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
Thermal loss at idle or with very low signal level. Not all models were tested.

1/8 Power
Thermal loss at 1/8 of full power is measured with pink noise. It approximates operating with music or voice with light clipping and repesents the amplifier's typical "clean" maximum level, without audible clipping. Use these figures for typical maximum level operation.

1/3 Power
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.

Full Power
Thermal loss at full power is measured with a 1 kHz sine wave. However, it does not represent any real-world operating condition.

	Idle		1/8 Power								1/3 Power								Full Power							
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**	**BTUl/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																										
PL325	143	36	785	198	1382	348	2184	550			1109	279	1980	499	3328	839			1195	301	2474	623	4949	1247		
PL340	195	49	1229	310	2150	542	3550	895			1911	482	3242	817	4522	1140			2082	525	4253	1072	8601	2167		
PL380	488	123	683	172	1242	313	1413	356			1195	301	1782	449	2809	708			1768	446	4113	1036	10611	2674		