	23 T.m
Voice Coil Winding Depth	18 mm	Equivalent Cas air load	Vas	94 liters
Number of layers	2	Effective piston area	Sd	0.0531 m ²
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	±6.5mm
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±16 mm
Flux Density	1.45 T	Voice coil inductance(1kHz)	Le	0.68 mH

Efficiency Bandwidth Product

EBP

dB

-12

-18 -24

-30 -36

5 Hz

343

Computer predicted low frequency response⁽⁷⁾

MOUNTING INFORMATION		
Overall Diameter	316 mm	
Bolt Circle Diameter	297 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	283 mm	
Overall Depth	140 mm	
Air volume occupied by driver	3.0 liters	
Net Weight	5 kg	
Shipping Weight	5.7 kg	
Shipping Box 345x345x180mm		
Also available in 160hm, data upon request.		



500

1000

2000

Fb=15L/71Hz

100



Neodymium



1. AES standard

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 15L/71Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

-50

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Turb@sonic

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

ND93I2







KEY FEATURES:

- 1 900 W continuous program power capacity
- 2 High efficiency: 99dB 1w/1m
- 3 Very smooth response up to 3500Hz
- ④ 76mm(3") inside/outside CCAW voice coil wounded on fiberglass former

⑤ UKM paper cone

- 6 Special treatment on cone in house for excellent performance
- $\overline{\mathcal{O}}$ SH grade neodymium magnet for increased thermal proction
- 8 Aluminum demodulating ring for low distortion
- 9 Optimized for the use in line array or compact bass reflex systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	450 Watts
Program Power ²	900 Watts
Sensitivity(1w/1m) ³	99 dB
Frequency Range⁴	51 ~ 3500Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	17 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

I FILLE - SIVIALL FARAIV	EIEKS	
Resonance frequency	Fs	51 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	13.7
Electrical factor	Qes	0.31
Total factor	Qts	0.306
Mechanical compliance	Cms	0.15 mm/N
Mechanical resistance of total-driver losses	Rms	1.48 kg/s
Effective Moving Mass	Mms	63 g
Half-space efficiency	Eff	2.8%
BL Factor	BL	18.8 T.m
Equivalent Cas air load	Vas	65 liters
Effective piston area	Sd	0.0551 m ²
Max. linear excursion ⁶	Xmax	±6 mm
Max. excursion before damage	Xdam	± 14.5 mm
Voice coil inductance(1kHz)	Le	0.66 mH
Efficiency Bandwidth Product	EBP	165

dB

-12

-18 -24 -30 -36

5 Hz

MOUNTING INFORMATION **Overall Diameter** 316 mm Bolt Circle Diameter 297 mm Bolt Hole Diameter 6.5 mm 283 mm **Baffle Cutout Diameter Overall Depth** 146 mm Air volume occupied by driver 2.8 liters Net Weight 4.2 kg Shipping Weight 4.9 kg

Shipping Box 345x345x180mm

Also available in 16ohm, data upon request.



500

1000

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber dRSE 90 ++++Impedance magnitude curve measured in free air

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=22L/62H

100

- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 14

Vb/Fb = 45L/48HzVb/Fb = 22L/62Hz

Vb/Fb=45L/48Hz

Computer predicted low frequency response⁽⁷⁾

FERRITE WOOFER MID-BASS

NEO

HF

ND90I2w







KEY FEATURES:

- ① 800 W continuous program power capacity
- 2 High efficiency: 98.5dB 1w/1m
- ③ 76mm(3") aluminum voice coil wounded on Kapton former
- ④ Vented on former, dual-forced air ventilation magnet system for heat dispersion and minimum power compression
- ⑤ UKM paper cone

Le

dB

-12

-18 -24 -30 -36 5 Hz

EBP

0.86 mH

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=35L/51Hz

177

- 6 Special treatment on cone in house for excellent performance
- 7 high temperature SH grade neodymium magnet; FEA optimized magnetic circuit for the highest force factor
- ⑧ A ferrite magnet on top of core for heat dispersion and higher flux density
- 9 Optimized for the use in line array or compact bass reflex systems

GENERAL SPECIFICAT	IONS	THIELE – SMALL PARAMETERS ⁵			MOUNTIN	
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	46 Hz	Overall Diame	
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm	Bolt Circle Dia	
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	9.8	Bolt Hole Diar	
Program Power ²	800 Watts	Electrical factor	Qes	0.263	Baffle Cutout	
Sensitivity(1w/1m)3	98.5 dB	Total factor	Qts	0.259	Overall Depth	
Frequency Range⁴	44 ~ 3500Hz	Mechanical compliance	Cms	0.22 mm/N	Air volume occup	
Minimum Impedance(Zmin)	6.8 ohm	Mechanical resistance of total-driver losses	Rms	1.08 kg/s	Net Weight	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	56 g	Shipping Weig	
Voice Coil Material	CCAW	Half-space efficiency	Eff	3.2%	Shipping Box	
Former Material	Polyimide	BL Factor	BL	19.8 T.m	Also available	
Voice Coil Winding Depth	17.5 mm	Equivalent Cas air load	Vas	91 liters		
Number of layers	2	Effective piston area	Sd	0.0547 m ²		
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	±6.5 mm		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	± 15 mm		

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

MOUNTING INFORMATION				
Overall Diameter	316 mm			
Bolt Circle Diameter	297 mm			
Bolt Hole Diameter	6.5 mm			
Baffle Cutout Diameter	283 mm			
Overall Depth	144 mm			
Air volume occupied by driver	2.8 liters			
Net Weight	4.4 kg			
Shipping Weight	5.1 kg			
Shipping Box	345x345x180mm			
Also available in 160hm, data upon request.				



500

1000

2000



1.2 T

Neodymium

NOTES:

1. AES standard

Flux Density

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

/b/Fb=26L/57Hz

100

Vb/Fb = 26L/57Hz

Hg is the gap depth.

Vb/Fb = 35L/51Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 15

FERRITE WOOFER MID-BASS

NEO

HF

ND98I2







KEY FEATURES:

- 1 1000 W continuous program power capacity
- 2 Sensitivity: 98dB 1w/1m
- 3 59 ~ 3600Hz frequency response range
- ④ 76mm(3") high temperature copper clad aluminum voice coil wounded on fiberglass former
- (5) The advanced motor structure is built with an aluminum heat radiator, it also acts as demodulating ring. The structure allows an extreme heat dispersion and a very low distortion figure
- 6 High temperature SH grade neodymium magnet
- ⑦ Optimized for the use in high quality bass reflex systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch		
Rated Impedance	8 ohm		
Nominal Power handling ¹	500 Watts		
Program Power ²	1000 Watts		
Sensitivity(1w/1m) ³	98 dB		
Frequency Range⁴	59 ~ 3600Hz		
Minimum Impedance(Zmin)	6.3 ohm		
Voice Coil Diameter	76mm /3inch		
Voice Coil Material	CCAW		
Former Material	Glass Fiber		
Voice Coil Winding Depth	18.7 mm		
Number of layers	2(inside/outside)		
Magnet gap depth	10 mm		
Basket	Cast Aluminum		
Flux Density	1.2 T		
Magnet Material	Neodymium		

THIELE – SMALL PARAMETERS⁵				
Fs	59.5 Hz			
Re	5.4 ohm			
Qms	19			
Qes	0.44			
Qts	0.43			
Cms	0.12 mm/N			
Rms	1.2 kg/s			
Mms	61 g			
Eff	2.3%			
BL	16.7 T.m			
Vas	50 liters			
Sd	0.0552 m ²			
Xmax	± 6.9 mm			
Xdam	±18.7mm			
Le	0.72 mH			
EBP	135			
	Fs Re Qms Qes Qts Cms Rms Mms Eff BL Vas Sd Xmax Xdam Le EBP			

MOUNTING INFORMATION **Overall Diameter** 316 mm **Bolt Circle Diameter** 297 mm Bolt Hole Diameter 6.5 mm 283 mm **Baffle Cutout Diameter Overall Depth** 145 mm Air volume occupied by driver 2.8 liters Net Weight 5.4 kg Shipping Weight 6.1 kg Shipping Box 345x345x180mm Also available in 16ohm, data upon request.

lurb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 100 90 Impedance magnitude curve measured in free air



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 16

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

ND98IO







KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 High efficiency : 99dB 1w/1m
- 3 70 ~ 4100Hz frequency response range
- ④ 76mm(3") high temperature copper clad aluminum voice coil wounded on fiberglass former
- ⑤ The advanced motor structure is built with an aluminum heat radiator, it also acts as demodulating ring. The structure allows an extreme heat dispersion and a very low distortion figure
- 6 High temperature SH grade neodymium magnet
- ⑦ Optimized for the use in high quality bass reflex or midrange systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling ¹	400 Watts
Program Power ²	800 Watts
Sensitivity(1w/1m) ³	99 dB
Frequency Range ^₄	70 ~ 4100Hz
Minimum Impedance(Zmin)	6.3 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	17.2 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

I TIELE - SIVIALL PARAIVIE I ERS					
Resonance frequency	Fs	70 Hz			
DC resistance	Re	5.3 ohm			
Mechanical factor	Qms	16.4			
Electrical factor	Qes	0.24			
Total factor	Qts	0.24			
Mechanical compliance	Cms	0.12 mm/N			
Mechanical resistance of total-driver losses	Rms	1.1 kg/s			
Effective Moving Mass	Mms	41 g			
Half-space efficiency	Eff	2.9%			
BL Factor	BL	20.2 T.m			
Equivalent Cas air load	Vas	21 liters			
Effective piston area	Sd	0.0346 m ²			
Max. linear excursion ⁶	Xmax	±6.1mm			
Max. excursion before damage	Xdam	±17 mm			
Voice coil inductance(1kHz)	Le	0.61 mH			
Efficiency Bandwidth Product	EBP	292			

dB

-12

-18 -24 -30 -36

5 Hz

MOUNTING INFORMATION				
Overall Diameter	261 mm			
Bolt Circle Diameter	246 mm			
Bolt Hole Diameter	5.5 mm			
Baffle Cutout Diameter	228 mm			
Overall Depth	127 mm			
Air volume occupied by driver	1.9 liters			
Net Weight	4.9 kg			
Shipping Weight	5.4 kg			
Shipping Box	295x295x155mm			
Also available in 160hm, data upon request.				

Turbosonic



500

1000

2000

Vb/Fb=9L/Sealea



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

Vb/Fb = 9L/Sealed

Hg is the gap depth.

Vb/Fb = 11L/71Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=11L/71Hz

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

COAXIAL

NEO

HF

ND95IOm



🔆 10 inch 🔆 350 Watts **★ 60 ~ 4300 Hz ※ 99 dB**



KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 High efficiency: 99dB 1w/1m
- ③ Smooth frequency response up to 4.3kHz
- ④ 76mm(3") aluminum voice coil wounded on Kapton former
- ⑤ High grade neodymium magnet allows a very light yet powerful motor assembly
- 6 Special treated cloth edge for reducing distortion
- ⑦ Optimized for the use in line array systems or compact reflex enclosure

GENERAL SPECIFICAT	IONS	THIELE – SMALL PARAMETERS ⁵			MOUNTING IN	
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	61.5 Hz	Overall Diameter	
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm	Bolt Circle Diame	
Nominal Power handling ¹	350 Watts	Mechanical factor	Qms	9.3	Bolt Hole Diamete	
Program Power ²	700 Watts	Electrical factor	Qes	0.17	Baffle Cutout Diar	
Sensitivity(1w/1m) ³	99 dB	Total factor	Qts	0.16	Overall Depth	
Frequency Range ^₄	60 ~ 4300Hz	Mechanical compliance	Cms	0.16 mm/N	Air volume occupied b	
Minimum Impedance(Zmin)	7.8 ohm	Mechanical resistance	Rms	1.7 kg/s	Net Weight	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	42 g	Shipping Weight	
Voice Coil Material	Aluminum	Half-space efficiency	Eff	3.7%	Shipping Box	
Former Material	Polyimide	BL Factor	BL	23 T.m	Also available in 1	
Voice Coil Winding Depth	18 mm	Equivalent Cas air load	Vas	28 liters		
Number of layers	2	Effective piston area	Sd	0.0353 m ²		
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	±6.5mm	影	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±16 mm		
Flux Density	1.45 T	Voice coil inductance(1kHz)	Le	0.6 mH	ារ	

Efficiency Bandwidth Product

IFORMATION 261 mm 246 mm ter 5.5 mm er 228 mm meter 121 mm by driver 2.0 liters 4.6 kg 5.1 kg 295x295x155mm 60hm, data upon request.

lurb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSP 100. 90.1 210.0 80.0 40.0 70. 60. 20 Impedance magnitude curve measured in free air

Neodymium



NOTES:

1. AES standard

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity

5. T/S parameters measured with laser system BEFORE preconditioning test.

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

EBP

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

ND93IOm



★ 10 inch ★ 400 Watts KLIPPEL 🔆 97 dB 🛛 🔆 63 ∼ 4100 Hz



KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 Sensitivity: 97dB 1w/1m
- 3 63 ~ 4100Hz frequency response range
- ④ 76mm(3") inside/outside winding CCAW voice coil
- (5) SH grade neodymium magnet for increased thermal protection
- 6 Half the weight than a conventional ferrite model
- ⑦ Aluminum demodulating ring for low distortion
- 8 Ideal for mid-bass or line array applications

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAMETERS ⁵		MOUNTING INFORM	1ATION	
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	63 Hz	Overall Diameter	261 mm
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	246 mm
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	17.8	Bolt Hole Diameter	5.5 mm
Program Power ²	800 Watts	Electrical factor	Qes	0.31	Baffle Cutout Diameter	228 mm
Sensitivity(1w/1m) ³	97 dB	Total factor	Qts	0.30	Overall Depth	115 mm
Frequency Range⁴	63 ~ 4100Hz	Mechanical compliance	Cms	0.14 mm/N	Air volume occupied by driver	1.6 liters
Minimum Impedance(Zmin)	6.4 ohm	Mechanical resistance	Rms	0.9 kg/s	Net Weight	3.7 kg
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	45 g	Shipping Weight	4.2 kg
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.9%	Shipping Box	275x275x130mm
Former Material	Glass fiber	BL Factor	BL	17.6 T.m	Also available in 4&16ohr	n, data upon request.
Voice Coil Winding Depth	17.2 mm	Equivalent Cas air load	Vas	25 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0353 m ²		
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 6.1 mm	64 X X	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±15.7mm	1021A-01	
Flux Density	1.25 T	Voice coil inductance(1kHz)	Le	0.6 mH		
Magnet Material	Noodymium	Efficiency Randwidth Broduct	ERD	203	回往安静	***

Efficiency Bandwidth Product



Neodymium

NOTES:

1. AES standard

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=15L/62Hz

100

500

1000

2000

Hg is the gap depth.

Vb/Fb = 15L/62Hz

EBP

dB

-12

-18 -24

-30 -36

19

5 Hz

203

Computer predicted low frequency response⁽⁷⁾

7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

COAXIAL

NEO

HF

ND90IOw



🔆 10 inch 🔆 350 Watts **★ 62 ~ 3500 Hz ※ 96 dB**



KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 Sensitivity: 96dB 1w/1m
- 3 76mm(3") aluminum voice coil wounded on Kapton former
- ④ Vented on former, dual-forced air ventilation magnet system for heat dispersion and minimum power compression
- (5) FEA optimized neodymium magnet assembly allows the highest force factor and excursion capability
- ⑥ Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling ¹	350 Watts
Program Power ²	700 Watts
Sensitivity(1w/1m) ³	96 dB
Frequency Range ^₄	62 ~ 3500Hz
Minimum Impedance(Zmin)	7.8 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	17.5 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Material	Neodymium

I TIELE - SWALL PARAWETERS				
Resonance frequency	Fs	64 Hz		
DC resistance	Re	5.6 ohm		
Mechanical factor	Qms	11		
Electrical factor	Qes	0.3		
Total factor	Qts	0.29		
Mechanical compliance	Cms	0.15 mm/N		
Mechanical resistance of total-driver losses	Rms	1.5 kg/s		
Effective Moving Mass	Mms	43 g		
Half-space efficiency	Eff	2.1%		
BL Factor	BL	18 T.m		
Equivalent Cas air load	Vas	28 liters		
Effective piston area	Sd	0.0353 m^2		
Max. linear excursion ⁶	Xmax	±6.5mm		
Max. excursion before damage	Xdam	±15 mm		
Voice coil inductance(1kHz)	Le	0.9 mH		
Efficiency Bandwidth Product	EBP	213		

MOUNTING INFORMATION **Overall Diameter** 261 mm Bolt Circle Diameter 246 mm **Bolt Hole Diameter** 5.5 mm 228 mm **Baffle Cutout Diameter Overall Depth** 121 mm Air volume occupied by driver 1.7 liters Net Weight 3.7 kg Shipping Weight 4.2 kg Shipping Box 295x295x155mm Also available in 16ohm, data upon request.

lurb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSP 100.0 90.1 80 70.0 -----60.0 100 100 200 Hz 20k 1k 2k 5k 10 Impedance magnitude curve measured in free air



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - - 20

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

COAXIAL

NEO

HF

ND94I0m/I6



🔆 10 inch 🔆 300 Watts **★ 65 ~ 4500 Hz ♦ 95 dB**



KEY FEATURES:

- ① 600 W continuous program power capacity
- 2 High SPL, superb quality sound
- ③ 2.5" pure aluminum voice coil wounded on polyimide former
- ④ Neodymium magnet structure, a very light weight
- ⑤ Aluminum demodulating ring for low distortion 6 Ideal for mid-bass or line array applications

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling ¹	300 Watts
Program Power ²	600 Watts
Sensitivity(1w/1m) ³	95 dB
Frequency Range⁴	65 ~ 4500Hz
Minimum Impedance(Zmin)	14.6 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Pure Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	15 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3 T
Magnet Material	Neodymium

I FIELE - SIVIALL FARAIVI	ETERS	
Resonance frequency	Fs	65 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	5.4
Electrical factor	Qes	0.58
Total factor	Qts	0.52
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of total-driver losses	Rms	2.9 kg/s
Effective Moving Mass	Mms	38 g
Half-space efficiency	Eff	1.2%
BL Factor	BL	18.4 T.m
Equivalent Cas air load	Vas	27 liters
Effective piston area	Sd	0.0353 m ²
Max. linear excursion ⁶	Xmax	± 6 mm
Max. excursion before damage	Xdam	± 15
Voice coil inductance(1kHz)	Le	0.84 mH
Efficiency Bandwidth Product	EBP	112

MOUNTING INFORMATION **Overall Diameter** 261 mm Bolt Circle Diameter 246 mm **Bolt Hole Diameter** 5.5 mm 228 mm **Baffle Cutout Diameter Overall Depth** 115 mm Air volume occupied by driver 1.6 liters Net Weight 2.3 kg Shipping Weight 2.8 kg Shipping Box 275x275x130mm Also available in 80hm, data upon request.

lurb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 120 dBSF 110. 100. 90.0 70.0 Impedance magnitude curve measured in free air



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity

5. T/S parameters measured with laser system BEFORE preconditioning test.

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE **SUBWOOFER**

FERRITE WOOFER **MID-BASS**

NEO

HF

ND9308m



🔆 8 inch 🛛 🔆 350 Watts KLIPPEL ¥ 96.5 dB ¥ 92 ~ 6000 Hz



KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 96.5dB Sensitivity 1w/1m
- 3 92~6000Hz frequency response range
- ④ 76mm(3") inside/outside copper clad aluminum voice coil
- ⑤ High grade neodymium magnet allows a light weight yet
- powerful motor assembly

- 6 Copper shorting ring ensures extremely linear impedance and reduced distortion figure
- Inverted dust cap to minimize the cone distortion and for better coupling to a phase plug
- 8 Optimized for the use in line arrays or multi-way systems

92 Hz

5.2 ohm

GENERAL SPECIFICATIONS Nominal Diameter 200mm /8inch Rated Impedance 8 ohm Nominal Power handling 350 Watts Program Power² 700 Watts Sensitivity(1w/1m)³ 96.5 dB Frequency Range⁴ 92~6000Hz Minimum Impedance(Zmin) 6.9 ohm Voice Coil Diameter 76mm /3inch

350 Watts	Mechanical factor	Qms	12.9
700 Watts	Electrical factor	Qes	0.283
96.5 dB	Total factor	Qts	0.277
92 ~ 6000Hz	Mechanical compliance	Cms	0.09 mm/N
6.9 ohm	Mechanical resistance of total-driver losses	Rms	1.5 kg/s
76mm /3inch	Effective Moving Mass	Mms	33.8 g
CCAW	Half-space efficiency	Eff	1.7 %
Glass Fiber	BL Factor	BL	18.8 T.m
13.5 mm	Equivalent Cas air load	Vas	6.5 liters
2(Inside/Outside)	Effective piston area	Sd	0.023 m^2
8 mm	Max. linear excursion ⁶	Xmax	± 5 mm
Cast Aluminum	Max. excursion before damage	Xdam	±10mm
1.45T	Voice coil inductance(1kHz)	Le	0.17 mH
Neodymium	Efficiency Bandwidth Product	EBP	325

dB

-12 -18 -24 -30 -36

5 Hz

THIELE - SMALL PARAMETERS

Fs

Re

Resonance frequency

DC resistance

MOUNTING INFORM	1ATION
Overall Diameter	208 mm
Bolt Circle Diameter	208 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	182 mm
Overall Depth	108mm
Air volume occupied by driver	1.2 liter
Net Weight	3.3 kg
Shipping Weight	3.6 kg
Shipping Box	220x220x110mm
Also available in 16ohm, o	data upon request.

urb@soni



Vb/Fb=5.5L/Sealed

500

1000

2000



NOTES:

1. AES standard

Voice Coil Material

Voice Coil Winding Depth

Former Material

Number of layers

Magnet gap depth

Basket

Flux Density

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis. 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 6L/90Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=6L/90Hz

22

Vb/Fb = 5.5L/Sealed

FERRITE **SUBWOOFER**

FERRITE WOOFER **MID-BASS**

NEO

HF

ND9608m



🔆 8 inch 🛛 🔆 300 Watts KLIPPEL



KEY FEATURES:

- ① 600 W continuous program power capacity
- 2 96.5dB Sensitivity 1w/1m
- 3 79~4500Hz frequency response range
- ④ 65mm(2.5") inside/outside copper clad aluminum voice coil
- (5) High grade neodymium magnet system, a very light weight
- 6 Aluminum demodulating ring for low distortion
- ⑦ Optimized for the use in line array or compact bass reflex enclosures

THIELE - SMALL PARAMETERS **GENERAL SPECIFICATIONS** Nominal Diameter 200mm /8inch Rated Impedance 8 ohm Nominal Power handling 300 Watts Program Power² 600 Watts Sensitivity(1w/1m)³ 96.5 dB Frequency Range⁴ 79~4500Hz Minimum Impedance(Zmin) 6.1 ohm Voice Coil Diameter 65mm /2.5inch Voice Coil Material CCAW Former Material Glass Fiber Voice Coil Winding Depth 11 mm Number of layers 2(Inside/Outside)

8 mm

1.2T

Cast Aluminum

Neodymium

Resonance frequency	Fs	79 Hz
DC resistance	Re	5 ohm
Mechanical factor	Qms	7.7
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.17 mm/N
Mechanical resistance of total-driver losses	Rms	1.6 kg/s
Effective Moving Mass	Mms	24.1 g
Half-space efficiency	Eff	1.7 %
BL Factor	BL	13.5 T.m
Equivalent Cas air load	Vas	11.6 liters
Effective piston area	Sd	0.0238 m ²
Max. linear excursion ⁶	Xmax	± 3.5 mm
Max. excursion before damage	Xdam	±10 mm
Voice coil inductance(1kHz)	Le	0.38 mH
Efficiency Bandwidth Product	EBP	239

dB

-12 -18 -24 -30 -36

5 Hz

MOUNTING INFORMATION **Overall Diameter** 208.5 mm **Bolt Circle Diameter** 196 mm Bolt Hole Diameter 5 5 mm **Baffle Cutout Diameter** 187 mm **Overall Depth** 102 mm Air volume occupied by driver 1 liter Net Weight 2 kg

urb@sonic

Also available in 16ohm, data upon request.

Shipping Weight

Shipping Box

2.3 kg

220x220x110mm

1000

500



Vb/Fb=4.6L/91Hz

Vb/Fb = 4.6L/91Hz





1. AES standard

Magnet gap depth

Basket

Flux Density

Magnet Material

- 2. Program Power is defined as 3 dB greater than the nominal power handling
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis. 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 8.7L/77Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=8.7L/77Hz

FERRITE **SUBWOOFER**

FERRITE WOOFER MID-BASS

NEO

HF

ND9306m



★ 6.5 inch ★ 100 Watts KLIPPEL **※ 95 dB** ★ 119 ~ 5600 Hz



KEY FEATURES:

- 1 200 W continuous program power capacity
- 2 High sensitivity 95dB/1w/1m
- 3 119 ~ 5600Hz frequency response range
- ④ 38mm(1.5") CCAW wire wounded on fiberglass

(5) Neodymium magnet system

⑥ Ideal for line array or midrange applications

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	ΙΑΤΙ
Nominal Diameter	170mm /6.5inch	Resonance frequency	Fs	119 Hz	Overall Diameter	162
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	172
Nominal Power handling ¹	100 Watts	Mechanical factor	Qms	15.1	Bolt Hole Diameter	5 mr
Program Power ²	200 Watts	Electrical factor	Qes	0.49	Baffle Cutout Diameter	147
Sensitivity(1w/1m) ³	95 dB	Total factor	Qts	0.47	Overall Depth	82 n
Frequency Range ⁴	119~5600Hz	Mechanical compliance	Cms	0.13 mm/N	Air volume occupied by driver	0.6 I
Minimum Impedance(Zmin)	6.5 ohm	Mechanical resistance	Rms	0.66 kg/s	Net Weight	1.2
Voice Coil Diameter	38mm /1.5inch	Effective Moving Mass	Mms	13.3 g	Shipping Weight	1.4
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.2%	Shipping Box	172
Former Material	Fiberglass	BL Factor	BL	10.6 T.m	Also available in 16ohm, o	data u
Voice Coil Winding Depth	12 mm	Equivalent Cas air load	Vas	3.6 liters		
Number of layers	2	Effective piston area	Sd	0.0137 m ²		\$# D
Magnet gap depth	6 mm	Max. linear excursion ⁶	Xmax	±4.5 mm	19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	315
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±9.5 mm	読むが	of S
Flux Density	1.3T	Voice coil inductance(1kHz)	Le	0.29 mH		646
Magnet Material	Neodymium	Efficiency Bandwidth Product	EBP	243		155



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

-50

100

Vb/Fb = 2.6L/Sealed

Vb/Fb = 5L/97Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=5L/97Hz

24

dB

-12

-18 -24 -30 -36

5 Hz

ON mm mm m mm nm iters kg kg x172x95mm

pon request.



Vb/Fb=2.6L/Sealed

500

1000

2000

Hg is the gap depth.

