

# Technical Data | Subwoofer

	Sub 8	Sub10 Mk2	Sub12	Sub20	Sub24	Sub2100
Driver	210 mm / 8"	260 mm / 10"	310 mm / 12"	2 x 260 mm / 10"	2 x 310 mm / 12"	543 mm / 21"
Free air resonance	28 Hz	25 Hz	22 Hz	25 Hz	22 Hz	18 Hz
Voice coil ø	38 mm / 1.5"	50 mm / 2"	50 mm / 2"	50 mm / 2"	50 mm / 2"	150 mm / 6"
Cone material	coated paper	coated paper	coated paper	coated paper	coated paper	paper
Amp. power RMS / music	160 W / 240 W	200 W / 300 W	200 W / 300 W	2 x 200 W / 300 W	2 x 200 W / 300 W	1000 W / 1200 W
Frequ. response ±3dB	28 Hz - 150 Hz	25 Hz - 150 Hz	22 Hz - 150 Hz	25 Hz - 150 Hz	22 Hz - 150 Hz	18 Hz - 150 Hz
THD >60Hz	≤ 1 %	≤ 1 %	≤ 1 %	≤ 1 %	≤ 1 %	≤ 1 %
SPL max in 1m	≥ 110 dB	≥ 113 dB	≥ 115 dB	≥ 118 dB	≥ 120 dB	≥ 128 dB
Crossover frequencies	50 - 150 Hz	50 - 150 Hz	50 - 150 Hz	50 - 150 Hz	50 - 150 Hz	50 - 150 Hz
Input connectors	XLR / RCA	XLR / RCA	XLR / RCA	XLR / RCA	XLR / RCA	XLR / RCA
Input impedance	10 kΩ	10 kΩ	10 kΩ	10 kΩ	10 kΩ	10 kΩ
Weight	12 kg / 26.4 lb.	21 kg / 46.3 lb.	26 kg / 57.3 lb	38 kg / 83.8 lb	48 kg / 105.8 lb	85 kg / 187.4 lb
Magnetical shielding	no	no	no	no	no	no
Height x Width x Depth	310 x 260 x 380 mm 16.1" x 10.2" x 14.9"	560 x 300 x 400 mm 19.7" x 11.8" x 15.7"	600 x 360 x 450 mm 23.6" x 14.2" x 15.7"	560 x 810 x 300 mm 22" x 31.9" x 11.8"	600 x 890 x 360 mm 23.6" x 35" x 14.2"	850 x 600 x 705 mm 33.5" x 23.6" x 27.7"
Warranty	2 years	2 years	2 years	2 years	2 years	2 years

# Technical Data | A- & P-Series

	ANF10	A7	P11A	P22A	P33A
Woofer/Subwoofer	1	1	1	1	1 / 1
Basket ø	180 mm / 7"	165 mm / 6.5"	182 mm / 7"	220 mm / 9"	182 mm / 7"
ART Tweeter	1	1	1	1	1
Diaphragm area	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>
Equiv.alent diaphragm ø	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"
Velocity transfer ratio	4:1	4:1	4:1	4:1	4:1
Power handling (average / peak)	60 W / 90 W	•	•	•	•
Efficiency	88 dB/W/m	•	•	•	•
Built in amps	•	2	2	2	3
Subwoofer / Woofer <sup>(1/2)*</sup>	•	50 W / 80 W	100 W / 150 W	100 W / 150 W	2 x 100 W / 150 W
Tweeter <sup>(1/2)*</sup>	•	50 W / 80 W	100 W / 150 W	100 W / 150 W	100 W / 150 W
Controls					
Volume	•	± 10 dB	± 10 dB	± 10 dB	± 10 dB
Tweeter level	•	± 4 dB	± 4 dB	± 4 dB	± 4 dB
Room EQ > 6kHz	•	± 6 dB	± 6 dB	± 6 dB	± 6 dB
Room EQ < 150Hz	•	± 6 dB	± 6 dB	± 6 dB	± 6 dB
General Data					
Freq. response ±3dB	50 Hz - 35 kHz	46 Hz - 35 kHz	42 Hz - 35 kHz	38 Hz - 35 kHz	36 Hz - 35 kHz
THD >80Hz bei 90dB in 1m	≤ 1.5%	≤ 1.5%	≤ 1%	≤ 1%	≤ 1%
Short time sine wave acoustic output at 1 m from 100 Hz to 3 kHz	≥ 104 dB	≥ 105 dB	≥ 107 dB	≥ 112 dB	≥ 113 dB
Maximum peak acoustic output per pair with music	≥ 113 dB	≥ 115 dB	≥ 117 dB	≥ 122 dB	≥ 123 dB
Crossover frequencies	1800 Hz	2200 Hz	1800 Hz	1800 Hz	150 Hz / 1800 Hz
Input connectors	Banana	XLR / RCA	XLR	XLR	XLR
Input impedance	4 Ω	10 kΩ	10 kΩ	10 kΩ	10 kΩ
Weight	5 kg / 11 lb.	8 kg / 17.6 lb.	10 kg / 22 lb.	13 kg / 28.6 lb.	15 kg / 33.1 lb.
Width x Height x Depth	330 x 180 x 280 mm 11" x 7.1" x 13"	300 x 180 x 280 mm 11" x 7.1" x 13"	330 x 210 x 280 mm 13" x 8.3" x 11"	430 x 260 x 340 mm 16.9" x 10.3" x 13.4"	230 x 500 x 280 mm 9.1" x 19.7" x 11"
Warranty	5 years	2 years	2 years	2 years	2 years

