CLASSE

CUSTOM THEATER ELECTRONICS

CT-5300 five-channel amplifier



Classé Custom Theater series components offer a beautiful and purpose-built solution for installing world-class audio components in professional equipment racks.

Our commitment to building the world's best amplifiers has not changed, but the way our customers use them has. High-end amplifiers today are as likely as not to be installed in equipment racks or custom cabinetry and often serve as the foundation of a home theater. Their sheer size, weight and heat render them impractical in many installations.

The revolutionary Custom Theater (CT) series is our response to this reality. They are the first world class high-end amplifiers specifically tailored to modern custom installations. They deliver ultra high-end performance, exceptional reliability and are designed to be easily installed. We say that they are rack advantaged, because of a variety of features tailored to the demanding requirements of this environment.

CT amplifiers come with their own adjustable rack rails and a separate faceplate designed to conceal all mounting hardware along the sides of the rack. The rails adapt easily to common rack depths while providing front to back support of the chassis. Hidden inside, our unique Intelligent Cooling Tunnel, or ICTunnel™ (pronounced Icy Tunnel) architecture and related circuitry quietly controls the amplifier temperature, ensuring optimum performance and reliability in enclosed, poorly ventilated environments.

Conventional high-end amplifiers use heatsinks with high thermal mass that rely on convection to cool the active circuits. They are slow to heat up and slow to cool down. Eventually they heat up their environment and as the air around them gets hotter, they become part of the problem. For this reason, high-powered amps and racks or cabinets don't easily mix.

Conventional heatsinks are simply shaped pieces of metal, relying on placement and ambient air to extract heat from the amplifier. The ICTunnel™ is more sophisticated, acting like the human hypothalamus regulating body temperature. The ICTunnel™ utilizes an aluminum bonded-fin heatsink, of the kind used in high powered medical, laser and test equipment. It exploits the principle of low thermal mass, so it heats quickly but can also be cooled quickly. Inside its relatively small size are fins providing nearly 31 square feet of surface area. The key to its operation is how the fins are spaced—as close as possible to each other to maximize the surface area inside the tunnel, but not so close as to heat each other. The ICTunnel™ utilizes a noiseless fan along with pressure and temperature sensors to maintain the amplifier's target temperature.

The CT series has everything you would expect from the world's best amplifiers. They are designed for lifetime reliability. They have the power to effortlessly control the lowest impedances imaginable. They have the finesse to resolve the infinitely minute details that are the DNA of great sound. But CT amplifiers add a new dimension. For the first time the world's best amplifiers can go right where you need them – in the home theater rack.

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CT-5300 Specifications

All tests un-weighted and 500kHz measurement bandwidth (except SNR)

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Frequency response	1Hz – 80kHz, -3dB

Output power 300W rms into 8Ω (24.8 dBW)

All channels driven*

Harmonic Distortion <0.002% at 1 kHz balanced

<0.004% at 1 kHz single ended

Peak Output Voltage 167V peak to peak, 53V rms no load

156V peak to peak, 48V rms into 8Ω

Input Impedance $50k\Omega$ balanced / single ended

Voltage gain 29dB balanced / single ended

Input level at clipping 2.1V rms balanced / single ended

Intermodulation Distortion >90dB below fundamental into 8Ω balanced / single ended

>85dB below fundamental into 4Ω balanced / single ended

Signal to Noise Ratio -116dB at peak output into 8Ω Measurement Bandwidth: 22kHz

Output impedance 0.03Ω @ 1kHz

Standby power consumption 6W @ 120V; 7W @ 230V

Rated power consumption 1300W @ 1/8th power into 8Ω

Width (including faceplate) 19" (483mm)
Width (excluding faceplate) 17" (432mm)

Depth (excluding connectors) 23.625" (569mm)

Height 8.75" (221mm)

Gross weight 140lbs (59.5kg)

Net weight 113lbs (51.25kg)

Mains voltage Specified on rear panel

^{*}specifications for output into 4 ohms are omitted because the AC Mains/power supply cannot support all channels driven simultaneously at this level, which would require over 5,000W and only occur under a special test condition. The amplifier easily drives lower impedance loads.