

Cloud Electronics Limited - Power (W) Consumption and Heat Loss Chart

P:\Power (W) Consumption\_20180719

	Quiescent (Measurement taken where sound levels are minimal, simulating muted operation or music at very low levels)				1/8th Power (W) Pink noise (constant level at 1/8th Power (W) simulates normal Power (W) use with clean sound with minimal distortion)				1/3rd Power (W) Pink noise (Constant Sound level at 1/3rd Power (W). Simulates use where audio begins to become compressed, limited or clipped)				Music at +4dB [M.B <sup>1</sup> Test *] (simulating levels music levels exceeding expected use. Compression, limiting and clipping occur dynamically)			
	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss
	Watts		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour
DCM1e	13.34	24.75	48.0	45.5	13.37	24.6	48.1	45.6	13.32	24.6	48.0	45.4	13.36	24.77	48.1	45.6
DCM1	13.1	24.4	47.2	44.7	13.7	24.4	49.3	46.7	13.5	23.5	48.6	46.1	13.4	24.1	48.2	45.7
CX163	9.2	10	33.1	31.4	9.2	10.3	33.1	31.4	9.2	10.2	33.1	31.4	9.3	10.3	33.5	31.7
CX163 (Serial Number 212993 onwards)	3.95	8.7	14.2	13.5	3.92	8.7	14.1	13.4	3.92	8.7	14.1		3.96	8.7	14.3	13.5
CX261	10.08	11.2	36.3	34.4	10.05	11.2	36.2	34.3	10.08	11.2	36.3	34.4	10.06	11.2	36.2	34.3
CX261 (Serial Number 203728 onwards)	4.8	10.2	17.3	16.4	4.8	10.2	17.3	16.4	4.8	10.2	17.3		4.7	10.2	16.9	16.0
CX263	9.3	10.4	33.5	31.7	9.2	10.4	33.1	31.4	9.3	10.4	33.5	31.7	9.2	10.4	33.1	31.4
CX263 (Serial Number 212251 onwards)	4.05	9.1	14.6	13.8	4.03	9.1	14.5	13.8	4.03	9	14.5		4.14	9.1	14.9	14.1
CX462	9	10.27	32.4	30.7	8.9	10.1	32.0	30.4	8.9	10.2	32.0	30.4	8.8	10.1	31.7	30.0
CX335	8.54	10.43	30.7	29.1	8.66	10.56	31.2	29.5	8.69	10.56	31.3	29.7	8.63	10.45	31.1	29.4
Z4 MK3	11.5	12.2	41.4	39.2	11.5	12.2	41.4	39.2	11.5	12.2	41.4	39.2	11.5	12.2	41.4	39.2
Z4 MK4	6.17	12.38	22.2	21.1	6.17	12.38	22.2	21.1	6.12	12.38	22.0	20.9	6.16	12.38	22.2	21.0
Z8 MK3	17.2	24.3	61.9	58.7	17.2	24.3	61.9	58.7	17.2	24.3	61.9	58.7	17.2	24.3	61.9	58.7
Z8 MK4	9.6	17.5	34.6	32.8	9.6	17.45	34.6	32.8	6.12	12.38	22.0	20.9	9.6	17.43	34.6	32.8
<b>36-50</b>																
36-50 into 3x 4Ω loads	17.3	24.8	62.3	59.0	57.9	77	208.4	197.6	82.5	112	297.0	281.5	76	108.3	273.6	259.3
36-50 into 3x 8Ω loads					42.8	58.8	154.1	146.0	60.8	81.24	218.9	207.4	58.6	79.8	211.0	199.9
36-50 into 3x16Ω loads					31.3	43.8	112.7	106.8	41	55.5	147.6	139.9	40.8	54.2	146.9	139.2
<b>46-50</b>																
46-50 into 4x 4Ω loads	32	45	115.2	109.2	139	181	500.4	474.3	190	249	684.0	648.3	185	247	666.0	631.2
46-50 into 4x 8Ω loads					96.7	126.8	348.1	329.9	125	165	450.0	426.5	133	146.2	478.8	453.8
46-50 into 4x 16Ω loads					79.7	107	286.9	271.9	89	119	320.4	303.7	87	117	313.2	296.8
<b>46-120</b>																
46-120 into 4x 4Ω Loads	31	40.8	111.6	105.8	327	401	1177.2	1115.7	502	605	1807.2	1712.8	465	505	1674.0	1586.6
46-120 into 4x 8Ω Loads					217	291	781.2	740.4	335	421	1206.0	1143.0	292	335	1051.2	996.3
46-120 into 4x 16Ω Loads					135	177	486.0	460.6	194	251	698.4	661.9	142	152	511.2	484.5
<b>46-120Media</b>																
46-120media into 4x 4Ω Loads	33	40.8	118.8	112.6	332	415	1195.2	1132.8	504	608	1814.4	1719.6	481	559	1731.6	1641.2
46-120media into 4x 8Ω Loads					217	291	781.2	740.4	335	421	1206.0	1143.0	292	335	1051.2	996.3
46-120media into 4x 16Ω Loads					135	177	486.0	460.6	194	251	698.4	661.9	142	152	511.2	484.5
<b>CXV225 (100v, Into 2x 40Ω load)</b>	36.2	59.2	130.3	123.5	267.1	352	961.6	911.3	376.8	499	1356.5	1285.6	340.2	458	1224.7	1160.8
<b>CXV425 (100v, Into 4x 40Ω load)</b>	82	118.2	295.2	279.8	591	687	2127.6	2016.5	724	909	2606.4	2470.3	699	857	2516.4	2385.0
<b>VTX4120</b>																
VTX4120 into 4x 4Ω Loads	36.9	51.58	132.8	125.9	260	350.5	936.0	887.1	384	506	1382.4	1310.2	347	455	1249.2	1184.0
VTX4120 into 4x 8Ω Loads					150.1	209	540.4	512.1	219	299	788.4	747.2	214	281	770.4	730.2
VTX4120 into 4x 16Ω Loads					96.5	136.5	347.4	329.3	134.5	191	484.2	458.9	111.2	165.3	400.3	379.4
<b>VTX4240</b>																
VTX4240 into 4x 4Ω Loads	56.6	83.1	203.8	193.1	528	735	1900.8	1801.5	783	1031	2818.8	2671.6	703	903	2530.8	2398.6
VTX4240 into 4x 8Ω Loads					375	530	1350.0	1279.5	490	660	1764.0	1671.9	488	640	1756.8	1665.1
VTX4240 into 4x 16Ω Loads					215.2	298	774.7	734.3	276.1	382	994.0	942.1	220.5	355	793.8	752.3
<b>VTX4400</b>																
VTX4400 into 4x 4Ω Loads	86	124	309.6	293.4	882	1169	3175.2	3009.4	1292	1725	4651.2	4408.3	1204	1653	4334.4	4108.0
VTX4400 into 4x 8Ω Loads					556	786	2001.6	1897.1	766	1051	2757.6	2613.6	661	990	2379.6	2255.3
VTX4400 into 4x 16Ω Loads					334	460	1202.4	1139.6	432	612	1555.2	1474.0	425	553	1530.0	1450.1