NEO LE

7685

FERRITE

SUBWOOFER

FERRITE WOOFER **MID-BASS**

🔆 21 inch 🔆 2500 Watts VERIFIED WITH KLIPPEL **★ 42 ~ 700 Hz ※ 97 dB**





KEY FEATURES:

- 1 5000 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- ③ 42Hz ~700Hz frequency response range
- ④ 8.5" big size voice coil, 22AWG high temperature copper wire for improved power-handling and durability
- ⑤ World's biggest magnet (400mm OD) allows a powerful motor system
- 6 Ferrite magnet on top of cone for higher flux density and heat dispersion
- ⑦ 18mm top plate for minimum power compression
- ⑧ Triple Conex dampers to retain good mechanical properties at high power
- (9) Long excursion suspension with linear behavior for large singal
- 10 BL/Re maximized for loaded applications

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INF
Nominal Diameter	530mm / 21inch	Resonance frequency	Fs	42 Hz	Overall Diameter
Rated Impedance	4 ohm	DC resistance	Re	3.6 ohm	Bolt Circle Diamete
Nominal Power handling ¹	2500 Watts	Mechanical factor	Qms	23.6	Bolt Hole Diameter
Program Power ²	5000 Watts	Electrical factor	Qes	0.32	Baffle Cutout Diam
Sensitivity(1w/1m)3	97 dB	Total factor	Qts	0.315	Overall Depth
Frequency Range ^₄	42 ~ 700Hz	Mechanical compliance	Cms	0.019 mm/N	Air volume occupied by
Minimum Impedance(Zmin)	4.9 ohm	Mechanical resistance	Rms	8.3 kg/s	Net Weight
Voice Coil Diameter	215mm / 8.5inch	Effective Moving Mass	Mms	747 g	Shipping Weight
Voice Coil Material	Copper	Half-space efficiency	Eff	1.9 %	Shipping Box
Former Material	Glass Fiber	BL Factor	BL	47.1 T.m	Also available in 80
Voice Coil Winding Depth	35 mm	Equivalent Cas air load	Vas	85 liters	
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1772 m ²	
Magnet gap depth	18 mm	Max. linear excursion ⁶	Xmax	±13 mm	젊말
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±25 mm	(E)
Flux Density	1.0 T	Voice coil inductance(1kHz)	Le	2.1 mH	

Efficiency Bandwidth Product

EBP

dB

-12

-18 -24 -30 -36

5 Hz

131

Computer predicted low frequency response⁽⁷⁾

ORMATION 545 mm 520 mm ۶r 8.5 mm 495 mm eter 233 mm driver 17.5 liters 50.7 kg 55.5 kg 670x670x350mm hm, data upon request.

lurbôsonic



500

1000

2000

Frequency response measured in a bass reflex enclosure in an anechoic chamber 110 100. 90 ++11 500 1k 2k Hz 5k 10k 20k Impedance magnitude curve measured in free air

400mm / 445oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and present the expected long term parameter after a long term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=68L/43Hz

100

- Hg is the gap depth
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 68L/43Hz

SUBWOOFER

FERRITE

FERRITE WOOFER MID-BASS

NEO

HF

JCe55



* 21 inch * 1800 Watts KLIPPEL



KEY FEATURES:

- ① 3600 W continuous program power capacity
- 2 97.5dB Sensitivity 1w/1m
- ③ 31Hz ~800Hz frequency response range
- ④ 152mm(6") high temperature inside/outside copper voice coil
- ⁽⁵⁾ High grade Y35 ferrite magnet, 30mm in height for longer excursion and higher flux density
- [®] Ultra strong carbon cone and dust cap
- ⑦ Silicone double Conex damper
- ⁽⁸⁾ BL/Re maximized for loaded applications

GENERAL SPECIFICA I	IONS
Nominal Diameter	530mm / 21inch
Rated Impedance	8 ohm
Nominal Power handling ¹	1800 Watts
Program Power ²	3600 Watts
Sensitivity(1w/1m) ³	97.5 dB
Frequency Range ⁴	31 ~ 800Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	152mm / 6inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	34 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wat	330mm / 333oz

I FIELE - SIVIALL FARAIVI	EIEKS	
Resonance frequency	Fs	31 Hz
DC resistance	Re	5.7 ohm
Mechanical factor	Qms	20.7
Electrical factor	Qes	0.31
Total factor	Qts	0.30
Mechanical compliance	Cms	0.066 mm/N
Mechanical resistance of total-driver losses	Rms	3.74 kg/s
Effective Moving Mass	Mms	397 g
Half-space efficiency	Eff	2.5 %
BL Factor	BL	39 T.m
Equivalent Cas air load	Vas	261 liters
Effective piston area	Sd	0.1669 m ²
Max. linear excursion ⁶	Xmax	±13.5 mm
Max. excursion before damage	Xdam	±25 mm
Voice coil inductance(1kHz)	Le	2.1 mH
Efficiency Bandwidth Product	EBP	102

MOUNTING INFORMATION				
545 mm				
520 mm				
8.5 mm				
495 mm				
227 mm				
16.9 liters				
29.4 kg				
31.4 kg				
570x570x270mm				

Turb@sonic



1000

2000

Frequency response measured in a bass reflex enclosure in an anechoic chamber Computer predicted low frequency response⁽⁷⁾ 110 dB 100 320.0 Vb/Fb=251L/31Hz 90 240.0 -12 -18 -24 -30 -36 ++++++ 5 Hz 100 500 Impedance magnitude curve measured in free air Vb/Fb = 251L/31Hz

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- Vb: Net internal volume of box after subtracting the volume of internal objects.

2IDM2000

FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE



COAXIAL

NEO

HF





KEY FEATURES:

NEO

LE

- 1 4000 W continuous program power capacity
- 2 98dB Sensitivity 1w/1m
- ③ 36Hz ~800Hz frequency response range
- ④ 152mm(6") high temperature inside/outside copper voice coil
- (5) Peak to peak maximum excursion of 62mm
- 6 Double magnets allows a very high force factor and long driver excursion
- ${ar {\Bbb O}}$ Triple Conex dampers to retain good mechanical properties at high power
- (8) BL/Re maximized for loaded applications

Computer predicted low frequency response⁽⁷⁾

2.2 mH

120

Vb/Fb=100L/34Hz

Vb/Fb = 100L/40Hz

Le

dB

-12

-18 -24 -30 -36

5 Hz

EBP

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			
Nominal Diameter	530mm / 21inch	Resonance frequency	Fs	36 Hz	
Rated Impedance	8 ohm	DC resistance	Re	5.7 ohm	
Nominal Power handling ¹	2000 Watts	Mechanical factor	Qms	14.1	
Program Power ²	4000 Watts	Electrical factor	Qes	0.301	
Sensitivity(1w/1m)3	98 dB	Total factor	Qts	0.295	
Frequency Range⁴	36 ~ 800Hz	Mechanical compliance	Cms	0.04 mm/N	
Minimum Impedance(Zmin)	7.2 ohm	Mechanical resistance of total-driver losses	Rms	7.5 kg/s	
Voice Coil Diameter	152mm / 6inch	Effective Moving Mass	Mms	462 g	
Voice Coil Material	Copper	Half-space efficiency	Eff	2.5 %	
Former Material	Glass Fiber	BL Factor	BL	43.8 T.m	
Voice Coil Winding Depth	34 mm	Equivalent Cas air load	Vas	166 liters	
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1676 m ²	
Magnet gap depth	14 mm	Max. linear excursion ⁶	Xmax	±13.5 mm	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±31 mm	

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

MOUNTING INFORMATION		
Overall Diameter	545 mm	
Bolt Circle Diameter	520 mm	
Bolt Hole Diameter	8.5 mm	
Baffle Cutout Diameter	495 mm	
Overall Depth	234 mm	
Air volume occupied by driver	17.5 liters	
Net Weight	34.4 kg	
Shipping Weight	35.9 kg	
Shipping Box	570x570x270mm	



500

1000

2000



1.2 T

330mm / 400oz

NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

681/40H

100

Vb/Fb = 68L/40Hz

- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE

HF

SUBWOOFER

FERRITE

FERRITE WOOFER MID-BASS

NEO

HF

Urbosonic Prospervent

J642

NEO

LF



🔆 21 inch 🔆 1600 Watts VERIFIED WITH KLIPPEL **⅔ 96 dB ★ 30 ~ 800 Hz**



KEY FEATURES:

- ① 3200 W continuous program power capacity
- 2 96dB Sensitivity 1w/1m
- ③ 30Hz ~800Hz frequency response range
- ④ 134mm(5.3") high temperature inside/outside copper voice coil
- (5) Double treated cone for water protection
- 6 FEA optimzied magnetic circuit

EBP

dB

65

Computer predicted low frequency response⁽⁷⁾

- $\ensuremath{\overline{\mathcal{O}}}$ Silicone double Conex dampers with optimized compliance
- 8 BL/Re maximized for loaded applications

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	ETERS	5	MOUNTING INFORM	IATION
Nominal Diameter	530mm / 21inch	Resonance frequency	Fs	30.7 Hz	Overall Diameter	548 mm
Rated Impedance	8 ohm	DC resistance	Re	5.0 ohm	Bolt Circle Diameter	526 mm
Nominal Power handling ¹	1600 Watts	Mechanical factor	Qms	22.1	Bolt Hole Diameter	6.5 mm
Program Power ²	3200 Watts	Electrical factor	Qes	0.47	Baffle Cutout Diameter	504 mm
Sensitivity(1w/1m) ³	96 dB	Total factor	Qts	0.46	Overall Depth	247 mm
Frequency Range⁴	30 ~ 800Hz	Mechanical compliance	Cms	0.057 mm/N	Air volume occupied by driver	17 liters
Minimum Impedance(Zmin)	6.6 ohm	Mechanical resistance of total-driver losses	Rms	4.1 kg/s	Net Weight	22.5 kg
Voice Coil Diameter	134mm / 5.3inch	Effective Moving Mass	Mms	472 g	Shipping Weight	24 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	1.4 %	Shipping Box	570x570x270mm
Former Material	Glass Fiber	BL Factor	BL	31.2 T.m		
Voice Coil Winding Depth	37 mm	Equivalent Cas air load	Vas	230 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1691 m ²	■行政2	5 E
Magnet gap depth	14 mm	Max. linear excursion ⁶	Xmax	±15 mm	25655	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±27 mm		
Flux Density	1.05 T	Voice coil inductance(1kHz)	Le	2.2 mH	生物的	505

Efficiency Bandwidth Product



280mm / 233oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and present the expected long term parameter after a long term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 28



275L/26Hz Vb/Fb -12 Vb/Fb=1651/30Hz -18 -24 -30 -36 5 Hz 50 100 500 1000 2000 Vb/Fb = 275L/26Hz Vb/Fb = 165L/30Hz

NEO LE

FERRITE **SUBWOOFER** WOOFER MID-BASS

MIDRANGE

FULLRANGE

COAXIAL

NEO

HF

Turbosonic

76818/5

FERRITE



🔆 18 inch 🔆 1800 Watts VERIFIED WITH KLIPPEL **※ 97 dB ★ 42 ~ 500 Hz**



KEY FEATURES:

- ① 3600 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- 3 42Hz ~500Hz frequency response range
- (5) Bigger voice coil ensures bigger power
- ⁶ The use of highly resistant adhesives guarantees optimal cohesion and durability of components
- $\ensuremath{\overline{\mathcal{O}}}$ Heavy duty ferrite magnet allows a powerful motor assembly
- (4) 150mm(6") high temperature inside/outside copper voice coil (8) Optimized for the use in extremely high power subwoofer applications

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION	
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	47 Hz	Overall Diameter	461 mm
Rated Impedance	8 ohm	DC resistance	Re	5.8 ohm	Bolt Circle Diameter	439 mm
Nominal Power handling	1800 Watts	Mechanical factor	Qms	28.0	Bolt Hole Diameter	6.5x9.5 mm
Program Power	3600 Watts	Electrical factor	Qes	0.36	Baffle Cutout Diameter	424 mm
Sensitivity(1w/1m)	97 dB	Total factor	Qts	0.35	Overall Depth	230 mm
Frequency Range	42 ~ 500Hz	Mechanical compliance	Cms	0.013mm/N	Air volume occupied by driver	12.5 liters
Minimum Impedance(Zmin)	7.6 ohm	Mechanical resistance of total-driver losses	Rms	3.3 kg/s	Net Weight	29 kg
Voice Coil Diameter	150mm / 6inch	Effective Moving Mass	Mms	311 g	Shipping Weight	30.4 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	2.0 %	Shipping Box	490x490x245mm
Former Material	Glass Fiber	BL Factor	BL	38.7 T.m		
Voice Coil Winding Depth	31 mm	Equivalent Cas air load	Vas	71 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1176 m ²	回流部	
Magnet gap depth	14 mm	Max. linear excursion ⁶	Xmax	±12 mm	10120	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±27.5 mm	建 金油	
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	2.1 mH		
Magnat Out Diamatar/Mat	220	Efficiency Developidth Dreduct	EDD	120		244 S

Efficiency Bandwidth Product

EBP

dB

0 -6

-12

-18 -24 -30 -36

5 Hz

130

Vb/Fb=70L/43Hz

Computer predicted low frequency response⁽⁷⁾



330mm / 333 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=47L/47Hz

100 Vb/Fb = 47L/47Hz

500

1000

2000

Hg is the gap depth.

10 Vb/Fb = 70L/43Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 29

SUBWOOFER

FERRITE

FERRITE WOOFER MID-BASS

NEO

HF

JCe518



🔆 18inch 🛛 🔆 1400 Watts VERIFIED WITH KLIPPEL **☀ 97 dB ★ 31 ~ 1200 Hz**



KEY FEATURES:

- ① 2800 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- ③ 31Hz ~1200Hz frequency response range
- ④ 125mm(5") high temperature inside/outside copper voice coil
- (5) High grade Y35 ferrite magnet, 30mm in height for longer excursion and higher force factor
- ⑥ Ultra strong carbon cone and dust cap
- ⑦ Silicone double Conex damper
- (8) BL/Re maximized for loaded applications

GENERAL SPECIFICATIONS		
Nominal Diameter	460mm / 18inch	Re
Rated Impedance	8 ohm	D
Nominal Power handling ¹	1400 Watts	Μ
Program Power ²	2800 Watts	EI
Sensitivity(1w/1m) ³	97 dB	Tc
Frequency Range ⁴	31 ~ 1200Hz	Μ
Minimum Impedance(Zmin)	6.8 ohm	Me
Voice Coil Diameter	125mm / 5inch	Ef
Voice Coil Material	Copper	Ha
Former Material	Glass Fiber	Bl
Voice Coil Winding Depth	34 mm	Ed
Number of layers	2(inside/outside)	Ef
Magnet gap depth	14 mm	Μ
Basket	Cast Aluminum	Μ
Flux Density	1.2 T	Vo
Magnet Out Diameter/Wgt	280mm / 245oz	Ef

I HIELE - SIVIALL FARAIVI	EIEKS	
Resonance frequency	Fs	31 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	19.7
Electrical factor	Qes	0.28
Total factor	Qts	0.28
Mechanical compliance	Cms	0.092 mm/N
Mechanical resistance of total-driver losses	Rms	2.79 kg/s
Effective Moving Mass	Mms	279 g
Half-space efficiency	Eff	2.0 %
BL Factor	BL	33.2 T.m
Equivalent Cas air load	Vas	196 liters
Effective piston area	Sd	0.1225 m^2
Max. linear excursion ⁶	Xmax	±13.5mm
Max. excursion before damage	Xdam	± 29 mm
Voice coil inductance(1kHz)	Le	1.6 mH
Efficiency Bandwidth Product	EBP	110

dB

0

-12 -18 -24 -30

-36

5 Hz

MOUNTING INFORMATION			
Overall Diameter	461 mm		
Bolt Circle Diameter	439 mm		
Bolt Hole Diameter	6.5x9.5 mm		
Baffle Cutout Diameter	424 mm		
Overall Depth	227 mm		
Air volume occupied by driver	12.5 liters		
Net Weight	21 kg		
Shipping Weight	22.35 kg		
Shipping Box	490x490x245mm		



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

50

Vb/Fb=79L/35Hz

100

Vb/Fb = 79L/35Hz

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth
- Vb: Net internal volume of box after subtracting the volume of internal objects.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=157L/29Hz

Vb/Fb = 157L/29Hz

JCEOI8

NEO

LE

FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE



COAXIAL

NEO

HE

FERRITE

HF





KEY FEATURES:

- 1 2800 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- ③ 40Hz ~1200Hz frequency response range
- ④ 125mm(4.5") high temperature inside/outside copper voice coil
- 5 High grade Y35 ferrite magnet, 30mm in height for longer excursion
- [©] Ultra strong carbon cone and dust cap

FULLRANGE

- $\overline{\mathcal{O}}$ Dual spiders design with silicon based dampening control
- ⑧ Idea for compact subwoofer cabinets

GENERAL SPECIFICATIONS Nominal Diameter 460mm / 18inch Rated Impedance 8 ohm Nominal Power handling 1400 Watts Program Power² 2800 Watts Sensitivity(1w/1m)³ 97 dB Frequency Range⁴ 41~1200Hz Minimum Impedance(Zmin) 6.8 ohm Voice Coil Diameter 125mm / 5inch Voice Coil Material Copper Former Material Glass Fiber Voice Coil Winding Depth 34 mm Number of layers 2(inside/outside) Magnet gap depth 14 mm

INIELE - SIVIALL PARAIV	EIERS	
Resonance frequency	Fs	40 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	22.6
Electrical factor	Qes	0.45
Total factor	Qts	0.44
Mechanical compliance	Cms	0.054 mm/N
Mechanical resistance of total-driver losses	Rms	3.2 kg/s
Effective Moving Mass	Mms	281 g
Half-space efficiency	Eff	1.6 %
BL Factor	BL	29.3 T.m
Equivalent Cas air load	Vas	112 liters
Effective piston area	Sd	0.1207 m ²
Max. linear excursion ⁶	Xmax	±13.5mm
Max. excursion before damage	Xdam	± 29 mm
Voice coil inductance(1kHz)	Le	1.9 mH
Efficiency Bandwidth Product	EBP	89

MOUNTING INFORMATION		
461 mm		
439 mm		
6.5x9.5 mm		
424 mm		
215 mm		
11 liters		
16 kg		
17.5 kg		
490x490x245mm		

lurb@soni



500

1000

2000



Cast Aluminum

280mm / 245oz

1.2 T

NOTES:

Basket

Flux Density

Magnet Out Diameter/Wgt

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling.
- 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- Thiele-Small parameters are measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and represent the expected long term parameters after a short term of use.

50

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.

Vb/Fb = 125L/35Hz

100

7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Vb/Fb = 125L/35Hz

Computer predicted low frequency response⁽⁷⁾

5 Hz

FERRITE **SUBWOOFER** WOOFER MID-BASS

MIDRANGE FULLRANGE COAXIAL

NEO

HF

76518/5

FERRITE



🔆 18 inch 🔆 1300 Watts KLIPPEL **♦ 98 dB ★ 40 ~ 1000 Hz**



KEY FEATURES:

- ① 2600 W continuous program power capacity
- 2 98dB Sensitivity 1w/1m
- 3 40Hz ~1000Hz frequency response range
- ④ 125mm(5") inside/outside voice coil for improved power-handling and durability
- (5) Separated dual spiders assembly has a stronger structure and high linearity of movement
- 6 FEA optimized magnetic circuit
- ⑦ Increased excursion and power handling over J6218
- 8 Ideal for high quality horn-loaded subwoofer systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL
Nominal Diameter	460mm / 18inch	Resonance frequency
Rated Impedance	8 ohm	DC resistance
Nominal Power handling	1300 Watts	Mechanical factor
Program Power	2600 Watts	Electrical factor
Sensitivity(1w/1m)	98 dB	Total factor
Frequency Range	40 ~ 1000Hz	Mechanical compliance
Minimum Impedance(Zmin)	6.9 ohm	Mechanical resistance of total-driver losses
Voice Coil Diameter	125mm / 5inch	Effective Moving Mass
Voice Coil Material	Copper	Half-space efficiency
Former Material	Glass Fiber	BL Factor
Voice Coil Winding Depth	26 mm	Equivalent Cas air loa
Number of layers	2(inside/outside)	Effective piston area
Magnet gap depth	14 mm	Max. linear excursion
Basket	Cast Aluminum	Max. excursion before
Flux Density	1.16 T	Voice coil inductance(
Magnet Out Diameter/Wgt	280mm / 205 oz	Efficiency Bandwidth P

Resonance frequencyFs40 HzDC resistanceRe5.5 ohmMechanical factorQms25.8Electrical factorQes0.34Total factorQts0.33Mechanical complianceCms0.059mm/Mechanical resistance of total-driver lossesRms2.6 kg/sEffective Moving MassMms268.5 gHalf-space efficiencyEff2.3 %BL FactorBL33.2 T.mEquivalent Cas air loadVas126 litersEffective piston areaSd0.1225 m²	THIELE - SWALL FARAIN	EIEKS	
DC resistance Re 5.5 ohm Mechanical factor Qms 25.8 Electrical factor Qes 0.34 Total factor Qts 0.33 Mechanical compliance Cms 0.059mm/ Mechanical resistance of total-driver losses Rms 2.6 kg/s Effective Moving Mass Mms 268.5 g Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	Resonance frequency	Fs	40 Hz
Mechanical factor Qms 25.8 Electrical factor Qes 0.34 Total factor Qts 0.33 Mechanical compliance Cms 0.059mm/ Mechanical resistance of total-driver losses Rms 2.6 kg/s Effective Moving Mass Mms 268.5 g Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	DC resistance	Re	5.5 ohm
Electrical factor Qes 0.34 Total factor Qts 0.33 Mechanical compliance Cms 0.059mm// Mechanical resistance of total-driver losses Rms 2.6 kg/s Effective Moving Mass Mms 268.5 g Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	Mechanical factor	Qms	25.8
Total factorQts0.33Mechanical complianceCms0.059mm/Mechanical resistance of total-driver lossesRms2.6 kg/sEffective Moving MassMms268.5 gHalf-space efficiencyEff2.3 %BL FactorBL33.2 T.mEquivalent Cas air loadVas126 litersEffective piston areaSd0.1225 m²Max linear excursion ⁶ Xmax+9 5mm	Electrical factor	Qes	0.34
Mechanical compliance Cms 0.059mm// Mechanical resistance of total-driver losses Rms 2.6 kg/s Effective Moving Mass Mms 268.5 g Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	Total factor	Qts	0.33
Mechanical resistance of total-driver losses Rms 2.6 kg/s Effective Moving Mass Mms 268.5 g Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	Mechanical compliance	Cms	0.059mm/N
Effective Moving MassMms268.5 gHalf-space efficiencyEff2.3 %BL FactorBL33.2 T.mEquivalent Cas air loadVas126 litersEffective piston areaSd0.1225 m²Max linear excursion ⁶ Xmax+9 5mm	Mechanical resistance of total-driver losses	Rms	2.6 kg/s
Half-space efficiency Eff 2.3 % BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m² Max linear avgursion ⁶ Ymax +9 5mm	Effective Moving Mass	Mms	268.5 g
BL Factor BL 33.2 T.m Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ² Max, linear excursion ⁶ Xmax +9 5mm	Half-space efficiency	Eff	2.3 %
Equivalent Cas air load Vas 126 liters Effective piston area Sd 0.1225 m ²	BL Factor	BL	33.2 T.m
Effective piston area Sd 0.1225 m ²	Equivalent Cas air load	Vas	126 liters
Max linear excursion ⁶ Ymax +0.5mm	Effective piston area	Sd	0.1225 m ²
	Max. linear excursion ⁶	Xmax	±9.5mm
Max. excursion before damage Xdam ±26 mm	Max. excursion before damage	Xdam	±26 mm
Voice coil inductance(1kHz) Le 1.6 mH	Voice coil inductance(1kHz)	Le	1.6 mH
Efficiency Bandwidth Product EBP 118	Efficiency Bandwidth Product	EBP	118

dB

0 -6

-12

-18

-24

-30 -36

5 Hz

10

MOUNTING INFORMATION			
Overall Diameter	461 mm		
Bolt Circle Diameter	439 mm		
Bolt Hole Diameter	6.5 mm		
Baffle Cutout Diameter	424 mm		
Overall Depth	217 mm		
Air volume occupied by driver	11.9 liters		
Net Weight	19.2 kg		
Shipping Weight	20.7 kg		
Shipping Box	490x490x245mm		

Turbosonic



500

2000

1000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 100. 90.0 80. 70 +++++ 500 1k 2k Hz 5k 10k 20k Impedance magnitude curve measured in free air 20

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=53L/44Hz

Vb/Fb = 53L/44Hz

Hg is the gap depth.

Vb/Fb = 84L/40Hz

Vb/Fb=84L/40Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾
Jeeis

NEO

LE

FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE



COAXIAL

NEO

HE

FERRITE

HF





KEY FEATURES:

- ① 3000 W continuous program power capacity
- 2 98dB Sensitivity 1w/1m
- ③ 37Hz ~1000Hz frequency response range
- ④ 125mm(5") inside/outside voice coil for improved power-handling and durability
- (5) High grade Y35 ferrite magnet, 30mm in height for longer excursion and higher force factor
- 6 FEA optimized magnetic circuit
- ⑦ Silicone double Conex damper
- (8) Ideal for high quality loaded subwoofer applications

GENERAL SPECIFICATIONS Nominal Diameter 460mm / 18inch Rated Impedance 8 ohm Nominal Power handling 1500 Watts Program Power 3000 Watts 98 dB Sensitivity(1w/1m) Frequency Range 37~1000Hz Minimum Impedance(Zmin) 6.9 ohm Voice Coil Diameter 125mm / 5inch Voice Coil Material Copper Former Material Glass Fiber Voice Coil Winding Depth 34 mm Number of layers 2(inside/outside) Magnet gap depth 14 mm Basket Cast Aluminum Flux Density 1.2 T Magnet Out Diameter/Wgt 280mm / 245 oz

THIELE - SMALL PARAM	IETERS [®]	5
Resonance frequency	Fs	37 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	17.6
Electrical factor	Qes	0.334
Total factor	Qts	0.328
Mechanical compliance	Cms	0.061mm/N
Mechanical resistance of total-driver losses	Rms	3.9 kg/s
Effective Moving Mass	Mms	292 g
Half-space efficiency	Eff	2.1 %
BL Factor	BL	33.5 T.m
Equivalent Cas air load	Vas	132 liters
Effective piston area	Sd	0.1237 m ²
Max. linear excursion ⁶	Xmax	±13.5mm
Max. excursion before damage	Xdam	±29 mm
Voice coil inductance(1kHz)	Le	2.1 mH
Efficiency Bandwidth Product	EBP	112

dE

-6

-12

-18 -24 -30

5 Hz

10

MOUNTING INFORMATION						
Overall Diameter	461 mm					
Bolt Circle Diameter	439 mm					
Bolt Hole Diameter	6.5x9.5 mm					
Baffle Cutout Diameter	424 mm					
Overall Depth	227 mm					
Air volume occupied by driver	12.5 liters					
Net Weight	21 kg					
Shipping Weight	22.35 kg					
Shipping Box	490x490x245mm					

lurb@soni



1000

500

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling.
- 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test.
 The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

/b/Fb=54L/43Hz

100

Vb/Fb = 54L/43Hz

Hg is the gap depth.