\*1 = long term IEC 265-8-Wrms / 10 min

\*2 = nominal IEC 265-8 = Peak Power 5 µsec

# Technical Data | S-Series

	S1A	S2A	S2.5A	S3A	S4A
<b>Midwoofer / Subwoofer</b>	1	1	1	1 / 1	1 / 1
Basket ø	155 mm / 5"	186 mm / 7"	228 mm / 9"	186 mm / 7"	228 mm / 9"
Free air resonance	48 Hz	40 Hz	31 Hz	40 Hz	31 Hz
Voice coil ø	25 mm / 1"	39 mm / 1.5"	39 mm / 1.5"	39 mm / 1.5"	39 mm / 1.5"
Cone material	HexaCone™	HexaCone™	HexaCone™	HexaCone™	HexaCone™
<b>ART Midrange</b>	•	•	•	•	1
Diaphragm area	•	•	•	•	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>
Equiv. diaphragm ø	•	•	•	•	165 mm (6.4")
Speed transf. ratio	•	•	•	•	3,5:1
Diaphragm weight	•	•	•	•	0,7g
<b>ART Tweeter</b>	1	1	1	1	1
Equivalent diaphragm area	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>
Equivalent diaphragm ø	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"
Velocity transform. ratio	4 : 1	4 : 1	4 : 1	4 : 1	4 : 1
Diaphragm weight	0,17 g	0,17 g	0,17 g	0,17 g	0,17 g
<b>Built in amps:</b>	2	2	2	3	4
Subwoofer (1/2)*	•	•	•	150 W / 200 W	250 W / 300 W
Woofer (1/2)*	100 W / 120 W	150 W / 200 W	150 W / 200 W	150 W / 200 W	250 W / 300 W
Midrange (1/2)*	•	•	•	•	150 W / 200 W
Tweeter (1/2)*	100 W / 120 W	150 W / 200 W	150 W / 200 W	150 W / 200 W	150 W / 200 W
<b>Control panel</b>					
Input Sensitivity	± 10 dB	± 10 dB	± 10 dB	± 10 dB	± 10 dB
Tweeter level	± 4 dB	± 4 dB	± 4 dB	± 4 dB	± 4 dB
Room EQ >6kHz	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB
Mid level	•	•	•	•	±2dB
Room EQ <160Hz	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB
<b>General Data</b>					
Frequ. response ±3dB	40 Hz - 35 kHz	35 Hz - 35 kHz	34 Hz - 35 kHz	32 Hz - 35 kHz	30 Hz - 35 kHz
THD >80Hz	≤ 1, 5%	≤ 0,8 %	≤ 0,6 %	≤ 0,5 %	≤ 0,5 %
Short time sine wave acoustic output at 1 m from 100 Hz to 3 kHz	≥ 103 dB	≥ 108 dB	≥ 112 dB	≥ 114 dB	≥ 115 dB
Maximum peak acoustic output per pair with music	≥ 113 dB	≥ 118 dB	≥ 122 dB	≥ 124 dB	≥ 125 dB
Crossover frequencies	2200 Hz	1800 Hz	1800 Hz	150 / 1800 Hz	120 / 800 / 2800 Hz
Input connectors	XLR	XLR	XLR	XLR	XLR
Input impedance	10 kΩ	10 kΩ	10 kΩ	10 kΩ	10 kΩ
Weight	8 kg / 17,6 lb.	13 kg / 28,6 lb.	15 kg / 33 lb.	16 kg / 35,3 lb.	32 kg / 70,5 lb.
Magnetical shielding	yes	optional	optional	optional	optional
Height x Width x Depth	300 x 170 x 260 mm 11.8" x 6.6" x 10.2"	370 x 220 x 320 mm 14.5" x 8.6" x 12.5"	450 x 280 x 300 mm 17.7" x 11" x 11.8"	240 x 500 x 320 mm 9.4" x 19.7" x 12.3"	360 x 680 x 450 mm 14.1" x 26.7" x 17.7"
Warranty	2 years	2 years	2 years	2 years	2 years

\*1 = long term IEC 265-8-Wrms / 10 min  
 \*2 = nominal IEC 265-8 = Peak Power 5 μsec  
 \* = the S1A panel is located on the backside