	Quiescent				1/8th Power (W) Pink noise				1/3rd Power (W) Pink noise				Music at +4dB [M.B <sup>1</sup> Test *]			
	(Measurement taken where sound levels are minimal, simulating muted operation or music at very low levels)				(constant level at 1/8th Power (W) simulates normal Power (W) use with clean sound with minimal distortion)				(Constant Sound level at 1/3rd Power (W). Simulates use where audio begins to become compressed, limited or clipped)				(simulating levels music levels exceeding expected use. Compression, limiting and clipping occur dynamically)			
	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss	Power (W)	VA	Heat Loss	Heat Loss
Watts		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour	(Watts)		KJ/Hour	BTU/Hour	
<b>CXA450</b>																
CX-A450 into 4x 4Ω Loads	29.5	41.5	106.2	100.7	124	163	446.4	423.1	186	244.2	669.6	634.6	161	234	579.6	549.3
CX-A450 into 4x 8Ω Loads	-	-	-	-	85.5	110.9	307.8	291.7	123.5	158.9	444.6	421.4	110.9	146.3	399.2	378.4
CX-A450 into 4x 16Ω Loads	-	-	-	-	57.2	80.4	205.9	195.2	78.5	104.8	282.6	267.8	69.5	88.5	250.2	237.1
<b>CXA850</b>																
CX-A850 into 8x 4Ω Loads	54.6	76	196.6	186.3	220	293	792.0	750.6	331	435	1191.6	1129.4	329	380	1184.4	1122.5
CX-A850 into 8x 8Ω Loads	-	-	-	-	208	276	748.8	709.7	293	383	1054.8	999.7	223	370	802.8	760.9
CX-A850 into 8x 16Ω Loads	-	-	-	-	138	188	496.8	470.9	194.6	263	700.6	664.0	148	193	532.8	505.0
<b>CX-A6</b>																
CX-A6 (3 VCA Fitted), into 6x 4Ω loads	35	52.4	126.0	119.4	589	750	2120.4	2009.7	600	795	2160.0	2047.2	503	772	1810.8	1716.2
CX-A6 (3 VCA Fitted), into 6x 8Ω loads	-	-	-	-	229	213	824.4	781.3	358	463	1288.8	1221.5	320	456	1288.8	1091.8
CX-A6 (3 VCA Fitted), into 6x 16Ω loads	-	-	-	-	135	198	486.0	460.6	215	298	774.0	733.6	203	259	824.4	692.6
<b>MA60</b>																
MA60(Bose DS16 EQ fitted), into 1x 4Ω loads	12.46	17.2	44.9	42.5	45.5	57.4	163.8	155.2	68.1	70.2	245.2	232.4	66.2	69.2	238.3	225.9
MP60(Bose DS16 EQ fitted), into 1x 8Ω loads	-	-	-	-	30.5	39.8	109.8	104.1	44.2	56.7	159.1	150.8	41.7	43.6	150.1	142.3
MA60(Bose DS16 EQ fitted), into 1x 16Ω loads	-	-	-	-	21.3	28.5	76.7	72.7	29.2	38.3	105.1	99.6	26.7	35.8	96.1	91.1
<b>MA60Media</b>																
MA60Media(Bose DS16 EQ fitted) - 1x 4Ω loads	13.36	18.53	48.1	45.6	45.39	59.07	163.4	154.9	65.8	82.5	236.9	224.5	62.4	78.4	224.6	212.9
MA60(Bose DS16 EQ fitted), into 1x 8Ω loads	-	-	-	-	31.99	42.63	115.2	109.1	44.5	56.5	160.2	151.8	42.04	60.2	151.3	143.4