Vb/Fb = 150L/37Hz

Vb/Fb=150L/37Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

J6418



FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE

🔆 18 inch 🔆 1300 Watts **₩ 96 dB ★ 41 ~ 1000 Hz**



KEY FEATURES:

- 1 3000 W continuous program power capacity
- 2 96dB Sensitivity 1w/1m
- 3 41Hz ~1000Hz frequency response range
- ④ 125mm(5") inside/outside voice coil for improved power-handling and durability
- (5) Double silicone spiders with optimized compliance
- 6 Waterproof cone treatment

EBP

dB

0

-12

-18 -24

-30 -36

5 Hz

10

69

Computer predicted low frequency response⁽⁷⁾

 $\overline{\mathcal{T}}$ Ideal for compact bass-reflex subwoofer or horn-loaded application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	í
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	41 Hz	Overall Diameter	
Rated Impedance	8 ohm	DC resistance	Re	6.0 ohm	Bolt Circle Diameter	
Nominal Power handling	1300 Watts	Mechanical factor	Qms	13.2	Bolt Hole Diameter	
Program Power	2600 Watts	Electrical factor	Qes	0.59	Baffle Cutout Diameter	
Sensitivity(1w/1m)	96 dB	Total factor	Qts	0.56	Overall Depth	
Frequency Range	41 ~ 1000Hz	Mechanical compliance	Cms	0.055mm/N	Air volume occupied by driver	
Minimum Impedance(Zmin)	7.5 ohm	Mechanical resistance of total-driver losses	Rms	5.3 kg/s	Net Weight	
Voice Coil Diameter	125mm / 5inch	Effective Moving Mass	Mms	275 g	Shipping Weight	
Voice Coil Material	Copper	Half-space efficiency	Eff	1.3 %	Shipping Box	
Former Material	Glass Fiber	BL Factor	BL	27 T.m		
Voice Coil Winding Depth	29 mm	Equivalent Cas air load	Vas	117 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1238 m ²	- 1988	
Magnet gap depth	12 mm	Max. linear excursion ⁶	Xmax	±11.5 mm		1
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±20.5 mm		ì
Flux Density	1.0 T	Voice coil inductance(1kHz)	Le	2.3 mH		ļ

Efficiency Bandwidth Product

ATION 461 mm 439 mm 6.5 mm 424 mm 212 mm 10.1 liters 15.3 kg 16.8 kg 490x490x245mm



500

1000

2000



253mm / 155 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters are measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb=235L/32Hz

Vb/Fb = 235L/32Hz

NEO

HF



NEO LF

SUBWOOFER

FERRITE

FERRITE WOOFER **MID-BASS**

MIDRANGE FULLRANGE COAXIAL

NEO

HF

FERRITE HE

7018/3



🔆 18 inch 🔆 1400 Watts VERIFIED WITH KLIPPEL **☀ 97 dB ★ 31 ~ 1000 Hz**



KEY FEATURES:

- 1 2800 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- 3 36Hz ~1000Hz frequency response range
- ④ 115mm(4.5") inside/outside copper voice coil

⑤ 30 T.m BL

- 6 U-SONIC paper cone, double treated cone for water protection
- ⑦ Dual spiders design with silicon based dampening control
- ⁽⁸⁾ Ideal for 80 to 190 Litres subwoofer cabinets⁽⁸⁾

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	36.5 Hz	Overall Diameter	466.5 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	442 mm	
Nominal Power handling ¹	1400 Watts	Mechanical factor	Qms	14.5	Bolt Hole Diameter	6.5 mm	
Program Power ²	2800 Watts	Electrical factor	Qes	0.38	Baffle Cutout Diameter	423 mm	
Sensitivity(1w/1m) ³	97 dB	Total factor	Qts	0.37	Overall Depth	215 mm	
Frequency Range⁴	36 ~ 1000Hz	Mechanical compliance	Cms	0.07mm/N	Air volume occupied by driver	11 liters	
Minimum Impedance(Zmin)	6.7 ohm	Mechanical resistance of total-driver losses	Rms	4.2 kg/s	Net Weight	16 kg	
Voice Coil Diameter	115mm / 4.5inch	Effective Moving Mass	Mms	266 g	Shipping Weight	17.5 kg	
Voice Coil Material	Copper	Half-space efficiency	Eff	1.9%	Shipping Box	490x490x245mm	
Former Material	Glass Fiber	BL Factor	BL	30 T.m			
Voice Coil Winding Depth	32 mm	Equivalent Cas air load	Vas	154 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1238 m ²	回於語		
Magnet gap depth	15 mm	Max. linear excursion ⁶	Xmax	±12 mm	Arrest Sa		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±25.5mm			
Flux Density	1.0 T	Voice coil inductance(1kHz)	Le	2.2 mH			

Efficiency Bandwidth Product

EBP

dB

-12 -18 -24 -30

-36

35

5 Hz

96

Vb/Fb=167L/32Hz

Computer predicted low frequency response⁽⁷⁾



245mm / 190 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

50

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
- 8. Total internal volume of empty box

Vb/Fb = 167L/32Hz



500

1000

2000

5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

100

Vb/Fb = 93L/37Hz

Vb/Fb=93L/37Hz

NEO LF

SUBWOOFER MID-BASS

FERRITE WOOFER

NEO

HF

Turb@sonic

18DMI200

FERRITE



🔆 18 inch 🔆 1200 Watts VERIFIED WITH KLIPPEL **★ 99 dB ★ 36 ~ 1000 Hz**



KEY FEATURES:

- 1 2400 W continuous program power capacity
- 2 99dB Sensitivity 1w/1m
- ③ 36Hz ~1000Hz frequency response range
- ④ 100mm(4") inside/outside copper voice coil
- (5) Peak to peak maximum excursion of 58mm
- 6 Double magnets allows a very high force factor and long driver excursion
- ⑦ Ideal for compact vented or bandpass subwoofer usage

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	36 Hz	Overall Diameter	466.5 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.1 ohm	Bolt Circle Diameter	442 mm	
Nominal Power handling ¹	1200 Watts	Mechanical factor	Qms	26.7	Bolt Hole Diameter	6.5 mm	
Program Power ²	2400 Watts	Electrical factor	Qes	0.36	Baffle Cutout Diameter	423 mm	
Sensitivity(1w/1m) ³	99 dB	Total factor	Qts	0.36	Overall Depth	231 mm	
Frequency Range⁴	36 ~ 1000Hz	Mechanical compliance	Cms	0.077mm/N	Air volume occupied by driver	12 liters	
Minimum Impedance(Zmin)	6.7 ohm	Mechanical resistance of total-driver losses	Rms	2.1 kg/s	Net Weight	17.7 kg	
Voice Coil Diameter	100mm / 4inch	Effective Moving Mass	Mms	243 g	Shipping Weight	19.2 kg	
Voice Coil Material	Copper	Half-space efficiency	Eff	2.1%	Shipping Box	490x490x275mm	
Former Material	Glass Fiber	BL Factor	BL	28.1 T.m			
Voice Coil Winding Depth	36 mm	Equivalent Cas air load	Vas	158 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1201 m ²	回税场	59 <u>9</u>	
Magnet gap depth	14 mm	Max. linear excursion ⁶	Xmax	±14.5mm			
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±29 mm		F15	
Flux Density	1.2 T	Voice coil inductance(1kHz)	Le	2.4 mH	146.55		
Magnet Out Diameter/Wat	220mm / 250 oz	Efficiency Bandwidth Product	EBP	100		<u></u>	

dB

-12

-18 -24 -30 -36

5 Hz

Computer predicted low frequency response⁽⁷⁾

Efficiency Bandwidth Product



220mm / 250 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=84L/39Hz

100

500

1000

2000

Hg is the gap depth.

Vb/Fb = 84L/39Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 36

ESOI8

NEO

LE

FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE



COAXIAL

NEO

HF

FERRITE

HE

Turbosonic





KEY FEATURES:

- 1 2400 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- ③ 32Hz ~1000Hz frequency response range
- ④ 100mm(4") inside/outside copper voice coil
- (5) Heavy duty Y35 ferrite magnet structure (outer diameter:245mm)
- ⁶ Big damper allows long excursion with linear behavior for large singal
- ⑦ Ideal for high quality bass-reflex system

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	32 Hz	Overall Diameter	466.5 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	442 mm	
Nominal Power handling ¹	1200 Watts	Mechanical factor	Qms	20.8	Bolt Hole Diameter	6.5 mm	
Program Power ²	2400 Watts	Electrical factor	Qes	0.34	Baffle Cutout Diameter	423 mm	
Sensitivity(1w/1m) ³	97 dB	Total factor	Qts	0.33	Overall Depth	211 mm	
Frequency Range⁴	32 ~ 1000Hz	Mechanical compliance	Cms	0.096mm/N	Air volume occupied by driver	11.7 liters	
Minimum Impedance(Zmin)	6.8 ohm	Mechanical resistance of total-driver losses	Rms	2.47kg/s	Net Weight	16.7 kg	
Voice Coil Diameter	100mm / 4inch	Effective Moving Mass	Mms	254 g	Shipping Weight	18 kg	
Voice Coil Material	Copper	Half-space efficiency	Eff	2.1%	Shipping Box	490x490x245mm	
Former Material	Glass Fiber	BL Factor	BL	29.1 T.m			
Voice Coil Winding Depth	31 mm	Equivalent Cas air load	Vas	200 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1213 m ²		注目	
Magnet gap depth	12 mm	Max. linear excursion ⁶	Xmax	±12.5 mm		3.5	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±26.5 mm			
Flux Density	1.2 T	Voice coil inductance(1kHz)	Le	1.9 mH	1983 (M	A	

EBP

94



Efficiency Bandwidth Product

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

245mm / 190 oz

5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

口以出现

500

1000

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 37

S7118

NEO

LF



COAXIAL

NEO

HF

FERRITE

HF

Turb@sonic



FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE



KEY FEATURES:

- 1 1600W continuous program power capacity
- 2 98dB Sensitivity 1w/1m
- 3 32Hz ~1000Hz frequency response range
- ④ 4" inside/outside voice coil for improved power-handling and durability
- (5) Double silicone spiders with optimized compliance
- 6 Ventilated voice coil gap for reduced power compression
- 7 Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS		THIELE - SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	36 Hz	Overall Diameter	461 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.2 ohm	Bolt Circle Diameter	439 mm	
Nominal Power handling ¹	800 Watts	Mechanical factor	Qms	11.1	Bolt Hole Diameter	6.5x9.5 mm	
Program Power ²	1600 Watts	Electrical factor	Qes	0.37	Baffle Cutout Diameter	424 mm	
Sensitivity(1w/1m) ³	98 dB	Total factor	Qts	0.36	Overall Depth	197 mm	
Frequency Range⁴	32 ~ 1000Hz	Mechanical compliance	Cms	0.10 mm/N	Air volume occupied by driver	9.9 liters	
Minimum Impedance(Zmin)	6.1 ohm	Mechanical resistance of total-driver losses	Rms	4.22 kg/s	Net Weight	13 kg	
Voice Coil Diameter	100mm / 4inch	Effective Moving Mass	Mms	206 g	Shipping Weight	14.3 kg	
Voice Coil Material	Copper	Half-space efficiency	Eff	2.5%	Shipping Box	490x490x245mm	
Former Material	Glass Fiber	BL Factor	BL	26 T.m			
Voice Coil Winding Depth	25 mm	Equivalent Cas air load	Vas	200 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1231 m ²	国際語	۶ <u>.</u>	
Magnet gap depth	12 mm	Max. linear excursion ⁶	Xmax	± 9 mm	200		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±22.5mm		超進	

Le

dB

-12

-18 -24 -30 -36

5 Hz

EBP

1.8 mH

Computer predicted low frequency response⁽⁷⁾

97

Vb/Fb=160L/33Hz

Vb/Fb = 160L/33Hz

Voice coil inductance(1kHz)

Efficiency Bandwidth Product



1.1 T

220mm / 125 oz

NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

50

Vb/Fb=96L/38Hz

100

Vb/Fb = 96L/38Hz

500

1000

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.



FERRITE

FERRITE



🔆 18 inch 🔆 750 Watts **★** 36 ~ 1000 Hz **ఈ 97 dB**

COAXIAL

NEO

HF



KEY FEATURES:

NEO

LF

- 1 1500 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- 3 36Hz ~1000Hz frequency response range
- ④ 100mm(4") inside/outside copper voice coil
- ⑤ Vented back plate increases airflow to provide enhanced cooling
- 6 Both side waterproof cone treamment

FULLRANGE

 $\ensuremath{\overline{\mathcal{O}}}$ Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	1ATION
Nominal Diameter	460mm / 18inch	Resonance frequency	Fs	36 Hz	Overall Diameter	461 mm
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	439 mm
Nominal Power handling	750 Watts	Mechanical factor	Qms	12.5	Bolt Hole Diameter	6.5x9.5 mm
Program Power	1500 Watts	Electrical factor	Qes	0.33	Baffle Cutout Diameter	424 mm
Sensitivity(1w/1m)	97 dB	Total factor	Qts	0.33	Overall Depth	200 mm
Frequency Range	36 ~ 1000Hz	Mechanical compliance	Cms	0.09 mm/N	Air volume occupied by driver	9.4 liters
Minimum Impedance(Zmin)	7.4 ohm	Mechanical resistance	Rms	3.76 kg/s	Net Weight	12.8 kg
Voice Coil Diameter	100mm / 4inch	Effective Moving Mass	Mms	208 g	Shipping Weight	14.3 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	2.4%	Shipping Box	490x490x24
Former Material	Glass Fiber	BL Factor	BL	27.6 T.m		
Voice Coil Winding Depth	25 mm	Equivalent Cas air load	Vas	180 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.1170 m ²		뷰므
Magnet gap depth	10.7 mm	Max. linear excursion ⁶	Xmax	±9.6 mm		5 A
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±19.8mm	16-10-1 16-10-1	6002 100
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	2.3 mH	1997 - S. S.	
Magnet Out Diameter/Wgt	220mm / 125 oz	Efficiency Bandwidth Product	EBP	109	回惑論は	



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters are measured with laser system BEFORE preconditioning test.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=146L/35Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=72L/42Hz

Vb/Fb = 72L/42Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE

HE

Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	200 mm
Air volume occupied by driver	9.4 liters
Net Weight	12.8 kg
Shipping Weight	14.3 kg
Shipping Box	490x490x245mm



500

1000

2000

Vb/Fb = 146L/35Hz

dB

6

0 -6

-12

-18

-24 -30

-36

5 Hz

M5315s

NEO

LF



🔆 15 inch 🔆 800 Watts **ఈ 97 dB ★ 40 ~ 1000 Hz**



KEY FEATURES:

- ① 1600 W continuous program power capacity
- 2 97dB Sensitivity 1w/1m
- 3 40Hz ~1000Hz frequency response range
- ④ 100mm(4") inside/outside copper voice coil
- (5) Double silicone spiders with optimized compliance

FULLRANGE

- 6 Triple-roll cloth edge with deep corrugations for extended Xmax
- $\ensuremath{\overline{\mathcal{T}}}$ Corrugated cone geometry

EBP

dB

-12

-18 -24

-30 -36

5 Hz

121

Vb/Fb=71L/39Hz

Vb/Fb = 71L/39Hz

Computer predicted low frequency response⁽⁷⁾

(8) Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATI		
Nominal Diameter	380mm / 15inch	Resonance frequency	Fs	40 Hz	Overall Diameter	393	
Rated Impedance	8 ohm	DC resistance	Re	5.2 ohm	Bolt Circle Diameter	375	
Nominal Power handling	800 Watts	Mechanical factor	Qms	8.7	Bolt Hole Diameter	6.5 ו	
Program Power	1600 Watts	Electrical factor	Qes	0.33	Baffle Cutout Diameter	356	
Sensitivity(1w/1m)	97 dB	Total factor	Qts	0.32	Overall Depth	179	
Frequency Range	40 ~ 1000Hz	Mechanical compliance	Cms	0.095mm/N	Air volume occupied by driver	6.5	
Minimum Impedance(Zmin)	7.5 ohm	Mechanical resistance	Rms	4.74 kg/s	Net Weight	11.7	
Voice Coil Diameter	100mm / 4inch	Effective Moving Mass	Mms	163 g	Shipping Weight	12.7	
Voice Coil Material	Copper	Half-space efficiency	Eff	1.81%	Shipping Box	420	
Former Material	Glass Fiber	BL Factor	BL	25.4 T.m			
Voice Coil Winding Depth	25 mm	Equivalent Cas air load	Vas	95 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0845 m ²	回於道	Ϋ́	
Magnet gap depth	12 mm	Max. linear excursion ⁶	Xmax	± 9 mm		秋谷	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±23mm	1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -	FO.	
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	2.0 mH	1689 St	2.2	

Efficiency Bandwidth Product



220mm / 125 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=35L/47Hz

100

Vb/Fb = 35L/47Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

	ATION
Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	356 mm
Overall Depth	179 mm
Air volume occupied by driver	6.5 liters
Net Weight	11.7 kg
Shipping Weight	12.7 kg
Shipping Box	420x420x205mm



500

1000

2000

FERRITE

WOOFER

MID-BASS

NEO

HF



FERRITE

SUBWOOFER

S7315s

NEO

LE

FERRITE

SUBWOOFER

FERRITE

WOOFER

MID-BASS

MIDRANGE

FULLRANGE



COAXIAL

NEO

HF

FERRITE

HE

Turb@sonic





KEY FEATURES:

- 1 1300 W continuous program power capacity
- 2 96dB Sensitivity 1w/1m
- ③ 39Hz ~1000Hz frequency response range
- ④ 91mm(3.6") inside/outside copper voice coil
- (5) FEA designed ferrite magnetic
- ⁶ Reinforced CONEX[®] spider for improved linearity control
- $\bar{\mathbb{O}}$ Ideal for compact extended woofer or subwoofer application

GENERAL SPECIFICATIONS		THIELE - SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	380mm / 15inch	Resonance frequency	Fs	39 Hz	Overall Diameter	393 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm	Bolt Circle Diameter	375 mm	
Nominal Power handling	650 Watts	Mechanical factor	Qms	19.5	Bolt Hole Diameter	6.5 mm	
Program Power	1300 Watts	Electrical factor	Qes	0.43	Baffle Cutout Diameter	356 mm	
Sensitivity(1w/1m)	96 dB	Total factor	Qts	0.42	Overall Depth	170 mm	
Frequency Range	39 ~ 1000Hz	Mechanical compliance	Cms	0.12 mm/N	Air volume occupied by driver	6.1 liters	
Minimum Impedance(Zmin)	6.8 ohm	Mechanical resistance of total-driver losses	Rms	1.47 kg/s	Net Weight	8.8 kg	
Voice Coil Diameter	91mm / 3.6inch	Effective Moving Mass	Mms	141 g	Shipping Weight	9.9 kg	
Voice Coil Material	Copper	Half-space efficiency	Eff	1.61%	Shipping Box	430x430x205mm	
Former Material	Glass Fiber	BL Factor	BL	21 T.m			
Voice Coil Winding Depth	25.5 mm	Equivalent Cas air load	Vas	120 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0845 m ²	回飛行	第回	
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	±10.2 mm			
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±21.2 mm	1.2.2.2		
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	1.7 mH			

Efficiency Bandwidth Product

EBP

dB

0

-12

-18 -24

-30

-36

5 Hz

90

Vb/Fb=114L/35.5Hz

Computer predicted low frequency response⁽⁷⁾



200mm / 97 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=80L/39Hz

100

Vb/Fb = 80L/39Hz

自己法规转

500

1000

2000

- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 114L/35.5Hz

J6215

FERRITE

SUBWOOFER

NEO

LF





FERRITE WOOFER

MID-BASS



KEY FEATURES:

- ① 1600 W continuous program power capacity
- 2 Sensitivity: 98dB 1w/1m
- 3 40~2800Hz frequency response range
- ④ 100mm(4") high temperature inside/outside voice col with cooper clad aluminum wire
- (5) Treated paper cone to water protection
- 6 Long excursion suspension with linear Kms behavior
- 7 Reinforced CONEX[®] spider for improved linearity control
- 8 Ideal for compact 2 or 3-way systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	ETERS	5	MOUNTING INFORM	1
Nominal Diameter	380mm /15inch	Resonance frequency	Fs	42 Hz	Overall Diameter	Ī
Rated Impedance	8 ohm	DC resistance	Re	5.7 ohm	Bolt Circle Diameter	
Nominal Power handling ¹	800 Watts	Mechanical factor	Qms	19	Bolt Hole Diameter	
Program Power ²	1600 Watts	Electrical factor	Qes	0.37	Baffle Cutout Diameter	
Sensitivity(1w/1m) ³	98 dB	Total factor	Qts	0.36	Overall Depth	
Frequency Range ^₄	40 ~ 2800Hz	Mechanical compliance	Cms	0.11 mm/N	Air volume occupied by driver	
Minimum Impedance(Zmin)	7.0 ohm	Mechanical resistance of total-driver losses	Rms	1.7 kg/s	Net Weight	
Voice Coil Diameter	100mm /4inch	Effective Moving Mass	Mms	129 g	Shipping Weight	
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.1%	Shipping Box	
Former Material	Glass Fiber	BL Factor	BL	23.4 T.m		
Voice Coil Winding Depth	22 mm	Equivalent Cas air load	Vas	104 liters		
Number of layers	2(Inside/outside)	Effective piston area	Sd	0.0830 m ²	回必病症	î
Magnet gap depth	12 mm	Max. linear excursion ⁶	Xmax	± 7 mm	<u> 2003</u>	i
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±20mm		i.

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

ATION 393 mm 375 mm 6.5 mm 355 mm 167 mm 6.3 liters 11.9 kg 12.9 kg 430x430x205 mm

lurbôsonic





Le

EBP

1.4 mH

114

NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity

1.05 T

220mm / 125 oz

- 5. Thiele-Small parameters are measured with Klippel DA LPM module AFTER a high level 20Hz sine wave preconditioning test and present the expected long term parameter after a long term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

HF

M54I5/2

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

★ 15 inch ★ 800 Watts ★ 99 dB ★ 40 ~ 2800 Hz



KEY FEATURES:

- ① 1600 W continuous program power capacity
- 2 Sensitivity: 99dB 1w/1m

GENERAL SPECIFICATIONS

Magnet Out Diameter/Wgt

- ③ 100mm(4") high temperature inside/outsdie voice coil with copper clad aluminum wire
- ④ FEA designed ferrite magnetic

- (5) Vented back plate increases airflow to provide enhanced cooling
 (6) Aluminum demodulating ring reduces distortion and extends high frequency response to 2.8kHz
- ⑦ Ideal for compact 2 or 3-way systems

Nominal Diameter 380mm /15inch Rated Impedance 8 ohm Nominal Power handling 800 Watts Program Power² 1600 Watts 99 dB Sensitivity(1w/1m)³ Frequency Range⁴ 40~2800Hz Minimum Impedance(Zmin) 7.0 ohm Voice Coil Diameter 100mm /4inch Voice Coil Material CCAW Former Material Glass Fiber Voice Coil Winding Depth 22 mm Number of layers 2(inside/outside) Magnet gap depth 12 mm Basket Cast Aluminum Flux Density 1.1 T

THIELE – SMALL PARAM	ETERS	
Resonance frequency	Fs	40 Hz
DC resistance	Re	5.7 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.31
Total factor	Qts	0.30
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of total-driver losses	Rms	2.4 kg/s
Effective Moving Mass	Mms	107 g
Half-space efficiency	Eff	3.3%
BL Factor	BL	22.4 T.m
Equivalent Cas air load	Vas	156 liters
Effective piston area	Sd	0.0887 m ²
Max. linear excursion ⁶	Xmax	± 7 mm
Max. excursion before damage	Xdam	±20mm
Voice coil inductance(1kHz)	Le	1.5 mH
Efficiency Bandwidth Product	EBP	129

dB

-12

-18 -24

-30

5 Hz

MOUNTING INFORMATION				
Overall Diameter	393 mm			
Bolt Circle Diameter	375 mm			
Bolt Hole Diameter	6.5 mm			
Baffle Cutout Diameter	355 mm			
Overall Depth	170 mm			
Air volume occupied by driver	6.5 liters			
Net Weight	11 kg			
Shipping Weight	11.7 kg			
Shipping Box	425x425x215 mm			

lurb@soni



500

1000

2000



220mm / 125 oz

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling.
- 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=80L/42Hz

Vb/Fb = 80L/42Hz

The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Ho is the gap depth

50

Vb/Fb=50L/50Hz

Vb/Fb = 50L/50Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

HF

J6015

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 15 inch 🔆 650 Watts **★ 43 ~ 2800 Hz ₩ 99 dB**



KEY FEATURES:

- ① 1300 W continuous program power capacity
- 2 Sensitivity: 99dB 1w/1m
- ③ 86mm(3.4") high temperature inside/outsdie voice coil with copper clad aluminum wire
- ④ Paper cone made in USA

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	650 Watts
Program Power ²	1300 Watts
Sensitivity(1w/1m) ³	99 dB
Frequency Range ^₄	43 ~ 2800Hz
Minimum Impedance(Zmin)	6.8 ohm
Voice Coil Diameter	86mm /3.4inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Out Diameter/Wgt	190mm / 95 oz

I HIELE - SIVIALL PARAIV	EIERS	
Resonance frequency	Fs	43 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	7.0
Electrical factor	Qes	0.3
Total factor	Qts	0.29
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of total-driver losses	Rms	3.8 kg/s
Effective Moving Mass	Mms	99 g
Half-space efficiency	Eff	3.65%
BL Factor	BL	22 T.m
Equivalent Cas air load	Vas	145 liters
Effective piston area	Sd	0.0866 m^2
Max. linear excursion ⁶	Xmax	± 6 mm
Max. excursion before damage	Xdam	± 17.3mm
Voice coil inductance(1kHz)	Le	1.5 mH
Efficiency Bandwidth Product	EBP	143

power compression

	_	
	MOUNTING INFO	RMATION
43 Hz	Overall Diameter	393 mm

⑤ Dual-forced hyper-venting and 10mm top plate for minimum

6 Ideal for high quality compact 2 or 3-way systems

393 mm
375 mm
6.5 mm
355 mm
172 mm
5.6 liters
7.9 kg
9.1 kg
430x430x205 mm

Turbosonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 120 50.0 dBSPI 110.0 20.0 100. 90.0 80 NAA 70. 200 5 20 Impedance magnitude curve measured in free air



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

HF

* 15 inch * 550 Watts

I5DM550

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS



KEY FEATURES:

- ① 1100 W continuous program power capacity
- 2 High sensitivity: 100dB 1w/1m
- ③ 76mm(3") high temperature inside/outsdie voice coil with pure aluminum wire
- (5) Peak to Peak maximum excursion of 50mm
- 6 Aluminum dust cap guarantees great voice coil heat dissipation
- $\overline{\mathcal{T}}$ Double magnets allows a very high force factor and long driver displacement
- 8 Ideal for very compact 2-ways systems

GENER	AL SPE	CIFICAT	IONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	550 Watts
Program Power ²	1100 Watts
Sensitivity(1w/1m) ³	100 dB
Frequency Range ^₄	44 ~ 3100Hz
Minimum Impedance(Zmin)	6.5 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Pure Aluminum
Former Material	Fiber Glass
Voice Coil Winding Depth	18.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Out Diameter/Wgt	190mm / 256 oz

