

CURRENT DRAW AND HEAT DISSIPATION FOR VOLTERA D & DM

D 600.4M		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	66 W	0.0 W	226	0.3 A	68 W	0.0 W	230	0.6 A
Pink noise into 4 ohm ¹	Max continuous ²	320 W	168 W	520	1.4 A	320 W	162 W	539	2.7 A
	1/8th power	211 W	75 W	464	0.9 A	215 W	75 W	479	1.8 A
	1/8th power -3 dB	167 W	38 W	441	0.7 A	170 W	38 W	453	1.4 A
	1/8th power -6 dB	145 W	18.8 W	430	0.6 A	148 W	18.8 W	440	1.2 A
	1/8th power -9 dB	134 W	9.4 W	424	0.6 A	136 W	9.4 W	433	1.1 A
	1/8th power -15 dB ³	69 W	2.3 W	227	0.3 A	70 W	2.3 W	232	0.6 A

D 1200.8		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	98 W	0.0 W	333	0.4 A	100 W	0.0 W	340	0.8 A
Pink noise into 4 ohm ¹	Max continuous ²	520 W	283 W	808	2.3 A	520 W	274 W	840	4.4 A
	1/8th power	375 W	150 W	766	1.6 A	382 W	150 W	792	3.2 A
	1/8th power -3 dB	293 W	75 W	743	1.3 A	299 W	75 W	763	2.5 A
	1/8th power -6 dB	252 W	37.5 W	731	1.1 A	257 W	37.5 W	749	2.2 A
	1/8th power -9 dB	231 W	18.8 W	725	1.0 A	236 W	18.8 W	742	2.0 A
	1/8th power -15 dB ³	103 W	4.7 W	335	0.5 A	105 W	4.7 W	342	0.9 A

D 1200.4		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	65 W	0.0 W	221	0.3 A	66 W	0.0 W	226	0.6 A
Pink noise into 4 ohm ¹	Max continuous ²	520 W	339 W	619	2.3 A	520 W	330 W	649	4.4 A
	1/8th power	298 W	150 W	505	1.3 A	304 W	150 W	525	2.6 A
	1/8th power -3 dB	210 W	75 W	459	0.9 A	214 W	75 W	474	1.8 A
	1/8th power -6 dB	165 W	37.5 W	436	0.7 A	169 W	37.5 W	448	1.4 A
	1/8th power -9 dB	143 W	18.8 W	425	0.6 A	146 W	18.8 W	435	1.2 A
	1/8th power -18 dB ³	68 W	2.3 W	222	0.3 A	69 W	2.3 W	227	0.6 A

D 1200.4M		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	66 W	0.0 W	226	0.3 A	68 W	0.0 W	230	0.6 A
Pink noise into 4 ohm ¹	Max continuous ²	520 W	337 W	623	2.3 A	520 W	329 W	653	4.4 A
	1/8th power	299 W	150 W	509	1.3 A	305 W	150 W	530	2.6 A
	1/8th power -3 dB	211 W	75 W	464	0.9 A	215 W	75 W	479	1.8 A
	1/8th power -6 dB	167 W	37.5 W	441	0.7 A	170 W	37.5 W	453	1.4 A
	1/8th power -9 dB	145 W	18.8 W	430	0.6 A	148 W	18.8 W	440	1.2 A
	1/8th power -18 dB ³	69 W	2.3 W	227	0.3 A	70 W	2.3 W	232	0.6 A

D 1200.2M		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	48 W	0.0 W	165	0.2 A	49 W	0.0 W	168	0.4 A
Pink noise into 4 ohm ¹	Max continuous ²	520 W	367 W	523	2.3 A	520 W	358 W	553	4.4 A
	1/8th power	258 W	150 W	368	1.1 A	263 W	150 W	386	2.2 A
	1/8th power -3 dB	167 W	75 W	314	0.7 A	171 W	75 W	326	1.4 A
	1/8th power -6 dB	122 W	37.5 W	288	0.5 A	124 W	37.5 W	296	1.0 A
	1/8th power -9 dB	99 W	18.8 W	274	0.4 A	101 W	18.8 W	281	0.9 A
	1/8th power -21 dB ³	50 W	1.2 W	166	0.2 A	51 W	1.2 W	169	0.4 A

