

Amplifier Heat Loss

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 Thermal loss at idle or with very low signal level. 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										appro	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.									<i>Full Power</i> 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	r channel -	> 8	Ω	40	2	20	2	25V-7	70V-		8Ω	4	Ω	20	2	25V-	70V-		8Ω	4	Ω	20	2	25V-7	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	BTUI/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/	hr kcal/hi	r BTU/hr	kcal/hr	BTU/hr	kcal/hr	BTU/hr	kcal/hr		
Current models																												
CXD 4.2	180	46	432	109	476	120	597	150	nr	nr	849	214	873	220	1215	306	nr	nr	135	2 341	1478	372	2120	534	nr	nr		
CXD 4.3	225	57	684	172	794	200	1040	262	794	200	983	248	1261	318	1869	471	1261	318	249	629	2925	737	4198	1058	2925	737		
CXD 4.5	286	72	811	204	1144	288	1124	283	1144	288	881	222	1708	430	1737	438	1708	430	311	6 785	5318	1340	4208	1060	5318	1340		