THIELE – SMALL PARAMETERS ⁵				
Resonance frequency	Fs	44 Hz		
DC resistance	Re	5.5 ohm		
Mechanical factor	Qms	17.3		
Electrical factor	Qes	0.36		
Total factor	Qts	0.35		
Mechanical compliance	Cms	0.14 mm/N		
Mechanical resistance of total-driver losses	Rms	1.3 kg/s		
Effective Moving Mass	Mms	96 g		
Half-space efficiency	Eff	2.2%		
BL Factor	BL	20.3 T.m		
Equivalent Cas air load	Vas	140 liters		
Effective piston area	Sd	0.0855 m^2		
Max. linear excursion ⁶	Xmax	±6.2 mm		
Max. excursion before damage	Xdam	± 25 mm		
Voice coil inductance(1kHz)	Le	0.95 mH		
Efficiency Bandwidth Product	EBP	122		

dB

0

-12

-18 -24

-30 -36

5 Hz

10

Vb/Fb = 72L/47Hz

MOUNTING INFORMATION				
Overall Diameter	393 mm			
Bolt Circle Diameter	375 mm			
Bolt Hole Diameter	6.5 mm			
Baffle Cutout Diameter	355 mm			
Overall Depth	188 mm			
Air volume occupied by driver	5.4 liters			
Net Weight	10.9 kg			
Shipping Weight	12.3 kg			
Shipping Box	430x430x225 mm			

Turbosonic



500

2000

1000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSF 100. 90. ສາ 70. 60.0 Hz 5k 10 20 Impedance magnitude curve measured in free air

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb = 72L/47Hz

100

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS



NEO

HF



KEY FEATURES:

- 1 900 W continuous program power capacity
- 2 Sensitivity: 99dB 1w/1m
- ③ 76mm(3") high temperature inside/outsdie voice coil with copper clad aluminum wire
- ④ 7DF paper cone, made in USA
- ⑤ M-roll surround and curved cone geometry
- 6 Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS		THIELE - SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	380mm /15inch	Resonance frequency	Fs	47 Hz	Overall Diameter	393 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm	Bolt Circle Diameter	375 mm	
Nominal Power handling ¹	450 Watts	Mechanical factor	Qms	14	Bolt Hole Diameter	6.5 mm	
Program Power ²	900 Watts	Electrical factor	Qes	0.43	Baffle Cutout Diameter	355 mm	
Sensitivity(1w/1m) ³	99 dB	Total factor	Qts	0.42	Overall Depth	168 mm	
Frequency Range ^₄	45 ~ 2800Hz	Mechanical compliance	Cms	0.13 mm/N	Air volume occupied by driver	5 liters	
Minimum Impedance(Zmin)	7 ohm	Mechanical resistance	Rms	1.3 kg/s	Net Weight	8.1 kg	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	90 g	Shipping Weight	9.2 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	3.3%	Shipping Box	430x430x205 mm	
Former Material	Polyimide	BL Factor	BL	18.4 T.m			
Voice Coil Winding Depth	18 mm	Equivalent Cas air load	Vas	132 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0892 m ²	回新語	第回	
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 6.5 mm	2352		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±18.1 mm	250 B	国政	
Flux Density	1.2 T	Voice coil inductance(1kHz)	Le	0.93 mH	6455463	343 A	

EBP

dE

6

0

-6

-12

-18 -24

-30 -36

-42 -48

5 Hz

10

109

-110L/46

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=80L/50Hz

100

Efficiency Bandwidth Product



190mm / 78 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

500 1 K

Vb/Fb = 80L/50Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 110L/46Hz



10 K 20 K

5 K

HF

CI5-500

FERRITE

SUBWOOFER

NEO

LF

FERRITE WOOFER

MID-BASS



KEY FEATURES:

- 1 1000 W continuous program power capacity
- 2 Sensitivity: 99dB 1w/1m
- ③ 76mm(3") high temperature inside/outside voice coil with copper clad aluminum wire
- (4) Vented back plate increases airflow to provide enhanced cooling ⑤ Treated cone for water protection
- ⑥ Increased power handling and more mid-high over C15-400
- 7 Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING IN	
Nominal Diameter	380mm /15inch	Resonance frequency	Fs	46 Hz	Overall Diameter	
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diamet	
Nominal Power handling ¹	500 Watts	Mechanical factor	Qms	12.3	Bolt Hole Diamete	
Program Power ²	1000 Watts	Electrical factor	Qes	0.39	Baffle Cutout Dian	
Sensitivity(1w/1m) ³	99 dB	Total factor	Qts	0.38	Overall Depth	
Frequency Range⁴	43 ~ 3000Hz	Mechanical compliance	Cms	0.12 mm/N	Air volume occupied b	
Minimum Impedance(Zmin)	6.6 ohm	Mechanical resistance of total-driver losses	Rms	1.45 kg/s	Net Weight	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	98 g	Shipping Weight	
Voice Coil Material	CCAW	Half-space efficiency	Eff	3.1%	Shipping Box	
Former Material	Glass Fiber	BL Factor	BL	20.2 T.m		
Voice Coil Winding Depth	19 mm	Equivalent Cas air load	Vas	125 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0855 m ²		
Magnet gap depth	10.5 mm	Max. linear excursion ⁶	Xmax	±7 mm		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±17.7mm		
Flux Density	1.2 T	Voice coil inductance(1kHz)	Le	0.87 mH	A3	
Magnet Out Diameter/Wgt	200mm / 100 oz	Efficiency Bandwidth Product	EBP	118		





500

1000

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dRSE 90 ____ M 60.03 Hz 20 Impedance magnitude curve measured in free air

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=73L/48Hz

100

Hg is the gap depth.

Vb/Fb = 73L/46Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

47

dB

-12

-18 -24 -30

-36

5 Hz

🔆 15 inch 🔆 500 Watts KLIPPEL **★ 99 dB ★ 43 ~ 3000 Hz**

HF

CI5-400

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 15 inch 🔆 400 Watts KLIPPEL **♦ 97 dB ★** 38 ~ 3000 Hz



KEY FEATURES:

- ① 800 W continuous program power capacity
- 2 Sensitivity: 97dB 1w/1m
- ③ 76mm(3") inside/outside voice coil with SV-W wire
- ④ Vented back plate increases airflow to provide enhanced cooling
- ⑤ Treated cone for water protection
- 6 Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling ¹	400 Watts
Program Power ²	800 Watts
Sensitivity(1w/1m) ³	97 dB
Frequency Range ^₄	38 ~ 3000Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	SV-W(Copper)
Former Material	Glass Fiber
Voice Coil Winding Depth	17.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Out Diameter/Wgt	190mm / 78 oz

THIELE – SMALL PARAMETERS⁵			
Resonance frequency	Fs	38 Hz	
DC resistance	Re	5.6 ohm	
Mechanical factor	Qms	15	
Electrical factor	Qes	0.37	
Total factor	Qts	0.36	
Mechanical compliance	Cms	0.17 mm/N	
Mechanical resistance of total-driver losses	Rms	1.63 kg/s	
Effective Moving Mass	Mms	102 g	
Half-space efficiency	Eff	2.6%	
BL Factor	BL	19.4 T.m	
Equivalent Cas air load	Vas	177 liters	
Effective piston area	Sd	$0.0855 m^2$	
Max. linear excursion ⁶	Xmax	± 6.5mm	
Max. excursion before damage	Xdam	± 19 mm	
Voice coil inductance(1kHz)	Le	1.4 mH	
Efficiency Bandwidth Product	EBP	103	

MOUNTING INFORMATION			
Overall Diameter	393 mm		
Bolt Circle Diameter	375 mm		
Bolt Hole Diameter	6.5 mm		
Baffle Cutout Diameter	355 mm		
Overall Depth	167 mm		
Air volume occupied by driver	5 liters		
Net Weight	7.3 kg		
Shipping Weight	8.4 kg		
Shipping Box	430x430x205 mm		

Turb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 11 BSF 100 90 70 ------500 1k 2k Hz 5k 10k 200 Impedance magnitude curve measured in free air

Computer predicted low frequency response⁽⁷⁾ dB Vb/Fb=100L/42Hz Vb/Fb=70L/44Hz -12 -18 -24 -30 -36 5 Hz 50 100 500 1000 2000 Vb/Fb = 100L/42HzVb/Fb = 70L/44Hz

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

I5BM400

FERRITE

SUBWOOFER

NEO

LF



NEO

HF



FERRITE WOOFER

MID-BASS



KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 Sensitivity: 99dB 1w/1m
- 3 43Hz ~ 3100Hz frequency response range
- ④ 76mm(3") copper clad aluminum voice coil

5	Biggerm	nagnet,	higher	sensitiv	ity and n	nore pow	/er over	15BM3	350
6	Ideal for	compa	ct 2 or 3	8-way sy	/stems				

GENERAL SPECIFICAT	IONS	THIE
Nominal Diameter	380mm /15inch	Resor
Rated Impedance	8 ohm	DC re
Nominal Power handling ¹	400 Watts	Mech
Program Power ²	800 Watts	Electr
Sensitivity(1w/1m) ³	99 dB	Total
Frequency Range⁴	43 ~ 3100Hz	Mech
Minimum Impedance(Zmin)	5.8 ohm	Mecha of to
Voice Coil Diameter	76mm /3inch	Effect
Voice Coil Material	CCAW	Half-s
Former Material	Glass Fiber	BL Fa
Voice Coil Winding Depth	16.6 mm	Equiv
Number of layers	2	Effect
Magnet gap depth	9.5 mm	Max.
Basket	Cast Aluminum	Max.
Flux Density	1.1 T	Voice
Magnet Out Diameter/Wgt	190mm / 78 oz	Efficie

THIELE - SMALL PARAMETERS*			
Resonance frequency	Fs	43.8 Hz	
DC resistance	Re	5.1 ohm	
Mechanical factor	Qms	15.5	
Electrical factor	Qes	0.44	
Total factor	Qts	0.43	
Mechanical compliance	Cms	0.17 mm/N	
Mechanical resistance of total-driver losses	Rms	1.4 kg/s	
Effective Moving Mass	Mms	80 g	
Half-space efficiency	Eff	3.0%	
BL Factor	BL	16 T.m	
Equivalent Cas air load	Vas	166 liters	
Effective piston area	Sd	$0.0845 \ m^2$	
Max. linear excursion ⁶	Xmax	±6 mm	
Max. excursion before damage	Xdam	±15.8	
Voice coil inductance(1kHz)	Le	0.67 mH	
Efficiency Bandwidth Product	EBP	100	

MOUNTING INFORMATION			
389.5 mm			
369 mm			
6.5 mm			
350 mm			
157 mm			
5 liters			
6.9 kg			
7.6 kg			
425x425x215 mm			

Turbosonic



500

1000

2000





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. Thiele-Small parameters measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=75L/49Hz

100

Vb/Fb = 75L/49Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=170L/39H

Vb/Fb = 170L/39Hz

49

-6

-12 -18

-24

-30 -36

5 Hz

HF

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 15 inch 🔆 500 Watts ★ 98.5 dB ★ 45 ~ 3000 Hz



KEY FEATURES:

- ① 1000 W continuous program power capacity
- 2 Sensitivity: 98.5dB 1w/1m
- 3 76mm(3") high temperature inside/outsdie CCAW voice coil
- ④ 7DF paper cone, made in USA

- ⑤ Unique eight-sided (Octagon) die-cast aluminum basket
- 6 FEA optimized magent system design for low distortion and minimum power compession
- ⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICA	THIELE - SMALL	
Nominal Diameter	380mm /15inch	Resonance frequency
Rated Impedance	8 ohm	DC resistance
Nominal Power handling ¹	500 Watts	Mechanical factor
Program Power ²	1000 Watts	Electrical factor
Sensitivity(1w/1m) ³	98 dB	Total factor
Frequency Range⁴	45 ~ 3000Hz	Mechanical compliance
Minimum Impedance(Zmin)	6.7 ohm	Mechanical resistance of total-driver losses
Voice Coil Diameter	76mm /3inch	Effective Moving Mass
Voice Coil Material	CCAW	Half-space efficiency
Former Material	Glass Fiber	BL Factor
Voice Coil Winding Depth	18 mm	Equivalent Cas air load
Number of layers	2(inside/outside)	Effective piston area
Magnet gap depth	10 mm	Max. linear excursion ⁶
Basket	Cast Aluminum	Max. excursion before
Flux Density	1.2 T	Voice coil inductance(1
Magnet Out Diameter/Wgt	190mm / 78 oz	Efficiency Bandwidth Pro

THIELE – SMALL PARAMETERS [®]			
Resonance frequency	Fs	45 Hz	
DC resistance	Re	5.6 ohm	
Mechanical factor	Qms	10.5	
Electrical factor	Qes	0.41	
Total factor	Qts	0.40	
Mechanical compliance	Cms	0.14 mm/N	
Mechanical resistance of total-driver losses	Rms	2.4 kg/s	
Effective Moving Mass	Mms	90 g	
Half-space efficiency	Eff	3.3%	
BL Factor	BL	18.7 T.m	
Equivalent Cas air load	Vas	150 liters	
Effective piston area	Sd	0.0887 m^2	
Max. linear excursion ⁶	Xmax	± 6.5 mm	
Max. excursion before damage	Xdam	±18.2mm	
Voice coil inductance(1kHz)	Le	1.1 mH	
Efficiency Bandwidth Product	EBP	109	

dB

0

-12 -18 -24 -30 -36

5 Hz

10

MOUNTING INFORMATION			
Overall Diameter	390 mm		
Bolt Circle Diameter	398 mm		
Bolt Hole Diameter	6.5 mm		
Baffle Cutout Diameter	353 mm		
Overall Depth	165 mm		
Air volume occupied by driver	5.7 liters		
Net Weight	8.4 kg		
Shipping Weight	9.5 kg		
Shipping Box	430x430x205 mm		

Turb@sonic



500

2000

1000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=115L/43Hz

Vb/Fb = 115L/43Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

Vb/Fb=80L/49Hz

Vb/Fb = 80L/49Hz

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 50

U8015

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS





- 1 800 W continuous program power capacity
- 2 High sensitivity: 99dB 1w/1m
- 3 Very smooth response up to 3000Hz
- ④ 76mm(3") copper clad aluminum voice coil
- (5) Non pressed cone to supply additional damping
- 6 Unique eight-sided (Octagon) die-cast aluminum basket
- ${f {\Bbb T}}$ FEA optimized magnetic circuit; a colorful aluminum ring on the back plate
- (8) Ideal for compact reflex enclosures and two way systems

GENERAL SPECIFICAT	IONS	THIELE – SMALL
Nominal Diameter	380mm /15inch	Resonance frequenc
Rated Impedance	8 ohm	DC resistance
Nominal Power handling ¹	400 Watts	Mechanical factor
Program Power ²	800 Watts	Electrical factor
Sensitivity(1w/1m) ³	99 dB	Total factor
Frequency Range⁴	38 ~ 3000Hz	Mechanical complian
Minimum Impedance(Zmin)	6.7 ohm	Mechanical resistance of total-driver losses
Voice Coil Diameter	76mm /3inch	Effective Moving Mas
Voice Coil Material	CCAW	Half-space efficiency
Former Material	Glass Fiber	BL Factor
Voice Coil Winding Depth	18.7 mm	Equivalent Cas air lo
Number of layers	2	Effective piston area
Magnet gap depth	10 mm	Max. linear excursior
Basket	Cast Aluminum	Max. excursion befor
Flux Density	1.15 T	Voice coil inductance

THIELE - SMALL PARAM	ETERS	
Resonance frequency	Fs	38.5 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	4.8
Electrical factor	Qes	0.37
Total factor	Qts	0.34
Mechanical compliance	Cms	0.19 mm/N
Mechanical resistance of total-driver losses	Rms	4.46 kg/s
Effective Moving Mass	Mms	88.5 g
Half-space efficiency	Eff	3.2%
BL Factor	BL	17.7 T.m
Equivalent Cas air load	Vas	217 liters
Effective piston area	Sd	0.0892 m^2
Max. linear excursion ⁶	Xmax	± 7 mm
Max. excursion before damage	Xdam	±17.4mm
Voice coil inductance(1kHz)	Le	0.96 mH
Efficiency Bandwidth Product	EBP	104

dB

0

-12 -18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION			
Overall Diameter	390 mm		
Bolt Circle Diameter	398 mm		
Bolt Hole Diameter	6.5 mm		
Baffle Cutout Diameter	353 mm		
Overall Depth	165 mm		
Air volume occupied by driver	5.7 liters		
Net Weight	7.1 kg		
Shipping Weight	8.2 kg		
Shipping Box	430x430x205 mm		

Turbosonic



500

2000

1000



190mm / 78 oz



1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

Vb/Fb=75L/46Hz

Vb/Fb = 75L/46Hz

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=103L/42Hz

Vb/Fb = 103L/42Hz

Turbosonic

NEO

HF

PSI5-76

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 15 inch 🔆 350 Watts **★ 37 ~ 2800 Hz ఈ 96 dB**



KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 96dB Sensitivity 1w/1m
- 3 37 ~ 2800Hz frequency response range
- ④ 76mm(3") SV-W voice coil

(5) Superb price/performance ration 6 Ideal for compact 2 or 3-way systems

GENERAL SPECIFICAT	TIONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	ATION
Nominal Diameter	380mm /15inch	Resonance frequency	Fs	37 Hz	Overall Diameter	387 mm
Rated Impedance	8 ohm	DC resistance	Re	5.0 ohm	Bolt Circle Diameter	373 mm
Nominal Power handling ¹	350 Watts	Mechanical factor	Qms	4.1	Bolt Hole Diameter	6.5 mm
Program Power ²	700 Watts	Electrical factor	Qes	0.47	Baffle Cutout Diameter	355 mm
Sensitivity(1w/1m) ³	96 dB	Total factor	Qts	0.42	Overall Depth	154 mm
Frequency Range⁴	37 ~ 2800Hz	Mechanical compliance	Cms	0.18 mm/N	Air volume occupied by driver	5.4 liters
Minimum Impedance(Zmin)	5.8 ohm	Mechanical resistance	Rms	5.58 kg/s	Net Weight	5.8 kg
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	100 g	Shipping Weight	6.9 kg
Voice Coil Material	SV-W	Half-space efficiency	Eff	1.8%	Shipping Box	430x430x205mm
Former Material	Aluminum	BL Factor	BL	15.6 T.m	Also available in 40hm, da	ata upon request.
Voice Coil Winding Depth	16 mm	Equivalent Cas air load	Vas	180 liters		
Number of layers	2	Effective piston area	Sd	0.0830 m ²		変具
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 6.5 mm	19 A B B B B B B B B B B B B B B B B B B	新た
Basket	Pressed Steel	Max. excursion before damage	Xdam	± 15 mm	66.34	N ANNA Maria
Flux Density	1.0T	Voice coil inductance(1kHz)	Le	1.17 mH		
Magnet Out Diameter/Wgt	170mm / 60 oz	Efficiency Bandwidth Product	EBP	79	国際論	



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5.T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 70L/43Hz

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

50

Vb/Fb=70L/43Hz

100

500

1000

2000

5 Hz

HF

76515\5

FERRITE

SUBWOOFER

NEO

LE



FERRITE WOOFER

MID-BASS





KEY FEATURES:

- ① 1100W continuous program power capacity
- 2 98.5dB sensitivity, 1w/1m

GENERAL SPECIFICATIONS

Nominal Diameter

Rated Impedance

Program Power²

Sensitivity(1w/1m)³

Frequency Range⁴

Voice Coil Diameter

Voice Coil Material

Former Material

Number of layers

Magnet gap depth

Basket

Flux Density

Nominal Power handling

Minimum Impedance(Zmin)

Voice Coil Winding Depth

Magnet Out Diameter/Wgt

- ③ 69~2800Hz frequency response range
- ④ 100mm(4") high temperature inside/outside copper clad aluminum voice coil

8 ohm

550 Watts

1100 Watts

69~2800 Hz

100mm /4inch

2(inside/outside)

Cast Aluminum

220mm / 125 oz

Glass Fiber

19.5 mm

12 mm

1.1T

98.5 dB

7 ohm

CCAW

300mm /12inch

Effective piston area

Max. linear excursion⁶

Max. excursion before damage

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

- (4) Copper shorting ring ensures extremely linear impedance and reduced distortion figure
- (5) Heavy duty ferrite magnet for higher power handling and increased force factor 6 More mid-high over J6212
- 7 Ideal for compact 2 or 3-way systems

Sd

Le

dB

-12

-18 -24 -30

-36

5 Hz

10

EBP

Xmax

Xdam

 $0.0539 \,\mathrm{m}^3$

±6.8 mm

±18 mm

0.83 mH

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=20L/63Hz

215

THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Resonance frequency	Fs	69 Hz	Overall Diameter	313 mm	
DC resistance	Re	5.4 ohm	Bolt Circle Diameter	294 mm	
Mechanical factor	Qms	15.3	Bolt Hole Diameter	6.5 mm	
Electrical factor	Qes	0.32	Baffle Cutout Diameter	285 mm	
Total factor	Qts	0.31	Overall Depth	123 mm	
Mechanical compliance	Cms	0.067 mm/N	Air volume occupied by driver	3.6 liters	
Mechanical resistance of total-driver losses	Rms	2.2 kg/s	Net Weight	12.1 kg	
Effective Moving Mass	Mms	78 g	Shipping Weight	12.8 kg	
Half-space efficiency	Eff	2.8%	Shipping Box	345x345x170mm	
BL Factor	BL	24.2 T.m			
Equivalent Cas air load	Vas	28 liters			



500

1000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=13L/74Hz

Vb/Fb = 13L/74Hz

Hg is the gap depth.

Vb/Fb = 20L/63Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 53

HF

76015\5

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 550 Watts KLIPPEL ¥ 97.5 dB ¥ 55 ~ 3000 Hz



KEY FEATURES:

- ① 1100 W continuous program power capacity
- 2 Sensitivity: 97.5dB 1w/1m
- ③ 55~3000Hz frequency response range
- ④ 3.4" inside/outside winding voice coil with CCAW wire

(5) M-roll cloth edge with deep corrugations for extended Xmax. 6 Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	IATION
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	55 Hz	Overall Diameter	316 mm
Rated Impedance	8 ohm	DC resistance	Re	5.0 ohm	Bolt Circle Diameter	297 mm
Nominal Power handling ¹	550 Watts	Mechanical factor	Qms	13.6	Bolt Hole Diameter	6.5 mm
Program Power ²	1100 Watts	Electrical factor	Qes	0.36	Baffle Cutout Diameter	283 mm
Sensitivity(1w/1m) ³	97.5 dB	Total factor	Qts	0.35	Overall Depth	145 mm
Frequency Range ^₄	55 ~ 3000Hz	Mechanical compliance	Cms	0.12 mm/N	Air volume occupied by driver	3.7 liters
Minimum Impedance(Zmin)	6.3 ohm	Mechanical resistance	Rms	1.78 kg/s	Net Weight	7.4 kg
Voice Coil Diameter	86mm /3.4inch	Effective Moving Mass	Mms	70 g	Shipping Weight	8.1 kg
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.2%	Shipping Box	345x345x180mm
Former Material	Glass Fiber	BL Factor	BL	18.7 T.m		
Voice Coil Winding Depth	17 mm	Equivalent Cas air load	Vas	49 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0539 m ²		日表
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 6.7 mm		57 St.
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±20.5mm		
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	0.85 mH	i and a second	A224
Magnet Out Diameter/Wgt	190mm / 95 oz	Efficiency Bandwidth Product	EBP	153	回來設備	



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

500

1000

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 54

NEO LE

SUBWOOFER

FERRITE

FERRITE WOOFER **MID-BASS**

COAXIAL

NEO

HE

RSI2-76



🔆 12 inch 🔆 450 Watts **★ 59 ~ 2900 Hz ఈ 94 dB**



KEY FEATURES:

- 1 900W continuous program power capacity
- 2 94dB sensitivity, 1w/1m
- 3 59~2900Hz frequency response range
- ④ 76mm(3") high temperature copper voice coil
- (5) Heavy duty magnet
- 6 Single roll rubber edge
- \bigcirc Double silicon spiders
- 8 Ideal for compact subwoofer or woofer application

GENERAL SPECIFICATIONS Nominal Diameter 300mm /12inch Rated Impedance 4 ohm Nominal Power handling 450 Watts Program Power 900 Watts 94 dB Sensitivity(1w/1m) 59 ~ 2900 Hz Frequency Range Minimum Impedance(Zmin) 4 ohm Voice Coil Diameter 76mm /3inch Voice Coil Material Copper Fiber glass Former Material Voice Coil Winding Depth 18 mm 2 Number of layers Magnet gap depth 10 mm Basket Cast Aluminum

THIELE - SMALL PARAM	ELEK	5°
Resonance frequency	Fs	59 Hz
DC resistance	Re	3.2 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.48
Total factor	Qts	0.46
Mechanical compliance	Cms	0.0682 mm/N
Mechanical resistance of total-driver losses	Rms	3.4 kg/s
Effective Moving Mass	Mms	105 g
Half-space efficiency	Eff	1.1%
BL Factor	BL	16.2 T.m
Equivalent Cas air load	Vas	26 liters
Effective piston area	Sd	0.0519m ²
Max. linear excursion ⁶	Xmax	± 7 mm
Max. excursion before damage	Xdam	±25mm
Voice coil inductance(1kHz)	Le	0.89 mH
Efficiency Bandwidth Product	EBP	123

MOUNTING INFORM	IATION		
Overall Diameter	316 mm		
Bolt Circle Diameter	297 mm		
Bolt Hole Diameter	6.5 mm		
Baffle Cutout Diameter	283 mm		
Overall Depth	149 mm		
Air volume occupied by driver	3.7 liters		
Net Weight	8.2 kg		
Shipping Weight	9 kg		
Shipping Box	345x345x170mm		
Also available in 80hm, data upon request.			

lurb@soni



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSP 100. 90. 80 20 Impedance magnitude curve measured in free air

1.2T

190mm / 95 oz



NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

HF

I2DM450

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS





KEY FEATURES:

- 1 900 W continuous program power capacity
- 2 High sensitivity 98.5dB 1w/1m
- 3 56~3200Hz frequency response ragne
- ④ 3" inside/outside copper clad aluminum voice coil
- (5) Peak to Peak maximum excursion of 44mm
- 6 Aluminum dust cap guarantees great voice coil heat dissipation
- $\overline{\mathcal{O}}$ Double magnets allows a very high force factor and long driver displacement
- 8 Ideal for very compact 2-ways systems

GENERAL SPECIFICAT	IONS	THIELE – SMALL PARAMETERS ⁵		MOUNTING INFORM	IATION	
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	56 Hz	Overall Diameter	316 mm
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	297 mm
Nominal Power handling ¹	450 Watts	Mechanical factor	Qms	15.5	Bolt Hole Diameter	6.5 mm
Program Power ²	900 Watts	Electrical factor	Qes	0.34	Baffle Cutout Diameter	283 mm
Sensitivity(1w/1m) ³	98.5 dB	Total factor	Qts	0.33	Overall Depth	165 mm
Frequency Range⁴	56 ~ 3200Hz	Mechanical compliance	Cms	0.12 mm/N	Air volume occupied by driver	3.6 liters
Minimum Impedance(Zmin)	6.6 ohm	Mechanical resistance of total-driver losses	Rms	1.1 kg/s	Net Weight	9.5 kg
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	67.1 g	Shipping Weight	10.5 kg
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.6%	Shipping Box	345x345x200mm
Former Material	Fiber Glass	BL Factor	BL	19.6 T.m		
Voice Coil Winding Depth	18.7 mm	Equivalent Cas air load	Vas	50.6 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0551 m ²	日孫常	۶D
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	±6.8 mm		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	± 22 mm		日記
Flux Density	1.3 T	Voice coil inductance(1kHz)	Le	0.89 mH	145.44	

EBP

dB

-12

-18 -24

-30 -36

5 Hz

165

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=30L/59Hz

Efficiency Bandwidth Product



180mm / 136 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

50

Hg is the gap depth.