MA60(Bose DS16 EQ fitted), into 1x 16Ω loads	-	-	-	-	23.6	31.3	85.0	80.5	30.3	40.4	109.1	103.4	27.8	38.5	100.1	94.9
<b>MPA60 (Bose DS16 EQ fitted)</b>																
MPA60(Bose DS16 EQ fitted), into 1x 4Ω loads	16.03	20.2	57.7	54.7	57.3	70.9	206.3	195.5	80.5	95	289.8	274.7	69.7	71.04	250.9	237.8
MPA60(Bose DS16 EQ fitted), into 1x 8Ω loads	-	-	-	-	37.6	47.3	135.4	128.3	48.6	59.7	175.0	165.8	40.5	50.32	145.8	138.2
MPA60(Bose DS16 EQ fitted), into 1x 16Ω loads	-	-	-	-	26.6	33	95.8	90.8	40.5	40.7	145.8	138.2	28.8	39.1	103.7	98.3
<b>MPA120 (Bose DS16 EQ fitted)</b>																
MPA120(Bose DS16 EQ fitted), into 1x 4Ω loads	89.8	21.63	323.3	306.4	99.1	126	356.8	338.1	135.2	186	486.7	461.3	99.1	126	356.8	338.1
MPA120(Bose DS16 EQ fitted), into 1x 8Ω loads	-	-	-	-	74.1	57.5	266.8	252.8	77.6	97.7	279.4	264.8	57.5	74.1	207.0	196.2
MPA120(Bose DS16 EQ fitted), into 1x 16Ω loads	-	-	-	-	39	50.8	140.4	133.1	48.2	62.8	173.5	164.5	39	50.8	140.4	133.1
<b>MPA240 (Bose DS16 EQ fitted)</b>																
MPA240(Bose DS16 EQ fitted), into 1x 4Ω loads	21.43	28.99	77.1	73.1	152.2	194	547.9	519.3	218	275	784.8	743.8	170	258	612.0	580.0
MPA240(Bose DS16 EQ fitted), into 1x 8Ω loads	-	-	-	-	83.2	110.5	299.5	283.9	119.5	153	430.2	407.7	109.3	109.3	393.5	372.9
MPA240(Bose DS16 EQ fitted), into 1x 16Ω loads	-	-	-	-	54.5	73	196.2	186.0	71.5	94	257.4	244.0	60.1	89.5	216.4	205.1
<b>MA40 SERIES</b>																
MA40 (Bose DS16 EQ fitted), into 1x 4Ω loads	0.898	6.358	3.2	3.1	12.824	27.13	46.2	43.8	21.18	39.92	76.2	72.3	17.3	37.87	62.3	59.1
MA40F (Bose DS16 EQ fitted), into 1x 4Ω loads	0.792	6.064	2.9	2.7	12.794	26.71	46.1	43.7	21.51	40.05	77.4	73.4	18.349	39.94	66.1	62.6
MA40T (Bose DS16 EQ fitted), into 1x 4Ω loads	0.805	6.064	2.9	2.7	12.539	26.62	45.1	42.8	20.08	40.48	72.3	68.5	17.018	36.59	61.3	58.1
MA40E (Bose DS16 EQ fitted), into 1x 4Ω loads	2.501	8.749	9.0	8.5	12.371	24.64	44.5	42.2	17.14	33.45	61.7	58.5	15.964	34.35	57.5	54.5

NOTE1: Amplifier heat loss calculations are based on measured current consumption at mains inlet, and therefore include any Power (W) losses dissipated in the loads (speakers). BTU/H or KJ/H of the amplifier alone may actually be lower than stated above, depending on mode of operation. This should be considered during ventilation design.

NOTE2: \*MB<sup>1</sup> Test: Reference source, CD audio source at +4dBu +/- 0.2dBu playing "general music" i.e. Michael Bolton