

## CA-D200 200W STEREO AMPLIFIER



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The CA-D200 is a new and innovative amplifier design that uses what are called switching technologies. Switching amplifiers and power supplies offer many advantages but present different challenges and a higher degree of complexity than conventional linear designs. Their potential is too great to ignore, however, which is why the Classé Design team now includes engineers with over fifty years combined experience in switching amplifier and power supply design. The result is the CA-D200, the first of its type from Classé; the first of its type—period.

### **Switching Power Supply**

A new Switch Mode Power Supply with Power Factor Correction, provides over 1,000W of clean, stable power to the CA-D200 amplifier circuitry. The SMPS and PFC each operate at over 90% efficiency, yielding impressive benefits for power delivery. The low frequency dynamics, extension and control of the CA-D200 and its ability to effortlessly drive difficult speaker loads can be credited in large part to the powerful and sophisticated power supply it employs. The SMPS with PFC is ideally suited to the demands of the CA-D200's revolutionary switching amplifier topology.

### **Switching Amplifier**

Some technical limitations have been commonly accepted as inherent in switching amplifiers—until now. Perhaps the biggest limitation is called dead-band time, which translates directly to distortion and tempts designers to employ excessive amounts of negative feedback to compensate. With its proprietary drivers and DSP tools, the Classé Design team solves the dead-band time problem with precision and consistency for each and every CA-D200. On power up, controller circuitry analyzes and adjusts to minimize the dead-band time for each pair of outputs. In this way, part tolerances and drift for each individual amplifier are taken into account. Lastly, the feedback loop is closed using the least amount of negative feedback required. Our linear phase output filters are then employed only to filter the 384 kHz switching frequency, not to roll off the top end of the audio band, as is often done to try to make amplifiers with high dead-band time more listenable. The result is a wide and deep soundstage with extended high frequencies that reveal a musically detailed and open midrange and top end..

### **Summary**

The CA-D200 employs proprietary component parts and DSP technology along with sound engineering practice to optimize its sonic performance at an affordable price of admission for a Classé amplifier. Listen and hear for yourself how beautiful great value can sound.