Vb/Fb = 30L/59Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 56



500

1000

2000

5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

Vb/Fb=21.5L/64Hz

Vb/Fb = 21.5L/64Hz

HF

S7012

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 450 Watts **₩ 97 dB ★ 41 ~ 2700 Hz**



KEY FEATURES:

- 1 900 W continuous program power capacity
- 2 Sensitivity: 97dB 1w/1m
- ③ 3" inside/outside winding voice coil with aluminum wire
- ④ Improved heat dissipation via unique basket design and multiple backplate vents
- (5) FEA optimized magnet system design for low distortion and minimum power compression
- 6 Special treatment on cone in house for excellent performance
- ⑦ UK manufactured cone offers increased strength, durability and performance
- 8 Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS Nominal Diameter 300mm /12inch Rated Impedance 8 ohm Nominal Power handling 450 Watts Program Power² 900 Watts Sensitivity(1w/1m)³ 97 dB Frequency Range⁴ 41~2700Hz Minimum Impedance(Zmin) 6.7 ohm Voice Coil Diameter 76mm /3inch Voice Coil Material Aluminum Former Material Glass Fiber Voice Coil Winding Depth 19 mm Number of layers 2(inside/outside) Magnet gap depth 10.5 mm Basket Cast Aluminum Flux Density 1.15 T Magnet Out Diameter/Wgt 200mm / 76 oz

IETERS [®]	
Fs	45 Hz
Re	5.4 ohm
Qms	8.2
Qes	0.35
Qts	0.34
Cms	0.20 mm/N
Rms	2.11 kg/s
Mms	61.8 g
Eff	2.11%
BL	16.3 T.m
Vas	86 liters
Sd	$0.0552m^2$
Xmax	± 7 mm
Xdam	±17.7mm
Le	1.1 mH
EBP	128
	Fs Re Qms Qes Qts Cms Rms Mms Eff BL Vas Sd Xmax Xdam Le EBP

MOUNTING INFORM	1ATION	
Overall Diameter	316 mm	
Bolt Circle Diameter	297 mm	
Bolt Hole Diameter	6.5 mm	
Baffle Cutout Diameter	283 mm	
Overall Depth	145 mm	
Air volume occupied by driver	3.8 liters	
Net Weight	7.7 kg	
Shipping Weight	8.4 kg	
Shipping Box	345x345x180mm	
Also available in 160hm, data upon request.		





500

1000

Vb/Fb=40L/50Hz

100



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling
- . Sensitivity is measured at 1W input on rated impedance at 1m on axis. 3
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

5.T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 40L/50Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

- - 57

HF

M5212

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 500 Watts ★ 97.5 dB ★ 45 ~ 3000 Hz



KEY FEATURES:

- ① 1000 W continuous program power capacity
- 2 Sensitivity: 97.5dB 1w/1m
- ③ 3" inside/outside winding voice coil with CCAW wire
- ④ Zero Self Noise white damper

- (5) FEA optimized magnet system design for low distortion and minimum power compression
- 6 M-roll cloth edge with deep corrugations for extended Xmax
- ⑦ RMD Paper cone, made in USA
- (8) Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS		THIELE - SMALL PARA
Nominal Diameter	300mm /12inch	Resonance frequency
Rated Impedance	8 ohm	DC resistance
Nominal Power handling ¹	500 Watts	Mechanical factor
Program Power ²	1000 Watts	Electrical factor
Sensitivity(1w/1m) ³	97.5 dB	Total factor
Frequency Range⁴	45 ~ 3000Hz	Mechanical compliance
Minimum Impedance(Zmin)	6.9 ohm	Mechanical resistance of total-driver losses
Voice Coil Diameter	76mm /3inch	Effective Moving Mass
Voice Coil Material	CCAW	Half-space efficiency
Former Material	Glass Fiber	BL Factor
Voice Coil Winding Depth	19 mm	Equivalent Cas air load
Number of layers	2(inside/outside)	Effective piston area
Magnet gap depth	10.5 mm	Max. linear excursion ⁶
Basket	Cast Aluminum	Max. excursion before damag
Flux Density	1.2 T	Voice coil inductance(1kHz)
Magnet Out Diameter/Wgt	190mm / 78 oz	Efficiency Bandwidth Product

THIELE - SMALL PARAM	ETERS	
Resonance frequency	Fs	49 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	9.4
Electrical factor	Qes	0.32
Total factor	Qts	0.31
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of total-driver losses	Rms	2.2 kg/s
Effective Moving Mass	Mms	66 g
Half-space efficiency	Eff	2.3%
BL Factor	BL	18.4 T.m
Equivalent Cas air load	Vas	65 liters
Effective piston area	Sd	0.0539 m^2
Max. linear excursion6	Xmax	± 7 mm
Max. excursion before damage	Xdam	±17.7mm
Voice coil inductance(1kHz)	Le	1.1 mH
Efficiency Bandwidth Product	EBP	153

MOUNTING INFORMATION					
Overall Diameter	316 mm				
Bolt Circle Diameter	297 mm				
Bolt Hole Diameter	6.5 mm				
Baffle Cutout Diameter	283 mm				
Overall Depth	145 mm				
Air volume occupied by driver	3.7 liters				
Net Weight	7.7 kg				
Shipping Weight	8.4 kg				
Shipping Box	345x345x180mm				

Turb@sonic



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 40L/50Hz

Vb/Fb=30L/53Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

50

- - 58

HE

HF

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 400 Watts KLIPPEL **₩ 98 dB ★ 58 ~ 3000 Hz**



KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 Sensitivity: 98dB 1w/1m
- 3 58~3000Hz frequency response range
- ④ 3" CCAW sandwich voice coil for low power compression
- (5) Non pressed cone to supply additional damping, solid paper dust cap 6 Black Nomex spider
- ⑦ Aluminum Demodulating Ring for lower distortion
- 8 Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS		THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORMATION		
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	58 Hz	Overall Diameter	316 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm	Bolt Circle Diameter	297 mm	
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	11.8	Bolt Hole Diameter	6.5 mm	
Program Power ²	800 Watts	Electrical factor	Qes	0.344	Baffle Cutout Diameter	283 mm	
Sensitivity(1w/1m) ³	98 dB	Total factor	Qts	0.336	Overall Depth	145 mm	
Frequency Range⁴	58 ~ 3000Hz	Mechanical compliance	Cms	0.11 mm/N	Air volume occupied by driver	3.7 liters	
Minimum Impedance(Zmin)	6.6 ohm	Mechanical resistance	Rms	1.5 kg/s	Net Weight	7.8 kg	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	65.5 g	Shipping Weight	8.5 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.55%	Shipping Box	345x345x180mm	
Former Material	Glass Fiber	BL Factor	BL	19.8 T.m			
Voice Coil Winding Depth	18 mm	Equivalent Cas air load	Vas	49 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0551 m ²		50	
Magnet gap depth	10.5 mm	Max. linear excursion ⁶	Xmax	± 6.6 mm		i i i i i i i i i i i i i i i i i i i	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±18.2mm			
Flux Density	1.2 T	Voice coil inductance(1kHz)	Le	0.72 mH		978	
Magnet Out Diameter/Wgt	190mm / 78 oz	Efficiency Bandwidth Product	EBP	168	回接装饰	363	

dB

-12 -18 -24 -30 -36

5 Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=35L/66Hz

Efficiency Bandwidth Product



190mm / 78 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and
- upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

Vb/Fb = 22L/65Hz

Vb/Fb=22L/65Hz

500

1000

2000

Hg is the gap depth.

Vb/Fb = 35L/66Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 59

HF

CI2-400

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

* 12 inch * 400 Watts **ఈ 97 dB ★ 49 ~ 3500 Hz**



KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 97dB 1w/1m sensitivity
- ③ 3" copper clad aluminum voice coil with fiberglass former
- (4) Vented back plate increases airflow to provide enhanced cooling ⑤ Idea for compact 2 way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	400 Watts
Program Power ²	800 Watts
Sensitivity(1w/1m) ³	97 dB
Frequency Range ^₄	49 ~ 3500Hz
Minimum Impedance(Zmin)	6.9 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	17.5 mm
Number of layers	2
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wgt	180mm / 80 oz

Resonance frequency	Fs	49 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	13.4
Electrical factor	Qes	0.43
Total factor	Qts	0.42
Mechanical compliance	Cms	0.17 mm/N
Mechanical resistance of total-driver losses	Rms	1.42 kg/s
Effective Moving Mass	Mms	61.3 g
Half-space efficiency	Eff	1.92%
BL Factor	BL	15.3 T.m
Equivalent Cas air load	Vas	71 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion ⁶	Xmax	±6.5 mm
Max. excursion before damage	Xdam	±19 mm
Voice coil inductance(1kHz)	Le	1.0 mH
Efficiency Bandwidth Product	EBP	113

MOUNTING INFORMATION					
Overall Diameter	316 mm				
Bolt Circle Diameter	297 mm				
Bolt Hole Diameter	6.5 mm				
Baffle Cutout Diameter	283 mm				
Overall Depth	145 mm				
Air volume occupied by driver	3.6 liters				
Net Weight	6.7 kg				
Shipping Weight	7.4 kg				
Shipping Box	345x345x180mm				

Turbosonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dese 100 90. 70. ++++ 60.03 24 Hz 5 204 Impedance magnitude curve measured in free air

Computer predicted low frequency response⁽⁷⁾ dB Vb/Fb=70L/45Hz -12 Vb/Fb=44L/51Hz -18 -24 -30 -36 5 Hz 50 100 500 1000 2000 Vb/Fb = 70L/45Hz Vb/Fb = 44L/51Hz

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5.T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

U8012

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 400 Watts KLIPPEL ¥ 97.5 dB ¥ 45 ~ 3000 Hz



KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 Sensitivity: 97.5dB 1w/1m
- 3 Very smooth response up to 3000Hz
- ④ 76mm(3") inside/outsdie copper clad aluminum voice coil
- (5) Non pressed cone to supply additional damping
- 6 Unique eight-sided (Octagon) die-cast aluminum basket
- ${f {\Bbb T}}$ FEA optimized magnetic circuit; a colorful aluminum ring on the back plate
- (8) Ideal for compact reflex enclosures and two way systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	45 Hz	Overall Diameter	312 mm	
Rated Impedance	8 ohm	DC resistance	Re	4.2 ohm	Bolt Circle Diameter	316 mm	
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	12.2	Bolt Hole Diameter	6.5 mm	
Program Power ²	800 Watts	Electrical factor	Qes	0.35	Baffle Cutout Diameter	283 mm	
Sensitivity(1w/1m) ³	97.5 dB	Total factor	Qts	0.34	Overall Depth	145 mm	
Frequency Range⁴	45 ~ 3000Hz	Mechanical compliance	Cms	0.18 mm/N	Air volume occupied by driver	3.6 liters	
Minimum Impedance(Zmin)	6.4 ohm	Mechanical resistance of total-driver losses	Rms	1.57 kg/s	Net Weight	6.5 kg	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	67 g	Shipping Weight	7.2 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.9%	Shipping Box	345x345x180 mm	
Former Material	Glass Fiber	BL Factor	BL	15.3 T.m			
Voice Coil Winding Depth	19 mm	Equivalent Cas air load	Vas	75.8 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0539 m ²	回海流		
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 7.1 mm		72.54) 8-1-1-1	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±17.3mm		463 	
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	0.78 mH	£38842		

EBP

dB

0 -6

-12

-18 -24 -30 -36

5 Hz

10

128

Computer predicted low frequency response⁽⁷⁾

Efficiency Bandwidth Product



180mm / 68 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

50

Vb/Fb=36L/49.5Hz

100

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Vb/Fb = 36L/49.5Hz

61



500

1000

HF

ESOIS

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS





KEY FEATURES:

- 1 800 W continuous program power capacity
- 2 Sensitivity: 98dB 1w/1m
- ③ Very smooth response up to 3000Hz
- ④ 76mm(3") inside/outsdie copper clad aluminum voice coil

180mm / 68 oz

- (5) Non pressed cone to supply additional damping
- 6 FEA optimized magnetic circuit
- ⑦ Ideal for compact reflex enclosures and two way systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	IATION
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	54 Hz	Overall Diameter	314 mm
Rated Impedance	8 ohm	DC resistance	Re	4.3 ohm	Bolt Circle Diameter	296 mm
Nominal Power handling ¹	400 Watts	Mechanical factor	Qms	11.4	Bolt Hole Diameter	6.5 mm
Program Power ²	800 Watts	Electrical factor	Qes	0.39	Baffle Cutout Diameter	280 mm
Sensitivity(1w/1m) ³	98 dB	Total factor	Qts	0.38	Overall Depth	145 mm
Frequency Range ^₄	54 ~ 3000Hz	Mechanical compliance	Cms	0.13 mm/N	Air volume occupied by driver	3.6 liters
Minimum Impedance(Zmin)	6.4 ohm	Mechanical resistance of total-driver losses	Rms	2.0 kg/s	Net Weight	6.5 kg
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	67 g	Shipping Weight	7.2 kg
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.1%	Shipping Box	345x345x180 mm
Former Material	Glass Fiber	BL Factor	BL	15.9 T.m		
Voice Coil Winding Depth	19 mm	Equivalent Cas air load	Vas	52 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0539 m ²		対回
Magnet gap depth	10 mm	Max. linear excursion ⁶	Xmax	± 7.1 mm	1963-00	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±17.3mm		321
Flux Density	1.1 T	Voice coil inductance(1kHz)	Le	0.78 mH		



-36

5 Hz

10

Vb/Fb = 34L/55Hz

20k

Hz 5

Impedance magnitude curve measured in free air



NOTES:

110

desp 100.

90.1

80

70.

60.0

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and represent the expected long term parameters after a short term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 62

500

1000

HF

BLI2-65

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

* 12 inch * 350 Watts **★ 50 ~ 2800 Hz ₩ 96 dB**



KEY FEATURES:

- 1 700W continuous program power capacity
- 2 96dB sensitivity, 1w/1m
- ③ 65mm(2.5") copper clad aluminum voice coil with fiberglass former
- ④ FEA optimized magnet system design for lower distortion and minimum power compression
- ⁽⁵⁾ Aluminum demodulating ring for lower distortion
- 6 Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	51 Hz	C
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	E
Nominal Power handling ¹	350 Watts	Mechanical factor	Qms	10.5	E
Program Power ²	700 Watts	Electrical factor	Qes	0.4	E
Sensitivity(1w/1m) ³	96 dB	Total factor	Qts	0.39	(
Frequency Range⁴	50 ~ 2800 Hz	Mechanical compliance	Cms	0.14 mm/N	1
Minimum Impedance(Zmin)	6.7 ohm	Mechanical resistance of total-driver losses	Rms	2.17 kg/s	1
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	71 g	Ş
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.7%	S
Former Material	Glass Fiber	BL Factor	BL	17.4 T.m	
Voice Coil Winding Depth	17 mm	Equivalent Cas air load	Vas	54 liters	
Number of layers	4	Effective piston area	Sd	0.0531 m ²	
Magnet gap depth	9.5 mm	Max. linear excursion ⁶	Xmax	± 6.3 mm	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±18.2mm	
Flux Density	0.9T	Voice coil inductance(1kHz)	Le	1.1 mH	

Efficiency Bandwidth Product

EBP

dB

-12

-18 -24

-30 -36

5 Hz

128

Computer predicted low frequency response⁽⁷⁾

MOUNTING INFORM	IATION
Overall Diameter	322 mm
Bolt Circle Diameter	303 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	288 mm
Overall Depth	152 mm
Air volume occupied by driver	3.3 liters
Net Weight	6 kg
Shipping Weight	6.7 kg
Shipping Box	345x345x180mm



500

1000

2000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dBSP 100. 90.1 80.0 70. 60. 200 Impedance magnitude curve measured in free air

170mm / 65 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 36L/51Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

-50

Vb/Fb=36L/51Hz

- - 63

HF

ISI2-65

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 12 inch 🔆 300 Watts **★ 47 ~ 5100 Hz ₩ 96 dB**



KEY FEATURES:

- 1 600 W continuous program power capacity
- 2 96dB Sensitivity 1w/1m
- ③ 47 ~ 5100Hz frequency response range
- ④ 65mm(2.5") CCAW wire wounded on polyimide former for higher sensitivity
- **5** Push terminal
- 6 Copper shorting ring ensures extremely linear impedance and minimized distortion
- 7 Ideal for compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	300 Watts
Program Power ²	600 Watts
Sensitivity(1w/1m) ³	96 dB
Frequency Range⁴	47 ~ 5100Hz
Minimum Impedance(Zmin)	7.1 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	16.2 mm
Number of layers	2
Magnet gap depth	9.5 mm
Basket	Pressed Steel
Flux Density	1.0 T
Magnet Out Diameter/Wgt	156mm / 54 oz

THIELE – SMALL PARAM	IETERS	
Resonance frequency	Fs	47 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	11.3
Electrical factor	Qes	0.45
Total factor	Qts	0.43
Mechanical compliance	Cms	0.21mm/N
Mechanical resistance of total-driver losses	Rms	1.4 kg/s
Effective Moving Mass	Mms	53 g
Half-space efficiency	Eff	1.9%
BL Factor	BL	13.8 T.m
Equivalent Cas air load	Vas	83 liters
Effective piston area	Sd	0.0531 m ²
Max. linear excursion ⁶	Xmax	± 5.6 mm
Max. excursion before damage	Xdam	±15.6mm
Voice coil inductance(1kHz)	Le	0.47 mH
Efficiency Bandwidth Product	EBP	104

MOUNTING INFORMATION **Overall Diameter** 305.5 mm **Bolt Circle Diameter** 294.5 mm **Bolt Hole Diameter** 6.5 mm 280.5 mm Baffle Cutout Diameter **Overall Depth** 130 mm Air volume occupied by driver 3.1 liters Net Weight 4.9 kg Shipping Weight 5.6 kg Shipping Box 350x350x185 mm

lurb@sonic



500

1000

2000





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 55L/48Hz

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

50

Vb/Fb=55L/48Hz

64

dB

-12

-18 -24

-30 -36

5 Hz

HF

Turb@sonic

PSI2-65

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

* 12 inch * 250 Watts **★ 53 ~ 3000 Hz ♦ 95 dB**



KEY FEATURES:

- 1 500 W continuous program power capacity
- 2 95dB Sensitivity 1w/1m
- ③ 53 ~ 3000Hz frequency response range
- ④ 2.5" high temperature voice coil wounded on polyimide former

⑤ Pressed paper cone to improve the high frequency response 6 Ideal for compact two-way system or midbass application

GENERAL SPECIFICATIONS		THIELE - SMALL PARAM	LE – SMALL PARAMETERS⁵			1ATION
Nominal Diameter	300mm /12inch	Resonance frequency	Fs	56 Hz	Overall Diameter	311 mm
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	294 mm
Nominal Power handling ¹	250 Watts	Mechanical factor	Qms	4.1	Bolt Hole Diameter	6.5 mm
Program Power ²	500 Watts	Electrical factor	Qes	0.59	Baffle Cutout Diameter	279 mm
Sensitivity(1w/1m) ³	95 dB	Total factor	Qts	0.51	Overall Depth	125 mm
Frequency Range⁴	53 ~ 3000Hz	Mechanical compliance	Cms	0.11 mm/N	Air volume occupied by driver	2.9 liters
Minimum Impedance(Zmin)	6.3 ohm	Mechanical resistance of total-driver losses	Rms	6.13 kg/s	Net Weight	4.3 kg
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	70 g	Shipping Weight	5 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	1.3%	Shipping Box	345x345x180mm
Former Material	Polyimide	BL Factor	BL	15 T.m	Also available in 40hm, da	ata upon request.
Voice Coil Winding Depth	16 mm	Equivalent Cas air load	Vas	46 liters	1 11 1 11	
Number of layers	2	Effective piston area	Sd	0.0539 m ²		現場
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	± 6 mm	873 H.	派 定
Basket	Pressed Steel	Max. excursion before damage	Xdam	±14.7mm	365. C	
Flux Density	1.0T	Voice coil inductance(1kHz)	Le	1.2 mH	1000元	NG MORE Settember
Magnet Out Diameter/Wgt	156mm / 50 oz	Efficiency Bandwidth Product	EBP	95	回线等的	257.4



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

5.T/S parameters measured with laser system BEFORE preconditioning test.

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Urb©sonic

7000/5

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS



NEO

HF



KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 High sensitivity: 99dB 1w/1m
- 3 80Hz ~3500Hz frequency response range
- ④ 3" inside/outside copper clad aluminum voice coil

⑤ Heavy duty motor system, Y35 magnet for increased force factor

- 6 Aluminum demodulating ring for lower distortion
- O Higher output and lower distortion over J6010
- 8 Ideal for mid-bass or midrange application

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	80 Hz	Overall Diameter	261 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.1 ohm	Bolt Circle Diameter	246 mm	
Nominal Power handling ¹	350 Watts	Mechanical factor	Qms	6.6	Bolt Hole Diameter	5.5 mm	
Program Power ²	700 Watts	Electrical factor	Qes	0.34	Baffle Cutout Diameter	228 mm	
Sensitivity(1w/1m) ³	99 dB	Total factor	Qts	0.32	Overall Depth	128 mm	
Frequency Range⁴	80 ~ 3500 Hz	Mechanical compliance	Cms	0.098 mm/N	Air volume occupied by driver	2.1 liters	
Minimum Impedance(Zmin)	5.91 ohm	Mechanical resistance	Rms	3.0 kg/s	Net Weight	7.0 kg	
Voice Coil Diameter	76mm /3inch	Effective Moving Mass	Mms	39.5 g	Shipping Weight	7.5 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	2.61%	Shipping Box	295x295x155mm	
Former Material	Fiberglass	BL Factor	BL	17.5 T.m			
Voice Coil Winding Depth	9.5 mm	Equivalent Cas air load	Vas	17 liters			
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0353 m ²		N.O.	
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	± 3 mm	4993 A		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±6 mm		324	
Flux Density	1.4 T	Voice coil inductance(1kHz)	Le	0.55 mH	1000		
Magnet Out Diameter/Wat	190mm / 78 oz	Efficiency Bandwidth Product	FRP	235		58542	

EBP

dB

0

-12

-18 -24

-30 -36

5 Hz

10

235

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=8.5L/88H

Vb/Fb=8.6L/Sealed

500

2000

1000

Efficiency Bandwidth Product



190mm / 78 oz



1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

Vb/Fb = 8.6L/Sealed

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 8.5L/88Hz

HF

ľurb@soni

IODM350

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS





KEY FEATURES:

- 1 700 W continuous program power capacity
- 2 96.5dB sensitivity 1w/1m
- 3 63~3500Hz frequency response ragne
- (4) 2.5" inside/outside copper clad aluminum voice coil
- (5) Peak to Peak maximum excursion of 36mm
- 6 Double magnets allows a very high force factor and long driver displacement
- ⑦ Ideal for very compact 2-ways systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	63 Hz	Overall Diameter	261 mm	
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	246 mm	
Nominal Power handling ¹	350 Watts	Mechanical factor	Qms	13.1	Bolt Hole Diameter	5.5 mm	
Program Power ²	700 Watts	Electrical factor	Qes	0.36	Baffle Cutout Diameter	228 mm	
Sensitivity(1w/1m) ³	96.5 dB	Total factor	Qts	0.36	Overall Depth	137 mm	
Frequency Range⁴	63~ 3500Hz	Mechanical compliance	Cms	0.15 mm/N	Air volume occupied by driver	1.9 liters	
Minimum Impedance(Zmin)	6.4 ohm	Mechanical resistance	Rms	0.89 kg/s	Net Weight	6.4 kg	
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	42.6 g	Shipping Weight	7.0 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.7%	Shipping Box	295x295x175mm	
Former Material	Fiberglass	BL Factor	BL	15.7 T.m			
Voice Coil Winding Depth	17.5 mm	Equivalent Cas air load	Vas	25.1 liters			
Number of layers	2(Inside/outside)	Effective piston area	Sd	0.0346 m ²			
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	±6.7 mm			
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±18 mm	10 A A A A A A A A A A A A A A A A A A A		
Flux Density	1.3T	Voice coil inductance(1kHz)	Le	0.74 mH	1943年1月		
Magnet Out Diameter/Wat	156mm / 100 oz	Efficiency Bandwidth Product	EBP	175	回惑論		

EBP

175

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=13L/68Hz

Efficiency Bandwidth Product



156mm / 100 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

500

1000

2000

Hg is the gap depth.

Vb/Fb = 13L/68Hz

- 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 67

M56IO

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 250 Watts KLIPPEL 🔆 95.5 dB 🔆 57 ~ 4000 Hz

NEO

HF



KEY FEATURES:

- 1 500 W continuous program power capacity
- 2 95.5dB sensitivity 1w/1m
- ③ 57~4000Hz frequency response ragne

4 2.5" copper wire, wound on fiberglass former ⑤ Ideal for compact 2-way systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORM	
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	57 Hz	Overall Diameter	
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	
Nominal Power handling ¹	250 Watts	Mechanical factor	Qms	13.0	Bolt Hole Diameter	
Program Power ²	500 Watts	Electrical factor	Qes	0.41	Baffle Cutout Diameter	
Sensitivity(1w/1m) ³	95.5 dB	Total factor	Qts	0.40	Overall Depth	
Frequency Range⁴	57 ~ 4000Hz	Mechanical compliance	Cms	0.19 mm/N	Air volume occupied by driver	
Minimum Impedance(Zmin)	6.5 ohm	Mechanical resistance of total-driver losses	Rms	1.13 kg/s	Net Weight	
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	41.1 g	Shipping Weight	
Voice Coil Material	SV-W(Copper)	Half-space efficiency	Eff	1.4%	Shipping Box	
Former Material	Fiberglass	BL Factor	BL	13.8 T.m		
Voice Coil Winding Depth	16.2 mm	Equivalent Cas air load	Vas	31.9 liters	回認識	
Number of layers	2	Effective piston area	Sd	0.0346 m ²	12.4.2	
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	± 6.1 mm	\$2,030	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±14.9mm	145733	
Flux Density	1.1T	Voice coil inductance(1kHz)	Le	0.75 mH		
Magnet Out Diameter/Wgt	156mm / 50 oz	Efficiency Bandwidth Product	EBP	139		

IATION 261 mm 246 mm 5.5 mm 228 mm 114 mm 1.8 liters 4.2 kg 4.7 kg 275x275x130mm

Turb@sonic



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after a 200W AES power preconditioning test and represent the expected long term parameters after a short term of use

Vb/Fb=25L/55Hz

100

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.