D 2400.8		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	98 W	0.0 W	335	0.4 A	100 W	0.0 W	342	0.8 A
Pink noise into 4 ohm ¹	Max continuous ²	730 W	473 W	877	3.2 A	730 W	460 W	923	6.1 A
	1/8th power	541 W	300 W	823	2.4 A	552 W	300 W	861	4.6 A
	1/8th power -3 dB	378 W	150 W	777	1.7 A	385 W	150 W	803	3.2 A
	1/8th power -6 dB	296 W	75 W	753	1.3 A	302 W	75 W	774	2.5 A
	1/8th power -9 dB	255 W	37.5 W	742	1.1 A	260 W	37.5 W	759	2.2 A
	1/8th power -18 dB ³	103 W	4.7 W	336	0.5 A	105 W	4.7 W	343	0.9 A

D 2400.4		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	65 W	0.0 W	223	0.3 A	67 W	0.0 W	227	0.6 A
Pink noise into 4 ohm ¹	Max continuous ²	730 W	514 W	736	3.2 A	730 W	502 W	778	6.1 A
	1/8th power	478 W	300 W	606	2.1 A	487 W	300 W	639	4.1 A
	1/8th power -3 dB	301 W	150 W	515	1.3 A	307 W	150 W	536	2.6 A
	1/8th power -6 dB	213 W	75 W	470	0.9 A	217 W	75 W	484	1.8 A
	1/8th power -9 dB	168 W	37.5 W	447	0.7 A	172 W	37.5 W	458	1.4 A
	1/8th power -21 dB ³	68 W	2.3 W	224	0.3 A	69 W	2.3 W	229	0.6 A

D 2400.4M		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	67 W	0.0 W	227	0.3 A	68 W	0.0 W	232	0.6 A
Pink noise into 4 ohm ¹	Max continuous ²	730 W	513 W	740	3.2 A	730 W	501 W	782	6.1 A
	1/8th power	479 W	300 W	611	2.1 A	489 W	300 W	644	4.1 A
	1/8th power -3 dB	302 W	150 W	520	1.3 A	308 W	150 W	541	2.6 A
	1/8th power -6 dB	214 W	75 W	474	0.9 A	218 W	75 W	489	1.8 A
	1/8th power -9 dB	170 W	37.5 W	451	0.7 A	173 W	37.5 W	463	1.5 A
	1/8th power -21 dB ³	69 W	2.3 W	229	0.3 A	71 W	2.3 W	234	0.6 A

D 2400.2M		230 V				120 V			
Scenario	Description	Pin	Pout	BTU/hr	lin	Pin	Pout	BTU/hr	lin
Idle	Ready to play	49 W	0.0 W	167	0.2 A	50 W	0.0 W	170	0.4 A
Pink noise into 4 ohm ¹	Max continuous ²	730 W	538 W	656	3.2 A	730 W	526 W	697	6.1 A
	1/8th power	442 W	300 W	486	1.9 A	451 W	300 W	517	3.8 A
	1/8th power -3 dB	261 W	150 W	378	1.1 A	266 W	150 W	397	2.2 A
	1/8th power -6 dB	170 W	75 W	325	0.7 A	174 W	75 W	337	1.5 A
	1/8th power -9 dB	125 W	37.5 W	298	0.5 A	127 W	37.5 W	307	1.1 A
	1/8th power -24 dB ³	50 W	1.2 W	168	0.2 A	51 W	1.2 W	171	0.4 A

FOOTNOTES

¹ Measured with a resistive 4-ohm load on each channel. The results with higher impedances will be similar or better. Please also note that a loudspeaker will typically consume slightly less power with the same signal as it is a complex load with a varying phase. It might also heat up leading to further reduction in power consumption. The combined effect of this is typically a 1.5 to 4 dB reduction in power use.

² This is the highest sustained mains consumption, heat loss and current draw. 1/8th power is however a more likely highest real-life use case, considering that most content will not stay at this level continuously. A single music track or a message might be at this level, but it likely won't be continuous at this level if we think of hours of use. If there will be periods of use at this level then the power distribution needs to support this current draw.

³ If the output voltage is low enough on all outputs, then the consumption will be very similar to the idle consumption. The threshold for when this is possible depends on the impedance. If some channels are 70V, then they will need to be <22.5 dB from max (<25.5 dB for 100V).