	S4VA Mk2	S5A Mk2	S5VA Mk2	S6A Mk2	S7A Mk2	MP1
<b>Midwoofer / Subwoofer</b>	1 / 1	1 / 2	1 / 1	2 / 2	2 / 2	2 / 1
Basket ø	155 mm / 315 mm 6" / 12"	155 mm / 280 mm 5" / 11"	228 mm / 310 mm 9" / 12"	186 mm / 310 mm 7" / 12"	228 mm / 380 mm 9" / 15"	180 / 315 mm 7" / 12"
Free air resonance	48 Hz / 26 Hz	48 Hz / 23 Hz	31 Hz / 23 Hz	40 Hz / 18 Hz	31 Hz / 18 Hz	42 / 18Hz
Voice coil ø	25 mm / 62 mm 1" / 2.5"	25 mm / 50 mm 1" / 2"	39 mm / 62 mm 1.5" / 2.5"	39 mm / 62 mm 1.5" / 2.5"	39 mm / 100 mm 1.5" / 4"	38 / 62 mm 1.5 / 2.5"
Cone material	HexaCone™	HexaCone™	HexaCone™	HexaCone™	HexaCone™ / paper	Ceramic / HexaCone™
<b>ART Midrange</b>	•	1	1	2	2	1
Diaphragm area	•	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>	2130 mm <sup>2</sup> / 33 in. <sup>2</sup>
Equiv. diaphragm ø	•	165 mm / 6.4"	165 mm / 6.4"	165 mm / 6.4"	165 mm / 6.4"	165 mm / 6.4"
Speed transf. ratio	•	3,5 : 1	3,5 : 1	3,5 : 1	3,5 : 1	3,5 : 1
Diaphragm weight	•	0,7 g	0,7 g	0,7 g	0,7 g	0,7 g
<b>ART Tweeter</b>	1	1	1	1	1	1
Equivalent diaphragm area	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>	710 mm <sup>2</sup> / 11 in. <sup>2</sup>
Equivalent diaphragm ø	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"	95 mm / 3.7"
Velocity transform. ratio	4:1	4:1	4:1	4:1	4:1	4:1
Diaphragm weight	0,17g	0,17g	0,17g	0,17g	0,17g	0,17g
<b>Built in amps:</b>	3	4	4	6	6	4
Subwoofer (1/2)*	•	500 W / 700 W	500 W / 700 W	2 x 500 W / 2 x 700 W	2 x 500 W / 2 x 700 W	500 W / 700 W
Woofer (1/2)*	500 W / 700 W	150 W / 200 W	150 W / 200 W	2 x 150 W / 200 W	2 x 250 W / 350 W	150 W / 200 W
Midrange (1/2)*	•	150 W / 200 W	150 W / 200 W	150 W / 200 W	250 W / 350 W	150 W / 200 W
Tweeter (1/2)*	150 W / 200 W	150 W / 200 W	150 W / 200 W	150 W / 200 W	250 W / 350 W	150 W / 200 W
<b>Control panel</b>						
Input Sensitivity	± 10 dB	± 10 dB	± 10 dB	± 10 dB	± 10 dB	± 10 dB
Tweeter level	± 4 dB	± 4 dB	± 4 dB	± 4 dB	± 4 dB	± 4 dB
Room EQ >6kHz	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB
Mid level	± 2 dB	± 2 dB	± 2 dB	± 2 dB	± 2 dB	± 2 dB
Room EQ <160Hz	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB	± 6 dB
<b>General Data</b>						
Frequ. response ±3dB	28 Hz - 35 kHz	26 Hz - 35 kHz	23 Hz - 35 kHz	23 Hz - 35 kHz	20 Hz - 50 kHz	23 Hz - 35 kHz
THD >80Hz	≤0,5%	≤0,5%	≤0,5%	≤0,5%	≤ 0,5 %	≤0,5%
Short time sine wave acoustic output at 1 m from 100 Hz to 3 kHz	≥ 115 dB	≥ 118 dB	≥ 120 dB	≥ 124 dB	≥ 133 dB	≥ 116 dB
Maximum peak acoustic output per pair with music	≥ 125 dB	≥ 128 dB	≥ 130 dB	≥ 134 dB	≥ 143 dB	≥ 126 dB
Crossover frequencies	300 / 2800 Hz	85 / 800 / 3100 Hz	200 / 800 / 3100 Hz	85 / 800 / 3100 Hz	65 / 800 / 3100 Hz	80 / 800 / 3100 Hz
Input connectors	XLR	XLR	XLR	XLR	XLR	XLR
Input impedance	10 kΩ	10 kΩ	10 kΩ	10 kΩ	10 kΩ	10 kΩ
Weight	36 kg / 75 lb.	48 kg / 105,8 lb.	52 kg / 114,6 lb.	103 kg / 227 lb.	261 kg / 575,4 lb.	60 kg / 132,3 lb.
Magnetical shielding	no	no	no	no	no	no
Height x Width x Depth	760 x 400 x 420 mm 29,9" x 15,7" x 16,5"	430 x 850 x 400 mm 16,9" x 33,4" x 15,7"	870 x 410 x 450 mm 34,2" x 16,1" x 17,7"	720 x 940 x 500 mm 28,3" x 37" x 19,6"	900 x 1200 x 670 mm 28,3" x 37" x 19,6"	1600 x 250 x 450 mm 63" x 9,8" x 17,7"
Warranty	2 years	2 years	2 years	2 years	2 years	2 years

\*1 = long term IEC 265-8-Wrms / 10 min  
 \*2 = nominal IEC 265-8 = Peak Power 5 μsec