50

7. Vb: Net internal volume of box after subtracting the volume of internal objects.
HF

BLIO-65

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 300 Watts **★ 61 ~ 4000 Hz ఈ 94 dB**



KEY FEATURES:

- ① 600W continuous program power capacity
- 2 94dB sensitivity, 1w/1m
- ③ 65mm(2.5") copper clad aluminum voice coil with fiberglass former
- ④ FEA optimized magnet system design for lower distortion and minimum power compression
- ⁽⁵⁾ Aluminum demodulating ring for lower distortion
- 6 Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS	
------------------------	--

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling ¹	300 Watts
Program Power ²	600 Watts
Sensitivity(1w/1m) ³	94 dB
Frequency Range ^₄	61 ~ 4000 Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	15 mm
Number of layers	4
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	0.8T
Magnet Out Diameter/Wgt	156mm / 52 oz

I HIELE - SIVIALL PARAIVI	EIERS	
Resonance frequency	Fs	61 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10.7
Electrical factor	Qes	0.38
Total factor	Qts	0.36
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of total-driver losses	Rms	1.5 kg/s
Effective Moving Mass	Mms	41 g
Half-space efficiency	Eff	1.68%
BL Factor	BL	15 T.m
Equivalent Cas air load	Vas	29 liters
Effective piston area	Sd	$0.0356 \ m^2$
Max. linear excursion ⁶	Xmax	± 5.5 mm
Max. excursion before damage	Xdam	±17.3mm
Voice coil inductance(1kHz)	Le	1.03 mH
Efficiency Bandwidth Product	EBP	162

dB

-12

-18 -24

-30 -36

5 Hz

MOUNTING INFORMATION						
Overall Diameter	266 mm					
Bolt Circle Diameter	252 mm					
Bolt Hole Diameter	6.5 mm					
Baffle Cutout Diameter	232 mm					
Overall Depth	117 mm					
Air volume occupied by driver	2 liters					
Net Weight	4.9 kg					
Shipping Weight	5.5 kg					
Shipping Box	275x275x145mm					

Turb@sonic



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 22L/59Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=22L/59Hz

Vb/Fb=16L/64Hz

100

Vb/Fb = 16L/64Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

- - 69

U8010

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 280 Watts KLIPPEL **※ 97 dB ★ 55 ~ 3600 Hz**



KEY FEATURES:

GENERAL SPECIFICATIONS

- 1 560 W continuous program power capacity
- 2 High output, 97dB sensitivity 1w/1m
- ③ Very smooth response up to 2.1kHz
- ④ 65mm(2.5") copper clad aluminum voice coil, wound on fiberglass former
- ⑤ Unique eight-sided (Octagon) die-cast aluminum basket
- 6 FEA optimized magnetic circuit; the colorful aluminum ring on the back for print
- 1 Ideal for compact reflex enclosures and two way systems

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling ¹	280 Watts
Program Power ²	560 Watts
Sensitivity(1w/1m) ³	97 dB
Frequency Range ^₄	55 ~ 3600Hz
Minimum Impedance(Zmin)	6.0 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	16 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet Out Diameter/Wgt	170mm / 60 oz

THIELE – SMALL PARAM	IETERS®	
Resonance frequency	Fs	55 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	9.0
Electrical factor	Qes	0.34
Total factor	Qts	0.33
Mechanical compliance	Cms	0.22 mm/N
Mechanical resistance of total-driver losses	Rms	1.45 kg/s
Effective Moving Mass	Mms	37.7 g
Half-space efficiency	Eff	1.8%
BL Factor	BL	14.0 T.m
Equivalent Cas air load	Vas	37.6 liters
Effective piston area	Sd	0.0346 m^2
Max. linear excursion ⁶	Xmax	±6.0 mm
Max. excursion before damage	Xdam	±17 mm
Voice coil inductance(1kHz)	Le	0.68 mH
Efficiency Bandwidth Product	EBP	162

dB

0

-12 -18 -24

-30 -36

> 5 Hz 10

MOUNTING INFORMATION						
Overall Diameter	264 mm					
Bolt Circle Diameter	264 mm					
Bolt Hole Diameter	6.5 mm					
Baffle Cutout Diameter	223 mm					
Overall Depth	114 mm					
Air volume occupied by driver	1.9 liters					
Net Weight	4.8 kg					
Shipping Weight	5.3 kg					
Shipping Box	275x275x130mm					

Turb@sonic



20 K

5 K 10 K



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

Vb/Fb=15L/63Hz

500

Vb/Fb = 15L/63Hz

1 K

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

50 100

Vb/Fb = 26L/56Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=26L/56Hz

Turb@sonic

65010

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS





KEY FEATURES:

- ① 560 W continuous program power capacity
- 2 High output, 97dB sensitivity 1w/1m
- 3 79~3600Hz frequency response range
- ④ 65mm(2.5") copper clad aluminum voice coil, wound on fiberglass former

(5)	FFA	ontimized	magnetic	circuit
J		optimizeu	magnetic	Gircuit

6 Ideal for compact reflex enclosures and two way systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION	
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	79 Hz	Overall Diameter	261 mm
Rated Impedance	8 ohm	DC resistance	Re	5.0 ohm	Bolt Circle Diameter	245 mm
Nominal Power handling ¹	280 Watts	Mechanical factor	Qms	13.6.0	Bolt Hole Diameter	6.5 mm
Program Power ²	560 Watts	Electrical factor	Qes	0.46	Baffle Cutout Diameter	228 mm
Sensitivity(1w/1m) ³	97 dB	Total factor	Qts	0.44	Overall Depth	108 mm
Frequency Range ^₄	79 ~ 3600Hz	Mechanical compliance	Cms	0.11 mm/N	Air volume occupied by driver	1.8 liters
Minimum Impedance(Zmin)	6.0 ohm	Mechanical resistance of total-driver losses	Rms	1.39 kg/s	Net Weight	4.8 kg
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	38.0 g	Shipping Weight	5.3 kg
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.9%	Shipping Box	275x275x130mm
Former Material	Fiberglass	BL Factor	BL	14.5 T.m		
Voice Coil Winding Depth	16 mm	Equivalent Cas air load	Vas	18 liters		
Number of layers	2	Effective piston area	Sd	0.0346 m ²		対回
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	±6.0 mm		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±17 mm		221

Le

dB

-12

-18 -24

-30 -36

5 Hz

EBP

Voice coil inductance(1kHz)

Efficiency Bandwidth Product



1.2T

170mm / 60 oz

NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

19L/69Hz

500

1000

2000

Vb/Fb

100

Vb/Fb = 19L/69Hz

Hg is the gap depth.

Vb/Fb = 29L/61Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

0.69 mH

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=29L/61Hz

171

urbosoni

M5010

NEO

LF

FERRITE

SUBWOOFER



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 180 Watts **★ 55 ~ 2800 Hz ☀ 95 dB**

NEO

HF



KEY FEATURES:

- ① 360 W continuous program power capacity
- 2 High sensitivity: 95dB/1w/1m
- 3 55 ~ 2800Hz frequency response range
- (4) 2" copper voice coil wounded on fiberglass former

(5) Semi-pressed paper cone with pressed dust cap 6 Ideal for compact multi-way systems or woofer application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	ATION
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	58 Hz	Overall Diameter	261 mm
Rated Impedance	8 ohm	DC resistance	Re	5.3 ohm	Bolt Circle Diameter	246 mm
Nominal Power handling ¹	180 Watts	Mechanical factor	Qms	8.6	Bolt Hole Diameter	5.5 mm
Program Power ²	360 Watts	Electrical factor	Qes	0.39	Baffle Cutout Diameter	228 mm
Sensitivity(1w/1m) ³	95 dB	Total factor	Qts	0.37	Overall Depth	113 mm
Frequency Range⁴	55 ~ 2800Hz	Mechanical compliance	Cms	0.20 mm/N	Air volume occupied by driver	1.7 liters
Minimum Impedance(Zmin)	6.5 ohm	Mechanical resistance of total-driver losses	Rms	1.5 kg/s	Net Weight	3.5 kg
Voice Coil Diameter	50mm /2inch	Effective Moving Mass	Mms	36.5 g	Shipping Weight	4 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	1.7%	Shipping Box	275x275x130mm
Former Material	Fiberglass	BL Factor	BL	13.5 T.m		
Voice Coil Winding Depth	18 mm	Equivalent Cas air load	Vas	35 liters		
Number of layers	2	Effective piston area	Sd	0.0350 m ²		4 D
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	± 6.5 mm		5 F
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±14.3mm		
Flux Density	1.1T	Voice coil inductance(1kHz)	Le	0.91 mH		
Magnet Out Diameter/Wat	140mm / 45 oz	Efficiency Bandwidth Product	EBP	148	回來講習	

EBP

dB

0

-12

-18 -24

-30 -36

5 Hz

10

Computer predicted low frequency response⁽⁷⁾

Efficiency Bandwidth Product



140mm / 45 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 21L/60Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

50

Vb/Fb=21L/60Hz

500

1000

2000

- - 72

HF

V30I0m/**I6**

FERRITE

SUBWOOFER

NEO

LF

🔆 10 inch 🔆 300 Watts **ఈ 96 dB ★ 70 ~ 4800 Hz**



FERRITE WOOFER

MID-BASS

KEY FEATURES:

- ① 600 W continuous program power capacity
- 2 High sensitivity 96dB/1w/1m
- ③ Very smooth response up to 4.8k Hz
- 4 2.5" inside/outside high temperature aluminum voice coil
- (5) Weather protected cone for outdoor usage
- 6 Aluminum demodulating ring for very low distortion
- $\ensuremath{\overline{\mathcal{O}}}$ Optimized for the use in line array systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORM	1ATION
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	72.5 Hz	Overall Diameter	261 mm
Rated Impedance	16 ohm	DC resistance	Re	12.6 ohm	Bolt Circle Diameter	246 mm
Nominal Power handling ¹	300 Watts	Mechanical factor	Qms	14.1	Bolt Hole Diameter	5.5 mm
Program Power ²	600 Watts	Electrical factor	Qes	0.52	Baffle Cutout Diameter	228 mm
Sensitivity(1w/1m) ³	96 dB	Total factor	Qts	0.51	Overall Depth	115 mm
Frequency Range⁴	70 ~ 4800Hz	Mechanical compliance	Cms	0.12 mm/N	Air volume occupied by driver	1.9 liters
Minimum Impedance(Zmin)	14.2 ohm	Mechanical resistance of total-driver losses	Rms	1.32 kg/s	Net Weight	5.0 kg
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	41 g	Shipping Weight	5.4 kg
Voice Coil Material	Pure Aluminum	Half-space efficiency	Eff	1.4%	Shipping Box	275x275x130mm
Former Material	Polyimide	BL Factor	BL	19 T.m	Also available in 80hm, da	ata upon request.
Voice Coil Winding Depth	15 mm	Equivalent Cas air load	Vas	20 liters		
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0353 m ²	国际代码	際国
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	±6 mm		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±15.5mm		
Flux Density	1.3T	Voice coil inductance(1kHz)	Le	0.84 mH		
Magnet Out Diameter/Wat	170mm / 62 oz	Efficiency Bandwidth Product	EBP	139		10-13

73

Efficiency Bandwidth Product



170mm / 62 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

50

100

500

1000

HF

🔆 10 inch 🔆 280 Watts

V36IOm/**I6**

FERRITE

SUBWOOFER



FERRITE WOOFER

MID-BASS



KEY FEATURES:

NEO

LF

- 1 560 W continuous program power capacity
- 2 95.5dB sensitivity 1w/1m
- ③ 54~4000Hz frequency response range
- ④ 65mm(2.5") inside/outside copper clad aluminum voice coil

156mm / 50 oz

- (5) Y35 high grade ferrite magnet
- 6 FEA designed ferrite magnetic
- ⑦ Weather protected cone for outdoor usage
- (8) Optimized for the use in line array systems or 2-way systems

GENERAL SPECIFICATIONS		THIELE – SMALL PARAMETERS ⁵			MOUNTING INFORMATION		
Nominal Diameter	250mm /10inch	Resonance frequency	Fs	54 Hz	Overall Diameter	261 mm	
Rated Impedance	8 ohm	DC resistance	Re	10.9 ohm	Bolt Circle Diameter	246 mm	
Nominal Power handling ¹	280 Watts	Mechanical factor	Qms	13.8	Bolt Hole Diameter	5.5 mm	
Program Power ²	560 Watts	Electrical factor	Qes	0.44	Baffle Cutout Diameter	228 mm	
Sensitivity(1w/1m) ³	95.5 dB	Total factor	Qts	0.43	Overall Depth	115 mm	
Frequency Range⁴	54 ~ 4000Hz	Mechanical compliance	Cms	0.23 mm/N	Air volume occupied by driver	1.8 liters	
Minimum Impedance(Zmin)	12.6 ohm	Mechanical resistance of total-driver losses	Rms	0.92 kg/s	Net Weight	4.4 kg	
Voice Coil Diameter	65mm /2.5inch	Effective Moving Mass	Mms	36.9 g	Shipping Weight	4.8 kg	
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.4%	Shipping Box	295x295x155mm	
Former Material	Fiberglass	BL Factor	BL	17.7 T.m	Also available in 80hm,da	ta upon request.	
Voice Coil Winding Depth	15.5 mm	Equivalent Cas air load	Vas	39.8 liters			
Number of layers	2(Inside/outside)	Effective piston area	Sd	0.0350m ²			
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	±6 mm	6.34 C		
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±16.2mm	海 条部		
Flux Density	1.1T	Voice coil inductance(1kHz)	Le	1.36 mH			
Magnet Out Diameter/Wat	156mm / 50 oz	Efficiency Bandwidth Product	FRP	124	回来要求		

EBP

124



Efficiency Bandwidth Product

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after a high level 20Hz sine wave preconditioning test and represent the expected long term parameters after a short term of use. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.
 - 74

HF

ISIO-65

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 280 Watts **★ 60 ~ 4500 Hz ₩ 95 dB**



KEY FEATURES:

- 1 560 W continuous program power capacity
- 2 95dB Sensitivity 1w/1m
- ③ 60 ~ 4500Hz frequency response range
- ④ 65mm(2.5") CCAW wire wounded on polyimide former for higher sensitivity

5 Push terminal

- 6 Copper shorting ring ensures extremely linear impedance and minimized distortion
- 7 Ideal for compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling ¹	280 Watts
Program Power ²	560 Watts
Sensitivity(1w/1m) ³	95 dB
Frequency Range⁴	60 ~ 4500Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	16.2 mm
Number of layers	2
Magnet gap depth	9.5 mm
Basket	Pressed Steel
Flux Density	1.0 T
Magnet Out Diameter/Wgt	156mm / 54 oz

THIELE – SMALL PARAM	IETERS	
Resonance frequency	Fs	60 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	10.5
Electrical factor	Qes	0.43
Total factor	Qts	0.41
Mechanical compliance	Cms	0.15mm/N
Mechanical resistance of total-driver losses	Rms	1.6 kg/s
Effective Moving Mass	Mms	45 g
Half-space efficiency	Eff	1.4%
BL Factor	BL	14.8 T.m
Equivalent Cas air load	Vas	28 liters
Effective piston area	Sd	0.0363 m ²
Max. linear excursion ⁶	Xmax	±5.6 mm
Max. excursion before damage	Xdam	±14 mm
Voice coil inductance(1kHz)	Le	0.39 mH
Efficiency Bandwidth Product	EBP	139

dB

-12

-18 -24

-30 -36

5 Hz

MOUNTING INFORMATION **Overall Diameter** 256.3 mm **Bolt Circle Diameter** 244 mm **Bolt Hole Diameter** 5 2 mm 230 mm **Baffle Cutout Diameter Overall Depth** 104.5 mm Air volume occupied by driver 1.8 liters Net Weight 4.8 kg Shipping Weight 5.3 kg Shipping Box 275x275x145 mm

ľurbôsonic



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 24L/56.8Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=24L/56.8

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - - 75

HF

PSI0-50

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 10 inch 🔆 150 Watts **ఈ 94 dB ★ 52 ~ 2800 Hz**



KEY FEATURES:

- 1 300 W continuous program power capacity
- 2 94dB Sensitivity 1w/1m
- 3 52 ~ 2800Hz frequency response range
- (4) 2" copper voice coil wounded on fiberglass former

5	Semi-pressed paper cone with pressed dust cap
6	Ideal for compact multi-way systems or woofer application

GENERAL SPECIFICAT	IONS	THIEL
Nominal Diameter	250mm /10inch	Resona
Rated Impedance	8 ohm	DC resi
Nominal Power handling ¹	150 Watts	Mechan
Program Power ²	300 Watts	Electric
Sensitivity(1w/1m) ³	94 dB	Total fac
Frequency Range⁴	52 ~ 2800Hz	Mechan
Minimum Impedance(Zmin)	6.3 ohm	Mechanic of total
Voice Coil Diameter	50mm /2inch	Effectiv
Voice Coil Material	Copper	Half-spa
Former Material	Fiberglass	BL Fact
Voice Coil Winding Depth	18 mm	Equival
Number of layers	2	Effectiv
Magnet gap depth	8 mm	Max. lin
Basket	Pressed Steel	Max. ex
Flux Density	1.1T	Voice co
Magnet Out Diameter/Wgt	145mm / 42 oz	Efficience

THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	55 Hz	
DC resistance	Re	5.3 ohm	
Mechanical factor	Qms	9.9	
Electrical factor	Qes	0.45	
Total factor	Qts	0.43	
Mechanical compliance	Cms	0.24 mm/N	
Mechanical resistance of total-driver losses	Rms	1.22 kg/s	
Effective Moving Mass	Mms	34.9 g	
Half-space efficiency	Eff	1.5%	
BL Factor	BL	11.9 T.m	
Equivalent Cas air load	Vas	42 liters	
Effective piston area	Sd	0.0353 m^2	
Max. linear excursion ⁶	Xmax	± 6.5 mm	
Max. excursion before damage	Xdam	±13.7mm	
Voice coil inductance(1kHz)	Le	1.0 mH	
Efficiency Bandwidth Product	EBP	122	

-6 -12

-18 -24

-30 -36

-42 -48

5 Hz

MOUNTING INFORMATION		
Overall Diameter	256.5 mm	
Bolt Circle Diameter	242 mm	
Bolt Hole Diameter	4.8 mm	
Baffle Cutout Diameter	235 mm	
Overall Depth	110 mm	
Air volume occupied by driver	1.9 liters	
Net Weight	3.5 kg	
Shipping Weight	4 kg	
Shipping Box	275x275x130mm	

Turb@sonic



500

1000

2000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

5.T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 38L/51Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=38L/51Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb=26L/56Hz

100

Vb/Fb = 26L/56Hz

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

HF

V3608m

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 8 inch 🛛 🔆 250 Watts KLIPPEL ¥ 96.5 dB ¥ 81 ~ 4100 Hz



KEY FEATURES:

- 1 500 W continuous program power capacity
- 2 High efficiency: 96.5dB/1w/1m
- ③ 81 ~ 4100Hz frequency response range
- ④ 65mm(2.5") high temperature CCAW voice coil
- (5) Aluminum demodulating ring for lower distortion
- 6 Waterpoof cone for outdoor usage
- 🕖 Ideal for the use in line array or multi-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling ¹	250 Watts
Program Power ²	500 Watts
Sensitivity(1w/1m) ³	96.5 dB
Frequency Range ^₄	81~4100Hz
Minimum Impedance(Zmin)	6.0 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	11 mm
Number of layers	2(insde/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.15T
Magnet Out Diameter/Wgt	156mm / 50 oz

THIELE - SMALL PARAM	IETERS⁵	
Resonance frequency	Fs	81 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	6.4
Electrical factor	Qes	0.35
Total factor	Qts	0.33
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of total-driver losses	Rms	1.9 kg/s
Effective Moving Mass	Mms	23.6 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	13.2 T.m
Equivalent Cas air load	Vas	11 liters
Effective piston area	Sd	0.0222 m ²
Max. linear excursion ⁶	Xmax	±3.5 mm
Max. excursion before damage	Xdam	±11 mm
Voice coil inductance(1kHz)	Le	0.47 mH
Efficiency Bandwidth Product	EBP	231

MOUNTING INFORMATION **Overall Diameter** 208.5 mm Bolt Circle Diameter 196 mm **Bolt Hole Diameter** 5.5 mm **Baffle Cutout Diameter** 187 mm **Overall Depth** 100 mm Air volume occupied by driver 1.3 liters Net Weight 4.0 kg Shipping Weight 4.4 kg Shipping Box 220x220x110mm Also available in 160hm, data upon request.

lurb@sonic









NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

S7008

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 8 inch 🔆 200 Watts **★ 79 ~ 6000 Hz ఈ 96 dB**



KEY FEATURES:

- 1 400 W continuous program power capacity
- 2 Sensitivity 96dB/1w/1m
- ③ Extended mid range response up to 6kHz
- ④ 50mm(2") copper clad aluminum voice coil wounded on polyimide former
- ⑤ Ideal for the use in compact multi-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling ¹	200 Watts
Program Power ²	400 Watts
Sensitivity(1w/1m) ³	96 dB
Frequency Range ^₄	79 ~ 6000Hz
Minimum Impedance(Zmin)	6.5 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	14 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3T
Magnet Out Diameter/Wgt	140mm / 45 oz

THIELE – SMALL PARAMETERS ⁵		
Resonance frequency	Fs	79.6 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	14.1
Electrical factor	Qes	0.366
Total factor	Qts	0.357
Mechanical compliance	Cms	0.19 mm/N
Mechanical resistance of total-driver losses	Rms	0.757 kg/s
Effective Moving Mass	Mms	21 g
Half-space efficiency	Eff	1.6%
BL Factor	BL	12.5 T.m
Equivalent Cas air load	Vas	12.4 liters
Effective piston area	Sd	0.0216 m^2
Max. linear excursion ⁶	Xmax	±5 mm
Max. excursion before damage	Xdam	±16mm
Voice coil inductance(1kHz)	Le	0.53 mH
Efficiency Bandwidth Product	EBP	217

MOUNTING INFORMATION **Overall Diameter** 208.5 mm Bolt Circle Diameter 196 mm **Bolt Hole Diameter** 5.5 mm **Baffle Cutout Diameter** 187 mm **Overall Depth** 99 mm Air volume occupied by driver 1.1 liters Net Weight 3.3 kg Shipping Weight 3.7 kg 220x220x110mm Shipping Box



Frequency response measured in a closed enclosure of 600L in an anechoic chamber dese 100. 90. -----0.03 Ha Impedance magnitude curve measured in free air



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 78

HF

V3008m

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 8 inch 🔆 200 Watts 🔆 96 dB **★ 72 ~ 5800 Hz**



KEY FEATURES:

- ① 400 W continuous program power capacity
- 2 High sensitivity 96dB/1w/1m
- ③ Very smooth response up to 5.8k Hz
- ④ 2" copper clad aluminum voice coil wounded on polyimide former

5	luminum demodulating ring for very low distortior	۱
6	leal for the use in line array or multi-way systems	;

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	ETERS ⁵
Nominal Diameter	200mm /8inch	Resonance frequency	Fs
Rated Impedance	8 ohm	DC resistance	Re
Nominal Power handling ¹	200 Watts	Mechanical factor	Qms
Program Power ²	400 Watts	Electrical factor	Qes
Sensitivity(1w/1m) ³	96 dB	Total factor	Qts
Frequency Range⁴	70 ~ 5800Hz	Mechanical compliance	Cms
Minimum Impedance(Zmin)	6.6 ohm	Mechanical resistance of total-driver losses	Rms
Voice Coil Diameter	50mm /2inch	Effective Moving Mass	Mms
Voice Coil Material	CCAW	Half-space efficiency	Eff
Former Material	Polyimide	BL Factor	BL
Voice Coil Winding Depth	14 mm	Equivalent Cas air load	Vas
Number of layers	2	Effective piston area	Sd
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax
Basket	Cast Aluminum	Max. excursion before damage	Xdam
Flux Density	1.3T	Voice coil inductance(1kHz)	Le

140mm / 45 oz

Resonance frequency	Fs	72.7 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	6.2
Electrical factor	Qes	0.37
Total factor	Qts	0.35
Mechanical compliance	Cms	0.24 mm/N
Mechanical resistance of total-driver losses	Rms	1.46 kg/s
Effective Moving Mass	Mms	20 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	11.5 T.m
Equivalent Cas air load	Vas	17 liters
Effective piston area	Sd	0.0227 m^2
Max. linear excursion ⁶	Xmax	±5 mm
Max. excursion before damage	Xdam	±16mm
Voice coil inductance(1kHz)	Le	0.48 mH
Efficiency Bandwidth Product	EBP	196

MOUNTING INFORM	ΙΑΤΙΟΝ
	208 5 mm
Bolt Circle Diameter	196 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	187 mm
Overall Depth	100 mm
Air volume occupied by driver	1.2 liters
Net Weight	3.2 kg
Shipping Weight	3.6 kg
Shipping Box	220x220x110mm
Also available in 16ohm, o	data upon request.

Turb@sonic



Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 100.0 dBSP 100. 90,1 80.0 in n 70. Man 200 H 5 20 Impedance magnitude curve measured in free air



NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

5. T/S parameters measured with laser system ${\sf BEFORE}$ preconditioning test.

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

HF

V3208m/**I6**

FERRITE

SUBWOOFER

FERRITE WOOFER

MID-BASS



* 200 Watts 🔆 8 inch **★ 90 ~ 6000 Hz ☀ 95 dB**



KEY FEATURES:

NEO

LF

- ① 400 W continuous program power capacity
- 2 High sensitivity 95dB/1w/1m
- 3 Very smooth response up to 6k Hz
- ④ 2" inside/outside copper clad aluminum voice coil wounded on polyimide former
- (5) Weather protected cone for outdoor usage
- 6 Aluminum demodulating ring for very low distortion
- $\ensuremath{\overline{\mathcal{O}}}$ Inverted dust cap to minimize the cone distortion and for better coupling to a phase plug
- (8) Optimized for the use in line array or multi-way systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	MOUNT		
Nominal Diameter	200mm /8inch	Resonance frequency	Fs	92 Hz	Overall Di
Rated Impedance	16 ohm	DC resistance	Re	12.6 ohm	Bolt Circle
Nominal Power handling ¹	200 Watts	Mechanical factor	Qms	7.3	Bolt Hole
Program Power ²	400 Watts	Electrical factor	Qes	0.64	Baffle Cut
Sensitivity(1w/1m) ³	95 dB	Total factor	Qts	0.59	Overall De
Frequency Range⁴	90 ~ 6000Hz	Mechanical compliance	Cms	0.15 mm/N	Air volume o
Minimum Impedance(Zmin)	14.5 ohm	Mechanical resistance of total-driver losses	Rms	1.62 kg/s	Net Weigh
Voice Coil Diameter	50mm /2inch	Effective Moving Mass	Mms	20 g	Shipping \
Voice Coil Material	CCAW	Half-space efficiency	Eff	1.2%	Shipping B
Former Material	Polyimide	BL Factor	BL	15.2 T.m	Also availa
Voice Coil Winding Depth	14 mm	Equivalent Cas air load	Vas	10 liters	
Number of layers	2(inside/outside)	Effective piston area	Sd	0.0222 m ²	
Magnet gap depth	8 mm	Max. linear excursion ⁶	Xmax	±6 mm	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±16mm	

Voice coil inductance(1kHz)

Efficiency Bandwidth Product

Le

EBP

MOUNTING INFORMATION					
Overall Diameter	200 mm				
Bolt Circle Diameter	212 mm				
Bolt Hole Diameter	5.5 mm				
Baffle Cutout Diameter	180 mm				
Overall Depth	100 mm				
Air volume occupied by driver	1.2 liters				
Net Weight	3.2 kg				
Shipping Weight	3.6 kg				
Shipping Box	220x220x110mm				
Also available in 80hm, da	ata upon request.				

