# ELECTRONICS CURRENT DRAW AND BTU GUIDE

WISDOM®

| Quick US 120V Breakdown | Total Max number of SA2's | Total Max number of SA3's | Total Max number of SA3's |
|---|---|---|---|
| 15A Branch Circuit | 4 | 3 | 2 |
| 20A Branch Circuit | 5 | 4 | 3 |

| | Watts in Rack Only (for rack cooling) | | | | | | BTU/hr *Waste Heat Not Used for Audio | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Product** | **Standby** | **Idle** | **12.50%** | **25.00%** | **33.30%** | **100%** | **Standby** | **Idle** | **12.50%** | **25.00%** | **33.30%** | **100%** |
| SA-2 / SA-2DSP | 0.43 | 24 | 42.8 | 61.5 | 74 | 174 | 1.5 | 81.9 | 145.9 | 209.8 | 252.5 | 593.7 |
| SA-3 / SA-3DSP | 0.43 | 29 | 57.1 | 85.3 | 104 | 209 | 1.5 | 99 | 194.9 | 290.9 | 354.9 | 713.1 |
| SA-8 / SA-8DSP / IA-8DSP | 0.3 | 30.5 | 60 | 89.6 | 109.2 | 219.5 | 1 | 104 | 205 | 306 | 373 | 749 |
| SW-1 / SW-1DSP | 0.15 | 12.8 | 21.6 | 30.4 | 36.3 | 83.3 | 0.5 | 43.7 | 73.7 | 103.8 | 123.9 | 284.2 |

| | Total Current Draw 120V Mains (in amps) | | | | | | Total Current Draw 230V Mains (in amps) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Product** | **Standby** | **Idle** | ***12.50%*** | ***25.00%*** | ***33.30%*** | ***100%*** | **Standby** | **Idle** | ***12.50%*** | ***25.00%*** | ***33.30%*** | ***100%*** |
| SA-2 / SA-2DSP | 0 | 0.2 | 1.4 | 2.6 | 3.39 | 9.78 | 0 | 0.1 | 0.73 | 1.35 | 1.77 | 5.1 |
| SA-3 / SA-3DSP | 0 | 0.24 | 2.04 | 3.84 | 5.03 | 14.24 | 0 | 0.13 | 1.06 | 2 | 2.63 | 7.43 |
| SA-8 / SA-8DSP / IA-8DSP | 0 | 0.25 | 3.8 | 7.1 | 9.3 | 15(1) | 0 | 0.25 | 2 | 3.7 | 4.9 | 12(1) |
| SW-1 / SW-1DSP | 0 | 0.11 | 0.63 | 1.15 | 1.5 | 4.28 | 0 | 0.19 | 0.37 | 0.68 | 0.88 | 2.54 |

Current Draw is based on **4Ω** loads across all outputs, with all outputs driving the same source material (mono input signal).
**8Ω** loads would be approximately half the current draw typically.

Use the **12.5%** column for calculating high-volume level operating conditions.
**12.5%** is 1/8th power pink noise, which is the equivalent of typical of program material being played at onset of clipping levels.
The **33%** Column is typical of the power draw when the amplifiers are experiencing extreme clipping on program material.
The **100%** Column is the theoretical maximum power draw with a pure sign wave input.

NOTES:
(1) Maximum continuous current draw is limited by the maximum safety ratings of the SA-8 / IA-8. Short term power to the speaker terminals are approximately double.