



Amplifier Heat Loss

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Heat losses are the thermal emissions from an amplifier while it is operating. It comes from dissipated waste power—i.e., real AC power in minus audio power out. Measurements are provided for various loads at idle, 1/8 of average full power, 1/3 of average full power, and full power, with all channels driven simultaneously. For typical usage, use the idle and 1/8 power figures. Where an asterisk (*) appears, the data was not available at press time. The designation "na" means not applicable to the particular amplifier model and "nr" means the model is not rated for the particular load. This data is measured from representative samples; due to production tolerances, actual heat emissions may vary slightly from one unit to another. Bridged mono into 8 ohms is equivalent to 4 ohms per channel; into 4 ohms is equivalent to 2 ohms per channel.

		Idle		1/8 Power								1/3 Power								Full Power													
		Thermal loss at idle or with very low signal level. Not all models were tested.		Thermal loss at 1/8 of full power is measured with pink noise. It approximates operating with music or voice with light clipping and represents the amplifier's typical "clean" maximum level, without audible clipping. Use these figures for typical maximum level operation.								Thermal loss at 1/3 of full power is measured with pink noise. It approximates operating with music or voice with very heavy clipping and a very compressed dynamic range.								Thermal loss at full power is measured with a 1 kHz sine wave. However, it does not represent any real-world operating condition.													
		Load per channel ->		8Ω		4Ω		2Ω		25V-70V-		8Ω		4Ω		2Ω		25V-70V-		8Ω		4Ω		2Ω		25V-70V-							
Model		BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr						
Current models																																	
GX3		44	11			904	228	1515	382	nr	nr					1160	292	2105	530	nr	nr					1109	279	2297	579	nr	nr		
GX5		60	15			734	185	1160	292	nr	nr					1456	367	2162	545	nr	nr					1891	477	3754	946	nr	nr		
GX7		82	21			1169	295	1963	495	nr	nr					1807	455	2612	658	nr	nr					2167	546	4478	1128	nr	nr		