Turbosonic



500

1000

2000



NOTES:

1. AES standard

Flux Density

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity

1.3T

140mm / 45 oz

5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 33L/57Hz

0.98 mH

Vb/Fb=22L/71Hz

144

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

- - 80

HF

PS08-38

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

🔆 8 inch 🔆 150 Watts **★ 75 ~ 6300 Hz ఈ 92 dB**



KEY FEATURES:

- ① 300 W continuous program power capacity
- 2 High efficiency: 92dB 1w/1m
- ③ Extended mid range response up to 6300Hz
- ④ 1.5" copper clad aluminum voice coil, vented on fiberglass former for heat dispersion
- ⑤ Ideal for the use in trolly, conference systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling ¹	150 Watts
Program Power ²	300 Watts
Sensitivity(1w/1m) ³	92 dB
Frequency Range ^₄	75 ~ 6300Hz
Minimum Impedance(Zmin)	6.2 ohm
Voice Coil Diameter	38mm /1.5inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	12 mm
Number of layers	2
Magnet gap depth	6 mm
Basket	Pressed Steel
Flux Density	1.0T
Magnet Out Diameter/Wgt	120mm / 30 oz

I HIELE - SIVIALL PARAIVI	EIERS	
Resonance frequency	Fs	79 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	10.9
Electrical factor	Qes	0.84
Total factor	Qts	0.75
Mechanical compliance	Cms	0.17 mm/t
Mechanical resistance of total-driver losses	Rms	1.04 kg/s
Effective Moving Mass	Mms	22.6 g
Half-space efficiency	Eff	0.7%
BL Factor	BL	8.7 T.m
Equivalent Cas air load	Vas	11 liters
Effective piston area	Sd	0.0214 m ²
Max. linear excursion ⁶	Xmax	±4.5 mm
Max. excursion before damage	Xdam	±12
Voice coil inductance(1kHz)	Le	0.56 mH
Efficiency Bandwidth Product	EBP	99

MOUNTING INFORMATION **Overall Diameter** 210.5 mm Bolt Circle Diameter 197.5 mm **Bolt Hole Diameter** 5 2 mm Baffle Cutout Diameter 184 mm 92 mm **Overall Depth** Air volume occupied by driver 1 liter Net Weight 2 kg Shipping Weight 2.4 kg Shipping Box 220x220x110mm Also available in 40hm, data upon request.

lurb@sonic







NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5.T/S parameters measured with laser system BEFORE preconditioning test.
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects



FERRITE

SUBWOOFER

FERRITE WOOFER

MID-BASS



🔆 6.5 inch 🔆 100 Watts **★ 81 ~ 6000 Hz ₩ 93 dB**



KEY FEATURES:

NEO

LF

- 1 200 W continuous program power capacity
- 2 93dB Sensitivity 1w/1m

GENERAL SPECIFICATIONS

- ③ 81 ~ 6000Hz frequency response range
- ④ 38mm(1.5") CCAW wire wounded on fiberglass
- (5) FEA optimized magnet system design for lower distortion
- 6 Waterproof cone treatment
- $\ensuremath{\overline{\mathcal{O}}}$ Ideal for the use in 2-way line array as mid-bass or 3-way system as midrange

Nominal Diameter	170mm /6.5inch
Rated Impedance	16 ohm
Nominal Power handling ¹	100 Watts
Program Power ²	200 Watts
Sensitivity(1w/1m) ³	93 dB
Frequency Range ^₄	81 ~ 6000Hz
Minimum Impedance(Zmin)	13.1 ohm
Voice Coil Diameter	38mm /1 5inch

Minimum Impedance(Zmin)	13.1 ohm
Voice Coil Diameter	38mm /1.5inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	11 mm
Number of layers	2
Magnet gap depth	6 mm
Basket	Cast Aluminum
Flux Density	1.1T
Magnet Out Diameter/Wgt	115mm / 28 oz

Resonance frequency	Fs	81 Hz
DC resistance	Re	11.3 ohm
Mechanical factor	Qms	6.5
Electrical factor	Qes	0.52
Total factor	Qts	0.48
Mechanical compliance	Cms	0.27mm/N
Mechanical resistance of total-driver losses	Rms	1.1 kg/s
Effective Moving Mass	Mms	14 g
Half-space efficiency	Eff	0.7%
BL Factor	BL	12.5 T.m
Equivalent Cas air load	Vas	7 liters
Effective piston area	Sd	0.0135 m ²
Max. linear excursion ⁶	Xmax	± 4 mm
Max. excursion before damage	Xdam	±9.5mm
Voice coil inductance(1kHz)	Le	0.64 mH
Efficiency Bandwidth Product	EBP	156

dB

-12

-18 -24

-30 -36

5 Hz

THIELE – SMALL PARAMETERS⁵

MOUNTING INFORM	IATION
Overall Diameter	162 mm
Bolt Circle Diameter	172 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	147 mm
Overall Depth	78 mm
Air volume occupied by driver	0.7 liters
Net Weight	2.0 kg
Shipping Weight	2.2 kg
Shipping Box	172x172x95mm
Also available in 80hm, da	ata upon request.

Turb@sonic



500

1000

2000

Vb/Fb=2.6L/Sealed





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 10L/66Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=10L/66Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

Vb/Fb = 2.6L/Sealed

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 82

HF

R06-25

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

★ 6.5 inch ★ 50 Watts **★ 50 ~ 4200 Hz ★ 88 dB**



KEY FEATURES:

- 1 100W continuous program power capacity
- 2 88dB sensitivity, 1w/1m
- 3 50Hz ~4200Hz frequency response range

④ 25mm(1") two layers copper voice coil ⑤ PP cone, rubber edge

6 Ideal for bass-reflex systems

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	IATION
Nominal Diameter	170mm /6.5inch	Resonance frequency	Fs	50 Hz	Overall Diameter	159 mm
Rated Impedance	8 ohm	DC resistance	Re	6.4 ohm	Bolt Circle Diameter	161.5 mm
Nominal Power handling ¹	50 Watts	Mechanical factor	Qms	2.2	Bolt Hole Diameter	4.9 mm
Program Power ²	100 Watts	Electrical factor	Qes	0.67	Baffle Cutout Diameter	145 mm
Sensitivity(1w/1m) ³	88 dB	Total factor	Qts	0.52	Overall Depth	71 mm
Frequency Range ⁴	50 ~ 4200 Hz	Mechanical compliance	Cms	0.71 mm/N	Air volume occupied by driver	0.8 liters
Minimum Impedance(Zmin)	7.4 ohm	Mechanical resistance of total-driver losses	Rms	2.0 mech-ohm	Net Weight	0.9 kg
Voice Coil Diameter	25mm /1inch	Effective Moving Mass	Mms	14 g	Shipping Weight	1.1 kg
Voice Coil Material	Copper	Half-space efficiency	Eff	0.32%	Shipping Box	175x175x85mm
Former Material	Aluminum	BL Factor	BL	6.5 T.m	Also available in 40hm, da	ata upon request.
Voice Coil Winding Depth	11 mm	Equivalent Cas air load	Vas	17 liters		
Number of layers	2	Effective piston area	Sd	0.0133 m ²	目品語	第旦
Magnet gap depth	4 mm	Max. linear excursion ⁶	Xmax	±4.5 mm		
Basket	Pressed Steel	Max. excursion before damage	Xdam	±10.5mm		同能
Flux Density	1.0T	Voice coil inductance(1kHz)	Le	0.53 mH		
Magnet Out Diameter/Wat	90mm / 15 oz	Efficiency Bandwidth Product	FBP	76		

83

EBP

76

Efficiency Bandwidth Product



90mm / 15 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity

5.T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 15L/56Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

50

Vb/Fb=15L/56Hz

100

500

1000

HF

MBO6-38

FERRITE

SUBWOOFER

NEO

LF



FERRITE WOOFER

MID-BASS

* 6.5 inch * 100 Watts **★ 125 ~ 9000 Hz ₩ 92 dB**



KEY FEATURES:

- 1 200 W continuous program power capacity
- 2 High efficiency: 92dB 1w/1m
- 3 Extended mid response up to 9kHz
- ④ 1.5" flat copper clad aluminum voice coil
- (5) Copper shorting ring ensures extremely linear impedance and reduced distortion figure
- ⑥ Ideal for the use in array systems, mid-bass or midrange application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORMATION	
Nominal Diameter	200mm /6.5inch	Resonance frequency	Fs	131 Hz	Overall Diameter	162 mm
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	172 mm
Nominal Power handling ¹	100 Watts	Mechanical factor	Qms	3.3	Bolt Hole Diameter	5 mm
Program Power ²	200 Watts	Electrical factor	Qes	1.03	Baffle Cutout Diameter	147 mm
Sensitivity(1w/1m) ³	92 dB	Total factor	Qts	0.78	Overall Depth	78 mm
Frequency Range⁴	125 ~ 9000Hz	Mechanical compliance	Cms	0.11 mm/N	Air volume occupied by driver	0.7 liters
Minimum Impedance(Zmin)	6.4 ohm	Mechanical resistance of total-driver losses	Rms	3.36 kg/s	Net Weight	2.1 kg
Voice Coil Diameter	38mm /1.5inch	Effective Moving Mass	Mms	13.5 g	Shipping Weight	2.3 kg
Voice Coil Material	Edgewound CCAW	Half-space efficiency	Eff	0.62%	Shipping Box	172x172x95mm
Former Material	Fiberglass	BL Factor	BL	7.65 T.m	Also available in 16ohm, o	data upon request.
Voice Coil Winding Depth	8 mm	Equivalent Cas air load	Vas	2.9 liters		
Number of layers	1	Effective piston area	Sd	0.0139 m ²	田橋湖	通興
Magnet gap depth	6 mm	Max. linear excursion ⁶	Xmax	±2.5 mm		8.55
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±6 mm		EUS
Flux Density	1.05 T	Voice coil inductance(1kHz)	Le	0.16 mH	in the second	
Magnet Out Diameter/Wat	120mm/30 oz	Efficiency Bandwidth Product	FBP	127		

Efficiency Bandwidth Product

EBP

-6

-12

-18 -24

-30 -36

-42 -48

84

5 Hz

127

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=11L/96Hz

Vb/Fb=5L/Sealed

500

1000

2000



120mm/30 oz

NOTES:

1. AES standard

Magnet Out Diameter/Wgt

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4
- Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 11L/96Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

Vb/Fb = 5L/Sealed

Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects



V3005m

🔆 5 inch 🛛 🔆 100 Watts KLIPPEL **☀ 91 dB ★ 121 ~ 7000 Hz**





KEY FEATURES:

- 1 200 W continuous program power capacity
- 2 91dB Sensitivity 1w/1m
- ③ Smooth frequency response up to 7000Hz
- ④ 38mm(1.5") CCAW wire wounded on fiberglass
- ⑤ FEA designed ferrite magnetic provides low harmonic distortion 6 High grade Y35 ferrite magnet
- $\overline{\mathcal{T}}$ Ideal for the use in line array as mid-bass or 3-way system as midrange

GENERAL SPECIFICAT	IONS	THIELE - SMA
Nominal Diameter	127mm /5inch	Resonance frequ
Rated Impedance	8 ohm	DC resistance
Nominal Power handling ¹	100 Watts	Mechanical factor
Program Power ²	200 Watts	Electrical factor
Sensitivity(1w/1m) ³	91 dB	Total factor
Frequency Range⁴	121 ~ 7000Hz	Mechanical comp
Minimum Impedance(Zmin)	6.8 ohm	Mechanical resistant of total-driver loss
Voice Coil Diameter	38mm /1.5inch	Effective Moving
Voice Coil Material	CCAW	Half-space efficie
Former Material	Fiberglass	BL Factor
Voice Coil Winding Depth	9.1 mm	Equivalent Cas ai
Number of layers	2	Effective piston a
Magnet gap depth	6 mm	Max. linear excur
Basket	Cast Aluminum	Max. excursion b
Flux Density	1.13T	Voice coil inducta
Magnet Out Diameter/Wgt	100mm / 19 oz	Efficiency Bandwid

INIELE - SIVIALL PARAIV	EIERS	
Resonance frequency	Fs	121 Hz
DC resistance	Re	5.8 ohm
Mechanical factor	Qms	6.4
Electrical factor	Qes	0.64
Total factor	Qts	0.58
Mechanical compliance	Cms	0.20mm/N
Mechanical resistance of total-driver losses	Rms	1.03 kg/s
Effective Moving Mass	Mms	8.6 g
Half-space efficiency	Eff	0.6%
BL Factor	BL	7.8 T.m
Equivalent Cas air load	Vas	2.1 liters
Effective piston area	Sd	0.086 m ²
Max. linear excursion ⁶	Xmax	±3 mm
Max. excursion before damage	Xdam	±7 mm
Voice coil inductance(1kHz)	Le	0.43 mH
Efficiency Bandwidth Product	EBP	189

dB

-12

-18 -24

-30 -36

5 Hz

MOUNTING INFORMATION **Overall Diameter** 155 mm Bolt Circle Diameter 142 mm **Bolt Hole Diameter** 5 mm **Baffle Cutout Diameter** 122 mm **Overall Depth** 78 mm Air volume occupied by driver 0.5 liters Net Weight 1.4 kg Shipping Weight 1.6 kg Shipping Box 145x145x90mm

urb@sonic

Also available in 160hm, data upon request.



500

1000

2000

Vb/Fb=5L/Sealed





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use

Vb/Fb = 5L/Sealed

50

- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb = 5.2L/94Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=5.2L/94Hz

HE

MR0638



* 6.5 inch * 150 Watts VERIFIED WITH KLIPPEL ※ 95.5 dB ★ 273 ~ 9000 Hz



KEY FEATURES:

Magnet Outer Diameter/Wgt

- 1 300 W continuous program power capacity
- 2 High efficiency: 95.5 dB 1w/1m
- ③ Extended mid response up to 9kHz
- ④ 38mm(1.5") flat copper clad aluminum voice coil

(5) Sealed box design

6 Ideal for the use in high SPL midrange application

GENERAL SPECIFICAT	IONS	THIELE - SMALL PARAM	IETERS	5	MOUNTING INFORM	1ATION
Nominal Diameter	200mm /6.5inch	Resonance frequency	Fs	273 Hz	Overall Diameter	162 mm
Rated Impedance	8 ohm	DC resistance	Re	5.4 ohm	Bolt Circle Diameter	172 mm
Nominal Power handling ¹	150 Watts	Mechanical factor	Qms	11.1	Bolt Hole Diameter	5 mm
Program Power ²	300 Watts	Electrical factor	Qes	1.47	Baffle Cutout Diameter	147 mm
Sensitivity(1w/1m) ³	95.5 dB	Total factor	Qts	1.3	Overall Depth	121 mm
Frequency Range⁴	273 ~ 9000Hz	Mechanical compliance	Cms	0.037 mm/N	Air volume occupied by driver	-
Minimum Impedance(Zmin)	6.3 ohm	Mechanical resistance of total-driver losses	Rms	1.4 kg/s	Net Weight	2.4 kg
Voice Coil Diameter	38mm /1.5inch	Effective Moving Mass	Mms	9.2 g	Shipping Weight	2.7 kg
Voice Coil Material	Edgewound CCAW	Half-space efficiency	Eff	1.5%	Shipping Box	172x172x95mm
Former Material	Fiberglass	BL Factor	BL	7.61 T.m	Also available in 16ohm, d	data upon request.
Voice Coil Winding Depth	8 mm	Equivalent Cas air load	Vas	1.1 liters		
Number of layers	1	Effective piston area	Sd	0.0145 m ²		
Magnet gap depth	6 mm	Max. linear excursion ⁶	Xmax	±2.5 mm	<u> </u>	
Basket	Cast Aluminum	Max. excursion before damage	Xdam	±6 mm		
Flux Density	1.05 T	Voice coil inductance(1kHz)	Le	0.33 mH		
Magnet Outer Diameter/Wat	120mm/30.07	Efficiency Bandwidth Product	FBP	186	回常动物	97842

86

EBP

186

Efficiency Bandwidth Product



120mm/30 oz



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- 5. Thiele-Small parameters measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 88dB sensitivity, 1w/1m
- 3 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Shorting copper ring for extended HF response
- 6 Y35 Strontium ferrite magnet
- $\ensuremath{\overline{\mathcal{O}}}$ Strong and light fiberglass cone remains rigid to higher frequencies
- 8 Rubber edge
- 9 Ideal for mini array systems, full range application

GENERAL SPECIFICAT	IONS
Nominal Diameter	80mm /3inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	88 dB
Frequency Range ^₄	110 ~ 15k Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2T
Magnet Out Diameter/Wgt	70mm / 8 oz

THIELE – SMALL PARAM	IETERS®	
Resonance frequency	Fs	113 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	3.5
Electrical factor	Qes	0.85
Total factor	Qts	0.68
Mechanical compliance	Cms	0.67 mm/N
Mechanical resistance of total-driver losses	Rms	0.59 kg/s
Effective Moving Mass	Mms	2.9 g
Half-space efficiency	Eff	0.17%
BL Factor	BL	4 T.m
Equivalent Cas air load	Vas	1.03 liters
Effective piston area	Sd	$0.0033 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	±5.5mm
Voice coil inductance(1kHz)	Le	0.1 mH
Efficiency Bandwidth Product	EBP	133

dB

0

-12 -18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION		
Overall Diameter	93 mm	
Bolt Circle Diameter	84 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	71 mm	
Overall Depth	51 mm	
Air volume occupied by driver	0.14 liters	
Net Weight	0.48 kg / pc	
Shipping Weight	17 kg / 32pcs	
Shipping Box	400*400*145mm	



500

2000

1000

Vb/Fb=1.5L/Sealed



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 1.5L / Sealed

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

-50

- - 87



FC322







KEY FEATURES:

- ① 80W continuous program power capacity
- 2 88.5dB sensitivity, 1w/1m
- ③ 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Shorting copper ring for extended HF response
- 6 Y35 Strontium ferrite magnet
- ${\ensuremath{\overline{\mathcal{T}}}}$ Strong and light fiberglass cone with polycotton edge remains rigid to higher frequencies
- 8 Ideal for mini array systems, full range application

GENERAL SPECIFICATIONS

Nominal Diameter	80mm /3inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	88.5 dB
Frequency Range ⁴	138 ~ 20k Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2T
Magnet Out Diameter/Wgt	70mm / 8 oz

THIELE – SMALL PARAM	IETERS °	
Resonance frequency	Fs	138 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	5.5
Electrical factor	Qes	1.01
Total factor	Qts	0.85
Mechanical compliance	Cms	0.53 mm/N
Mechanical resistance of total-driver losses	Rms	0.4 kg/s
Effective Moving Mass	Mms	2.5 g
Half-space efficiency	Eff	0.17%
BL Factor	BL	3.7 T.m
Equivalent Cas air load	Vas	0.68 liters
Effective piston area	Sd	$0.0033 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	±5.5mm
Voice coil inductance(1kHz)	Le	0.1 mH
Efficiency Bandwidth Product	EBP	137

dB

0

-12 -18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION		
Overall Diameter	93 mm	
Bolt Circle Diameter	84 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	71 mm	
Overall Depth	51 mm	
Air volume occupied by driver	0.14 liters	
Net Weight	0.48 kg / pc	
Shipping Weight	17 kg / 32pcs	
Shipping Box	400*400*145mm	



500

2000

1000

Vb/Fb=2.0L/Sealed

Vb/Fb = 2.0L / Sealed



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and
- Hg is the gap depth.

Vb/Fb = 2.9L / 101Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=2.9L/101Hz

88

5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test.

HF

FR32Ind

FERRITE

SUBWOOFER

NEO LF



FERRITE

WOOFER

MID-BASS

🔆 3 inch 🔆 40 Watts 🔆 115 ~ 15k Hz 🔆 89 dB



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 89dB sensitivity, 1w/1m

GENERAL SPECIFICATIONS

- 3 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Strong and light fiberglass cone remains rigid to higher frequencies 6 Rubber edge
- T High grade neodymium ring allows a high force factor(B) and lighter weight
- (8) Ideal for mini array systems, full range application

Nominal Diameter	80mm /3inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	89 dB
Frequency Range⁴	115 ~ 15k Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.4T
Magnet Out Diameter/Wgt	Neodymium

THIELE – SMALL PARAM	IETERS °	
Resonance frequency	Fs	118 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	3.1
Electrical factor	Qes	0.56
Total factor	Qts	0.47
Mechanical compliance	Cms	0.61 mm/N
Mechanical resistance of total-driver losses	Rms	0.7 kg/s
Effective Moving Mass	Mms	2.9 g
Half-space efficiency	Eff	0.3%
BL Factor	BL	5 T.m
Equivalent Cas air load	Vas	1.0 liters
Effective piston area	Sd	0.0033 m ²
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	± 5.5mm
Voice coil inductance(1kHz)	Le	0.05 mH
Efficiency Bandwidth Product	EBP	214

dB

0

-12

-18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION		
Overall Diameter	93 mm	
Bolt Circle Diameter	84 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	71 mm	
Overall Depth	47 mm	
Air volume occupied by driver	0.09 liters	
Net Weight	0.22 kg / pc	
Shipping Weight	8.7 kg / 32pcs	
Shipping Box	400*400*145mm	

Turb@sonic



500

2000

1000

Vb/Fb=1.5L/Sealed



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 1L / Sealed

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

50



NEO LF

FERRITE WOOFER MID-BASS

NEO

HF

FC322nd



🔆 3 inch 🛛 🔆 40 Watts VERIFIED WITH KLIPPEL 🔆 88.5 dB 🔆 138 ~ 20k Hz



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 89dB sensitivity, 1w/1m
- 3 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- ⑤ Strong and light fiberglass cone with polycotton edge remains rigid to higher frequencies
- $^{(6)}$ High grade neodymium ring allows a high force factor(B) and lighter weight
- 7 Ideal for mini array systems, full range application

GENERAL SPECIFICATIONS		
Nominal Diameter	80mm /3inch	

Nominal Diameter	0011111/3111011
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	89 dB
Frequency Range ^₄	138 ~ 20k Hz
Minimum Impedance(Zmin)	7.1 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.4T
Magnet Out Diameter/Wgt	Neodymium

THIELE – SMALL PARAMETERS [®]		
Resonance frequency	Fs	139 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	5.2
Electrical factor	Qes	0.56
Total factor	Qts	0.51
Mechanical compliance	Cms	0.52 mm/N
Mechanical resistance of total-driver losses	Rms	0.43 kg/s
Effective Moving Mass	Mms	2.52 g
Half-space efficiency	Eff	0.3%
BL Factor	BL	5 T.m
Equivalent Cas air load	Vas	0.67 liters
Effective piston area	Sd	$0.0033 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	± 5.5mm
Voice coil inductance(1kHz)	Le	0.18 mH
Efficiency Bandwidth Product	EBP	248

dB

0

-12 -18

-24

-30 -36

5 Hz

10

MOUNTING INFORMATION		
Overall Diameter	93 mm	
Bolt Circle Diameter	84 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	71 mm	
Overall Depth	47 mm	
Air volume occupied by driver	0.09 liters	
Net Weight	0.22 kg / pc	
Shipping Weight	8.7 kg / 32pcs	
Shipping Box	400*400*145mm	

Turbosonic



Vb/Fb=1.2L/Sealed

500

2000

1000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

100

Vb/Fb = 1.2L / Sealed

Hg is the gap depth.

Vb/Fb = 1.1L / 110Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=1.1L/110Hz



NEO LF

FERRITE WOOFER MID-BASS

MIDRANGE

NEO

HF

FR42

🔆 4 inch 🔆 40 Watts 🔆 87 dB 🔆 91 ~ 17k Hz





KEY FEATURES:

- ① 80W continuous program power capacity
- 2 87dB sensitivity, 1w/1m
- 3 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Shorting copper ring for extended HF response
- 6 Y35 Strontium ferrite magnet
- $\ensuremath{\overline{\mathcal{O}}}$ Strong and light fiberglass cone remains rigid to higher frequencies
- 8 Rubber edge
- 9 Ideal for mini array systems, full range application

GENERAL SPECIFICATIONS

Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	87 dB
Frequency Range ⁴	91 ~ 17k Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2 T
Magnet Out Diameter/Wgt	70mm / 8 oz

THIELE - SMALL PARAMETERS		
Resonance frequency	Fs	92 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	4.0
Electrical factor	Qes	1.1
Total factor	Qts	0.88
Mechanical compliance	Cms	0.65 mm/N
Mechanical resistance of total-driver losses	Rms	0.66 kg/s
Effective Moving Mass	Mms	4.5 g
Half-space efficiency	Eff	0.18%
BL Factor	BL	3.9 T.m
Equivalent Cas air load	Vas	2.5 liters
Effective piston area	Sd	$0.0053 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	± 5.5mm
Voice coil inductance(1kHz)	Le	0.3 mH
Efficiency Bandwidth Product	EBP	83

dB

0

-12

-18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION		
Overall Diameter	127 mm	
Bolt Circle Diameter	115 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	103 mm	
Overall Depth	55 mm	
Air volume occupied by driver	0.17 liters	
Net Weight	0.5 kg / pc	
Shipping Weight	14 kg / 24pcs	
Shipping Box	430*340*225mm	



500

2000

1000

Vb/Fb=2.5L/Sealed



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 2.5L / Sealed

Computer predicted low frequency response⁽⁷⁾

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

100

-50





🔆 4 inch 🛛 🔆 40 Watts VERIFIED WITH KLIPPEL 🔆 89.5 dB 🔆 134 ~ 17k Hz

HF



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 89.5dB sensitivity, 1w/1m
- ③ 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Shorting copper ring for extended HF response
- 6 Y35 Strontium ferrite magnet
- ${\ensuremath{\overline{\mathcal{T}}}}$ Strong and light fiberglass cone with polycotton edge remains rigid to higher frequencies
- 8 Ideal for mini array systems, full range application

GENERAL SPECIFICAT	IONS
Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	89.5 dB
Frequency Range ^₄	134 ~ 17k Hz
Minimum Impedance(Zmin)	7.1 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2 T
Magnet Out Diameter/Wgt	70mm / 8 oz

THIELE – SMALL PARAMETERS ⁵		
Resonance frequency	Fs	134 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	6.5
Electrical factor	Qes	1.27
Total factor	Qts	1.06
Mechanical compliance	Cms	0.4 mm/N
Mechanical resistance of total-driver losses	Rms	0.46 kg/s
Effective Moving Mass	Mms	3.5 g
Half-space efficiency	Eff	0.29%
BL Factor	BL	3.9 T.m
Equivalent Cas air load	Vas	1.6 liters
Effective piston area	Sd	0.0053 m ²
Max. linear excursion ⁶	Xmax	±2mm
Max. excursion before damage	Xdam	± 5.5mm
Voice coil inductance(1kHz)	Le	0.08 mH
Efficiency Bandwidth Product	EBP	105

dB

MOUNTING INFORMATION		
Overall Diameter	127 mm	
Bolt Circle Diameter	115 mm	
Bolt Hole Diameter	5 mm	
Baffle Cutout Diameter	103 mm	
Overall Depth	55 mm	
Air volume occupied by driver	0.17 liters	
Net Weight	0.5 kg / pc	
Shipping Weight	14 kg / 24pcs	
Shipping Box	430*340*225mm	

Turb@sonic





NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
- Vb/Fb=6L/119Hz 0 Vb/Fb=3.5L/Sealed -12 -18 -24 -30 -36 2000 5 Hz 10 500 1000 Vb/Fb = 6L/119HzVb/Fb = 3.5L / Sealed
- 5. Thiele-Small parameters are measured with Klippel DA LPM module after an AES power preconditioning test and represent the expected long term parameters after a short term of use
- 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
- 7. Vb: Net internal volume of box after subtracting the volume of internal objects.

Computer predicted low frequency response⁽⁷⁾

HF

FR42Ind

FERRITE

SUBWOOFER

NEO LF



FERRITE

WOOFER

MID-BASS

MIDRANGE

🔆 4 inch 🔆 40 Watts **※** 90 ~ 17k Hz 🔆 88 dB



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 88dB sensitivity, 1w/1m
- 3 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- (5) Strong and light fiberglass cone remains rigid to higher frequencies 6 Rubber edge
- $\ensuremath{\overline{\mathcal{D}}}$ High grade neodymium ring allows a high force factor(B) and lighter weight
- (8) Ideal for mini array systems, full range application.

Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	88 dB

GENERAL SPECIFICATIONS

Sensitivity(1w/1m) ³	88 dB
Frequency Range ^₄	90 ~ 16k Hz
Minimum Impedance(Zmin)	6.8 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2 T
Magnet Out Diameter/Wgt	Neodymium

THIELE - SMALL PARAM	IETERS ⁵	
Resonance frequency	Fs	90 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	4.0
Electrical factor	Qes	0.76
Total factor	Qts	0.64
Mechanical compliance	Cms	0.69 mm/N
Mechanical resistance of total-driver losses	Rms	0.637 kg/s
Effective Moving Mass	Mms	4.5 g
Half-space efficiency	Eff	0.25%
BL Factor	BL	4.6 T.m
Equivalent Cas air load	Vas	2.7 liters
Effective piston area	Sd	$0.0053 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	±5.5mm
Voice coil inductance(1kHz)	Le	0.16 mH
Efficiency Bandwidth Product	EBP	118

dB

0

-12

-18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION					
127 mm					
115 mm					
5 mm					
103 mm					
55 mm					
0.1 liters					
0.22 kg / pc					
6 kg / 24pcs					
430*340*225mm					



500

2000

1000

Vb/Fb=2.8L/Sealed

Vb/Fb = 2.8L / Sealed





- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters measured with laser system BEFORE preconditioning test.

Vb/Fb = 7L / 68Hz

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=7L/68Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

- Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects
 - 93



FC422nd

NEO LF



🔆 4 inch 🛛 🔆 40 Watts VERIFIED WITH KLIPPEL 🔆 91 dB 🔆 134 ~ 18.7k Hz

NEO

HF



KEY FEATURES:

- ① 80W continuous program power capacity
- 2 High sensitivity: 91dB 1w/1m
- (3) 20mm(0.8") high temperature CCAW voice coil
- ④ Vented voice coil former increases airflow to provide enhanced cooling
- ⑤ Strong and light fiberglass cone with polycotton edge remains rigid to higher frequencies
- $^{(6)}$ High grade neodymium ring allows a high force factor(B) and lighter weight
- 7 Ideal for mini array systems, full range application

Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
	40 10/- 44-

GENERAL SPECIFICATIONS

Nominal Power handling ¹	40 Watts
Program Power ²	80 Watts
Sensitivity(1w/1m) ³	88 dB
Frequency Range ⁴	134 ~ 18.7k Hz
Minimum Impedance(Zmin)	7 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Steel
Flux Density	1.2 T
Magnet Out Diameter/Wgt	Neodymium

THIELE – SMALL PARAM	ETERS	
Resonance frequency	Fs	141 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	7.5
Electrical factor	Qes	0.81
Total factor	Qts	0.73
Mechanical compliance	Cms	0.36 mm/N
Mechanical resistance of total-driver losses	Rms	0.423 kg/s
Effective Moving Mass	Mms	3.6 g
Half-space efficiency	Eff	0.47%
BL Factor	BL	5.0 T.m
Equivalent Cas air load	Vas	1.4 liters
Effective piston area	Sd	$0.0053 \ m^2$
Max. linear excursion ⁶	Xmax	± 2 mm
Max. excursion before damage	Xdam	±5.5mm
Voice coil inductance(1kHz)	Le	0.17 mH
Efficiency Bandwidth Product	EBP	174

dB

0

-12 -18 -24

-30 -36

5 Hz

10

MOUNTING INFORMATION				
Overall Diameter	127 mm			
Bolt Circle Diameter	115 mm			
Bolt Hole Diameter	5 mm			
Baffle Cutout Diameter	103 mm			
Overall Depth	55 mm			
Air volume occupied by driver	0.1 liters			
Net Weight	0.22 kg / pc			
Shipping Weight	6 kg / 24pcs			
Shipping Box	430*340*225mm			

Turb@sonic



Vb/Fb=2.4L/Sealed

500

2000

1000

Frequency response measured in a closed enclosure of 600L in an anechoic chamber 110 dRSE 100 90 70 60.0 201 .5k 20 Impedance magnitude curve measured in free air

NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- Frequency range is defined as the band of frequencies delineated by the lower and 4 upper limits where the output level drops by 10dB below the rated sensitivity
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test. 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and

50

100

Vb/Fb = 2.4L / Sealed

Hg is the gap depth.

Vb/Fb = 4.6L / 103Hz

7. Vb: Net internal volume of box after subtracting the volume of internal objects

Computer predicted low frequency response⁽⁷⁾

Vb/Fb=4.6L/103Hz

CXI244I

FERRITE

SUBWOOFER

NEO

LE



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE





KEY FEATURES:

- 1 800W(LF) +120W(HF) continuous program power capacity
- 2 98dB(LF)+106dB(HF) sensitivity 1w/1m
- 3 76mm(3") LF inside/outside copper clad aluminum voice coil
- ④ 44mm(1.75") HF edgewound aluminum voice coil
- (5) 1" polyimide HF driver directly coupled to the pole piece of the woofer provides excellent response in the mid to high frequencies
- 6 Designed for use as stage monitors or as compact bass reflex systems

LF GENERAL SPECIFICATIONS HF GENERAL SPECIFICATIONS LF THIELE – SMALL PARA			RAMETE	RS⁵		
Nominal Diameter	300mm /12inch	Throat Diameter	25.4mm /1inch	Resonance frequency	Fs	58.5 Hz
Rated Impedance	8 ohm	Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm
Nominal Power handling ¹	400 Watts	Power handling(2k~18kHz)		Mechanical factor	Qms	12.8
Program Power ²	800 Watts	Nominal ¹	60 Watts	Electrical factor	Qes	0.38
Sensitivity(1w/1m)3	98 dB	Porgram ²	120 Watts	Total factor	Qts	0.37
Frequency Range ^₄	55 - 3000Hz	Sensitivity ³		Mechanical compliance	Cms	0.13 mm/N
Voice Coil Diameter	76mm /3inch	(1w/1m, on axis)	106 dB	Mechanical resistance of total-driver losses	Rms	1.66kg/s
Voice Coil Material	CCAW	Frequency Range ^₄	700~19k Hz	Effective Moving Mass	Mms	58 g
Voice Coil Winding Depth	18 mm	Voice Coil Diameter	44mm /1.7inch	Half-space efficiency	Eff	2.64%
Magnet gap depth	10 mm	Voice Coil Material	Edgewound Aluminum	BL Factor	BL	17.7 T.m
Number of layers	2(inside/outside)	Diaphragm Material	Polyimide	Equivalent Cas air load	Vas	52 liters
Magnet Outer Diameter/Wgt	190mm / 78 oz	Magnet Outer Diamter/Wgt	120mm / 30 oz	Effective piston area	Sd	0.0539 m ²
	MOUNTING			Max. linear excursion ⁶	Xmax	±7.5 mm

dB

-12

-18 -24 -30 -36

5 Hz

MOUNTING INFORMATION				
Overall Diameter	316 mm	Overall Depth	210 mm	
Bolt Circle Diameter	297 mm	Net Weight	10 kg	
Bolt Hole Diameter	6.5 mm	Shipping Weight	11 kg	
Baffle Cutout Diameter	283 mm	Shipping Box	275x275x230mm	

Watts	Electrical factor	Qes	0.38
) Watts	Total factor	Qts	0.37
	Mechanical compliance	Cms	0.13 mm/N
6 dB	Mechanical resistance of total-driver losses	Rms	1.66kg/s
0∼19k Hz	Effective Moving Mass	Mms	58 g
nm /1.7inch	Half-space efficiency	Eff	2.64%
gewound Aluminum	BL Factor	BL	17.7 T.m
yimide	Equivalent Cas air load	Vas	52 liters
)mm / 30 oz	Effective piston area	Sd	0.0539 m ²
	Max. linear excursion 6	Xmax	±7.5 mm
	Max.excursion before damage	Xdam	±15 mm
) mm	Voice coil inductance	Le1K	0.93 mH
kg	Efficiency Bandwidth Product	EBP	154
kg			
DXZIDXZ3UMM			
2 1 1 1 1	r (7)		
Computer predicted low	rrequency response("		\

500

1000



NOTES:

- 1. AES standard
- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- 5. T/S parameters are measured with Klippel DA LPM module BEFORE preconditioning test 6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc

50

Vb/Fb=23L/64H

100

Vb/Fb = 23L/64Hz



2000

is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

Vb/Fb=48L/49Hz

Vb/Fb = 48L/49Hz

HF

CXI0442

FERRITE

SUBWOOFER

NEO

LE



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

★ 10 " / 1.75 " ★ 250w / 50w



KEY FEATURES:

- ① 500W(LF) +100W(HF) continuous program power capacity
- 2 95dB(LF)+102dB(HF) sensitivity 1w/1m
- 3 65mm(2.5") LF inside/outside copper clad aluminum voice coil
- ④ 44mm(1.75") HF edgewound aluminum voice coil
- (5) 1" PEEK HF driver directly coupled to the pole piece of the woofer provides excellent response in the mid to high frequencies
- [®] Designed for use as stage monitors or as compact bass reflex systems

LF GENERAL SPECIFIC	ATIONS	HF GENERAL SPECIF	ICATIONS	LF THIELE - SMALL PAR	AMETE	RS
Nominal Diameter	250mm /10inch	Throat Diameter	25.4mm /1inch	Resonance frequency	Fs	54Hz
Rated Impedance	8 ohm	Rated Impedance	8 ohm	DC resistance	Re	5.6 ohm
Nominal Power handling	250 Watts	Power handling(2k~18kHz)		Mechanical factor	Qms	5.0
Program Power	500 Watts	Nominal ¹	50 Watts	Electrical factor	Qes	0.31
Sensitivity(1w/1m)	95 dB	Porgram ²	100 Watts	Total factor	Qts	0.29
Frequency Range	50 - 3500Hz	Sensitivity ³		Mechanical compliance	Cms	0.23 mm/N
Voice Coil Diameter	65mm /2.5inch	(1w/1m, on axis)	102 dB	Mechanical resistance of total-driver losses	Rms	2.54 kg/s
Voice Coil Material	CCAW	Frequency Range ^₄	700~19k Hz	Effective Moving Mass	Mms	37.6 g
Voice Coil Winding Depth	16 mm	Voice Coil Diameter	44mm /1.7inch	Half-space efficiency	Eff	1.9%
Magnet gap depth	8 mm	Voice Coil Material	Edgewound Aluminum	BL Factor	BL	15.2 T.m
Number of layers	2(inside/outside)	Diaphragm Material	PEEK	Equivalent Cas air load	Vas	38.4 liters
Magnet Outer Diameter/Wgt	156mm / 50 oz	Magnet Outer Diamter/Wgt	102mm / 20 oz	Effective piston area	Sd	0.0346 m ²
				Max. linear excursion 6	Xmax	± 6 mm
	MOUNTING	NFORMATION		Max.excursion before damage	Xdam	±15mm

C

dB

-12

-18 -24

-30 -36

5 Hz

10

Vb/Fb = 20L/55Hz

MOUNTING INFORMATION			Max excursion before	
Overall Diameter	261 mm	Overall Depth	185 mm	Voice coil inductance
Bolt Circle Diameter	246 mm	Net Weight	6.8 kg	Efficiency Bandwidth P
Bolt Hole Diameter	5.5 mm	Shipping Weight	7.3 kg	
Baffle Cutout Diameter	228 mm	Shipping Box	275x275x200mm	

10

20k

Hz 5k

Impedance magnitude curve measured in free air

25

g	Efficiency Bandwidth Product	EBP	174	
g				
275x200mm				
mputer predicted low	v frequency response ⁽⁷⁾			
Vb/Fb=20L	/55Hz			
	Vb/Fb=14L/63Hz			
1				

Le1K

0.85 mH

NOTES:

110

dBSP 100. 90.0

an

70.0

60.0

20

1. AES standard

100

50

2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.

200

- 4. Frequency range is defined as the band of frequencies delineated by the lower and
 - upper limits where the output level drops by 10dB below the rated sensitivity

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

1k

500

5. T/S parameters measured with laser system BEFORE preconditioning test.

50

100

Vb/Fb = 14L/63Hz

6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

2000

1000

★ 10 " / 1.75 " ★ 350w / 50w

FERRITE

HE

CXNIO44

FERRITE

SUBWOOFER

NEO

LE



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE



KEY FEATURES:

- 1 700W(LF) +100W(HF) continuous program power capacity 2 98dB(LF)+106dB(HF) sensitivity 1w/1m
- 3 76mm(3") LF inside/outside copper clad aluminum voice coil
- ④ 44mm(1.75") HF edgewound aluminum voice coil
- (5) 1" HF driver directly coupled to the pole piece of the woofer provides excellent response in the mid to high frequencies
- (6) Neodymium magnet structure for a high force factor and lighter weight
- ⑦ Designed for use as stage monitors or as compact bass reflex systems

LF GENERAL SPECIFI	CATIONS	HF GENERAL SPECIF	ICATIONS	LF THIELE – SMALL PAR	AMETE	RS
Nominal Diameter	250mm /10inch	Throat Diameter	25.4mm /1inch	Resonance frequency	Fs	73Hz
Rated Impedance	8 ohm	Rated Impedance	8 ohm	DC resistance	Re	5.8 ohm
Nominal Power handling	350 Watts	Power handling(2k~18kHz)		Mechanical factor	Qms	9.0
Program Power	700 Watts	Nominal ¹	50 Watts	Electrical factor	Qes	0.32
Sensitivity(1w/1m)	98 dB	Porgram ²	100 Watts	Total factor	Qts	0.31
Frequency Range	73 - 4100Hz	Sensitivity ³		Mechanical compliance	Cms	0.13 mm/N
Voice Coil Diameter	76mm /3inch	(1w/1m, on axis)	106 dB	Mechanical resistance of total-driver losses	Rms	1.9 kg/s
Voice Coil Material	CCAW	Frequency Range ^₄	800~19k Hz	Effective Moving Mass	Mms	37.6 g
Voice Coil Winding Depth	16.5 mm	Voice Coil Diameter	44mm /1.7inch	Half-space efficiency	Eff	2.7%
Magnet gap depth	10 mm	Voice Coil Material	Edgewound Aluminum	BL Factor	BL	17.6 T.m
Number of layers	2(inside/outside)	Diaphragm Material	Polyimide	Equivalent Cas air load	Vas	23 liters
Magnet Material	Neodymium	Magnet Material	Neodymium	Effective piston area	Sd	0.0360 m ²
				Max. linear excursion 6	Xmax	± 5.8 mm
	MOUNTINGT	NFORMATION		Max.excursion before damage	Xdam	±15 mm
Overall Diameter	261 mm	Overall Depth	166 mm	Voice coil inductance	Le1K	0.6 mH
Bolt Circle Diameter	246 mm	Net Weight	4.1 kg	Efficiency Bandwidth Product	EBP	228

5.1 kg

275x275x200mm

Shipping Weight

Shipping Box



5.5 mm

228 mm

NOTES:

1. AES standard

Bolt Hole Diameter

Baffle Cutout Diameter

- 2. Program Power is defined as 3 dB greater than the nominal power handling. 3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity
- Computer predicted low frequency response⁽⁷⁾ dB Vb/Fb = 18L/73Hz-12 -18 -24 -30 -36 5 Hz 50 100 500 1000 2000 Vb/Fb = 18L/73Hz
- 5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test.
- The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth. 7. Vb: Net internal volume of box after subtracting the volume of internal objects

FERRITE

SUBWOOFER

NEO

LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

★ 3 inch ★ 90 Watts
★ 109 dB ★ 700 ~ 18k Hz



KEY FEATURES:

- ① 36mm(1.4") exit throat
- (2) 180 W continuous program power handling
- ③ 109 dB sensitivity 1w/1m

GENERAL SPECIFICATIONS

- (4) 700Hz~18kHz frequency response range
- (5) Titanium diaphragm

6 75mm(3") edgewound aluminum voice coi

COAXIAL

- ⑦ Copper inductance ring for extended HF responsel
- ⑧ Neodymium magnet structure

Throat Diameter	36mm /1.4inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal ²	90 Watts
Continuous Porgram ³	180 Watts
Sensitivity ⁴	
(1w/1m, on axis, on horn)	109 dB
Frequency Range	700~18k Hz
Minimum Lmpedance(Zmin)	7.8ohm
Voice Coil Diameter	75mm /3inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	1.9 T

MOUNTING INFORMATION

Magnet Material

Overall Diameter	124 mm	
Overall Depth	5 6 mm	
Net Weight	2.1 kg	

4xM6 holes, 90°on 102mm diameter

NOTES:

1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.

Neodymium

- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.

 A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air





FERRITE

SUBWOOFER

NEO

LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

★ 2.5 inch ★ 75 Watts
★ 108dB ★ 750 ~ 18k Hz



KEY FEATURES:

- 136mm(1.4") exit throat
- 2 150 W continuous program power handling
- ③ 108 dB sensitivity 1w/1m
- (4) 750Hz~18kHz frequency response range
- ⑤ Titanium diaphragm

6 65mm(2.5") edgewound aluminum voice coi

to an 80°x50° exponential horn.

500

1k

Impedance magnitude curve measured in free air

120.0 dBSPL 110.0 100.0

70.0 E

110.0

Oh

100.0

80.0

70.0

60.0 L

COAXIAL

- ⑦ Copper inductance ring for extended HF responsel
- ⑧ Neodymium magnet structure

GENERAL SPECIFICATIONS ¹	
Throat Diameter	36r

Throat Diameter	36mm /1.4inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal ²	75 Watts
Continuous Porgram ³	150 Watts
Sensitivity ⁴	
(1w/1m, on axis, on horn)	108 dB
Frequency Range	750~18k Hz
Minimum Lmpedance(Zmin)	7.7 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	2 T
Magnet Material	Neodymium

MOUNTING INFORMATION

Overall Diameter	115 mm	
Overall Depth	45 mm	
Net Weight	1.8 kg	
4 MOL 1 000 400 I' 1		

4xM6 holes, 90°on 102mm diameter

NOTES:

- 1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.
- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horr and averaged within the specified range.

 A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.



2k

10k Hz 20k

50.0

0hm 40.0

30.0

20.0

0.0

20k

Frequency response curve measured in an anechoic chamber, the driver is mounted



FERRITE

SUBWOOFER

NEO

LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

* 1.7 inch * 50 Watts 🔆 106dB 🛛 🔆 800 ~ 19k Hz



KEY FEATURES:

- 1 exit throat
- 2 100 W continuous program power handling
- ③ 106 dB sensitivity 1w/1m
- ④ 800Hz~19kHz frequency range
- ⑤ Polyimide diaphragm

⑥ 44mm(1.7") edgewound aluminum voice coi 7 Neodymium magnet structure

to an 80°x50° exponential horn.

120.0

COAXIAL

GENERAL SPECIFICATIONS ¹		
Throat Diameter	25.4mm /1inch	
Rated Impedance	8ohm	
Power handling(1k~18kHz)		
Nominal ²	50 Watts	

Nominal	50 Watts
Continuous Porgram ³	100 Watts
Sensitivity ^₄	
(1w/1m, on axis, on horn)	106 dB
Frequency Range	800~19k Hz
Minimum Lmpedance(Zmin)	7.5ohm
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Polyimide
Flux Density	1.7 T
Magnet Material	Neodymium

MOUNTING INFORMATION

Overall Diameter	85 mm
Overall Depth	46 mm
Net Weight	0.9 kg
2xM6 holes 180°on 76mm diameter	

2xM6 holes, 180°on 76mm diameter

NOTES:

- 1.2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.
- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.

A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.



Frequency response curve measured in an anechoic chamber, the driver is mounted





FERRITE

SUBWOOFER

NEO

LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

* 1.5inch * 50 Watts ★ 110dB ★ 1.2k ~ 20k Hz



KEY FEATURES:

① 1" exit throat

Phase Plug Material

Diaphragm Material

MOUNTING INFORMATION

Screw (35mm / 1.38inch diameter)

Flux Density

Magnet Material

Overall Diameter

Overall Depth

Net Weight

- 2 100 W continuous program power handling
- ③ 110 dB sensitivity 1w/1m
- ④ 1.2k~19kHz frequency range

GENERAL SPECIFICATIONS

(5) Polyester diaphragm

(6) 38mm(1.5") copper clad aluminum voice coil ⑦ Neodymium magnet structure

COAXIAL

Throat Diameter	25.4mm /1inch
Rated Impedance	8 ohm
Power handling(1k~18kHz)	
Nominal ²	50 Watts
Continuous Porgram ³	100 Watts
Sensitivity ^₄	
(1w/1m, on axis, on horn)	110 dB
Frequency Range	1200~20k Hz
Minimum Lmpedance(Zmin)	6 ohm
Voice Coil Diameter	38mm /1.5inch
Voice Coil Material	CCAW
Voice Coil Former	Kapton

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air





1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.

Aluminum

Polyester

Neodymium

2.1 T

70 mm

50 mm 0.5 kg

- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.
- A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.







🔆 108dB 🛛 🔆 500 ~ 17k Hz

HF



KEY FEATURES:

- ① 36mm(1.4") exit throat
- 2 180 W continuous program power handling
- 3 108 dB sensitivity 1w/1m
- ④ 500Hz~17kHz frequency range
- ⑤ Titanium diaphragm

- ⑥ 75mm(3") edgewound aluminum voice coil
- ⑦ Aluminum rear cover
- (8) optimized geometry phase plug

GENERAL SPECIFICATIONS ¹	
Throat Diameter	36mm /1.4inch
Rated Impedance	8ohm
Power handling (1k~18kHz)	

Power handling(1k~18kHz)	
Nominal ²	90 Watts
Continuous Porgram ³	180 Watts
Sensitivity ^₄	
(1w/1m, on axis, on horn)	108 dB
Frequency Range	500~17k Hz
Minimum Lmpedance(Zmin)	7.9ohm
Voice Coil Diameter	75mm /3inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	1.7 T
Magnet Outer Diameter/Wgt	170mm / 62 oz

Overall Diameter	170 mm
Overall Depth	64 mm
Net Weight	4.5 kg

4xM6 holes, 90° on 102mm diameter

NOTES:

- 1.2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.
- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.

A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

Frequency response curve measured in an anechoic chamber, the driver is mounted to an $80^\circ x 50^\circ$ exponential horn.



Impedance magnitude curve measured in free air





CDi440

FERRITE

SUBWOOFER

NEO LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

※ 1.7 inch ※ 60 Watts
 ※ 106 dB ※ 900 ~ 19k Hz

NEO HF

COAXIAL

FERRITE

HF



KEY FEATURES:

- 1 exit throat
- (2) 120 W continuous program power handling
- ③ 106 dB sensitivity 1w/1m
- ④ 900Hz~19kHz frequency range
- (5) Polyimide diaphragm

- 6 44mm(1.7") edgewound Aluminum voice coil
- O Aluminum heat sink cover for improved thermal dissipation
- (8) Optimized phase plug helps prevent phase cancellations

	GENERAL	SPECIFICAT	IONS ¹
--	---------	------------	-------------------

Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal ²	60Watts
Continuous Porgram ³	120Watts
Sensitivity ⁴	
(1w/1m, on axis, on horn)	106dB
Frequency Range	900~19k Hz
Minimum Lmpedance(Zmin)	7.60hm
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Polyimide
Flux Density	1.7 T
Magnet Outer Diameter/Wgt	120mm / 30 oz

MOUNTING INFORMATION

Overall Diameter	120mm
Overall Depth	60mm
Net Weight	2.1Kg

2xM6 holes, 180°on 76mm diameter

3xM6 holes, 120°on 57mm diameter

NOTES:

1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.

- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- B. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of and averaged within the specified range.

 A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

to an 80°x50° exponential horn. 120.0 dBSP 110.0 100. 90.0 80. 70.0 500 Hz 1k 2 5k 10k 20k

Frequency response curve measured in an anechoic chamber, the driver is mounted





CDi4402

FERRITE

SUBWOOFER

NEO LF



FERRITE

WOOFER

MID-BASS

MIDRANGE FULLRANGE

※ 1.3 inch ※ 55 Watts
※ 105 dB ※ 900 ~ 19k Hz

NEO

HE

COAXIAL

FERRITE

HF



KEY FEATURES:

- ① 1" exit throat
- 2 110 W continuous program power handling
- 3 105 dB sensitivity 1w/1m
- ④ 900Hz~19kHz frequency range

GENERAL SPECIFICATIONS

(5) PEEK diaphragm

- 6 44mm(1.7") edgewound Aluminum voice coil
- O Aluminum heat sink cover for improved thermal dissipation
- (8) Optimized phase plug helps prevent phase cancellations

Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal ²	55Watts
Continuous Porgram ³	110Watts
Sensitivity ⁴	
(1w/1m, on axis, on horn)	105dB
Frequency Range	000~10k Hz

Frequency Range 900~19k Hz Minimum Lmpedance(Zmin) 7.6ohm Voice Coil Diameter 44mm /1.7inch Voice Coil Material Edgewound Aluminum Voice Coil Former Kapton Phase Plug Material Composite **Diaphragm Material** PEEK 1.5 T Flux Density Magnet Outer Diameter/Wgt 102mm / 20 oz

MOUNTING INFORMATION

Overall Diameter	102 mm
Overall Depth	64 mm
Net Weight	1.7Kg
4xM6 holes, 90° on 76mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.





NOTES:

- 1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.
- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.
- 4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.


SUBWOOFER MID

MIDRANGE FULLRANGE

CD340I

NEO LF



★ 1.3 inch ★ 40 Watts
★ 104 dB ★ 1000 ~ 20k Hz



KEY FEATURES:

1 exit throat

- 2 80 W continuous program power handling
- ③ 104 dB sensitivity 1w/1m
- ④ 1000Hz~20kHz frequency range

⑤ Titanium diaphragm
⑥ 34mm(37") CCAW voice coil

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Throat Diameter	25.4mm /1inch			
Rated Impedance	8ohm			
Power handling(1k~18kHz)				
Nominal ²	40Watts			
Continuous Porgram ³	80Watts			
Sensitivity ⁴				
(1w/1m, on axis, on horn)	104dB			
Frequency Range	1000~20k Hz			
Minimum Lmpedance(Zmin)	7.0ohm			
Voice Coil Diameter	34mm /1.3inch			
Voice Coil Material	Aluminum			
Voice Coil Former	Kapton			
Phase Plug Material	Composite			
Diaphragm Material	Titanium			
Flux Density	1.4 T			
Magnet Outer Diameter/Wgt	100mm / 19 oz			

MOUNTING INFORMATION

Overall Diameter	100mm
Overall Depth	53mm
Net Weight	1.2kg

2xM6 holes, 180° on 76mm diameter

NOTES:

- 1. 2 hours test made with continuous pink noise signal (6dB creast factor) within the specified range.
- Continuous Program Power is defined as 3dB greater than the nominal power Handling.
 Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn
- and averaged within the specified range.

 A.Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.



Frequency response curve measured in an anechoic chamber, the driver is mounted









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