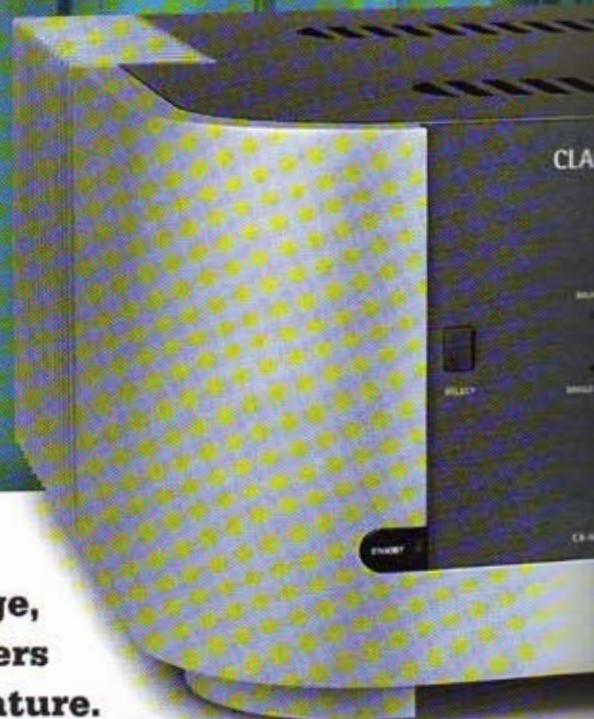


# POWER BLOCS

From Canada via Abbey Road to your lounge,  
may we present a pair of monobloc amplifiers  
— Classé by name, exceedingly classy by nature.



**Classé Audio**  
**CA-M400 monobloc**  
**amplifiers**  
Price: \$10,900 each

**Y**ou want an endorsement? The amplification behemoths on review here, the Classé CA-M400 monobloc amplifiers from Canada, have become Abbey Road Studios' amplifiers of choice for a number of its famous recording rooms. Closer to home, the very pair we plugged up were, prior to coming to us, in situ at a Sydney-based studio where they performed amplification duties during the production of the *Happy Feet* soundtrack, among others.

We were struck straight off by the quality and solidity on show here — even in the packaging. No mere cardboard boxes here; we're talking a rib-reinforced box of plastic-type material that can not only take the unit's weight, but also support and protect it against the clumsiest of couriers. What's more, unpacking is almost a breeze, with no turning the box upsidedown, no re-tipping the amp back up, etc. The box simply disassembles and collapses around its contents — or assembles around the product

when packing it back. (If more heavy products were packaged in this manner there would be a lot of reviewers around with healthier backs.)

This level of care goes some way towards establishing a buyer's sense of confidence in a product that reflects an overall philosophy of quality, extending from packaging to the product itself. The price is, of course, some indication of quality in itself. And we love this, from the Australian distributor's website: "Every Classé component is designed and built to last a lifetime; to engage and involve, long after its price is forgotten."

## EQUIPMENT

The CA-M400 amplifiers themselves are an example of industrial design at its pinnacle. The aesthetics are simple and clean, yet very elegant, a design theme carried through to the company's numerous other products. The thick and solid natural aluminium fascia bends curvaceously towards the rear at the sides without wrinkle or blemish (a difficult task when thick aluminium is curved in such a manner) as it meets the extensive custom heat-sinking and solid steel chassis. A contrasting black-anodised aluminium control panel is off-centred and is host to the standby/on, 'mode' and 'select' buttons. In conjunction, the mode and select buttons control and configure the amplifier for either balanced or single-ended operation. They also control the configuration

for the turn-on delay or amplifier number (in multi-amplifier set-ups) for connection with a Classé preamplifier.

The rear of the amplifier caters for RCA single-ended and XLR balanced inputs, which can be connected simultaneously and switched via RS-232 or the front panel. There are two sets of speaker outputs for bi-wiring and 3.5mm minijack comms sockets in addition to the above-mentioned RS-232 connectors.

The attention to detail even extends to the amplifiers' feet, which are substantial aluminium footers with a specialised rubber vibration-absorbing compound insert.

Each Classé CA-M400 37kg solid-state amplifier is rated at a powerful 400W at 8 ohms, doubling up to 800W into 4 ohms (this not measured 20Hz-20kHz but at 1kHz, with 0.003% distortion — our measurements showed this even lower, at 0.002%). Voltage gain is 29.1dB and signal-to-noise ratio is a healthy 112dB. The all-important input impedance — crucial for proper preamplifier matching — is a friendly 100kohms.

The input stage uses J-FET devices, utilised because of their high input impedance and low offset current. As a result, Classé amplifiers are easy to drive and low noise, and the J-FET input stages don't necessitate the use of sound-degrading coupling capacitors. The driver and output stages use a combination of MOSFETs and bipolar devices, to achieve



what Classé's engineers consider the ideal balance for great sound. Each amplifier houses a massive custom toroidal transformer among its other robust power supply componentry. The CA-M400s also incorporate extensive self protection against DC voltage, overheating and all other manner of potential mishaps.

According to Classé's philosophy, all of the above design decisions came after comprehensive listening tests. This from the manual:

*"Excellent measured performance is to be expected in world-class products, and Classé products deliver that performance. However, experience has shown that technical excellence alone is insufficient to guarantee subjectively musical results. For this reason, all Classé products are laboriously fine-tuned during the development process by carefully controlled listening tests. Our ears are still some of the finest laboratory test instruments available, and nicely complement more traditional engineering test equipment. In the course of optimizing the circuitry for a product, hundreds of decisions are made based on the subjective impression given by substituting one high quality part for another."*

## PERFORMANCE

We took up the challenge to see whether our ears are on par with Classé's. Slotting the amps in our system was a matter of plonking them on timbre platforms in front of our Finite Element equipment rack, as these monsters are physically enormous.

Sonically, one thing that's noticeable straight off the bat is the Classé's smoothness throughout the mid-band and top-end. The amps manage a balancing act that retains resolution and separation of musical strands while maintaining a level of detail that impresses.

Jazz ensemble recordings are a great medium to test and reveal these particular qualities. *Round Midnight*, a Herbie Hancock production, puts together a group of musos headed by Hancock himself and tenor saxophonist Dexter Gordon, all apparently recorded live within the film set's authentic reproduction of the real-life Blue Note Jazz Club. Here the CA-M400 amps revealed all the instruments in tight focus and in an airy space within the wide and deep soundstage. Herbie is on a large-sounding and tonally accurate

piano; Dexter's sax is equally well-reproduced, and really swings dynamically.

If your speakers are up to it, then the Classé amps will deliver the full measure of information. Playing the wonderfully re-mastered JVC XRCD version of Lightnin' Hopkins' *Goin' Away* (originally recorded in 1963), Lightnin's deep vocal growl was rendered with precision and accuracy as if the man and his guitar were placed in our listening room. Bass guitar and stand-up bass packed a real punch with these amps. It's here that the massive power supply really proves its worth. All bass-heavy music was controlled and powerful.

The CA-M400 amplifiers performed outstandingly in all areas. However, being expert nitpickers, we noticed a deficiency in PRA, or Pace, Rhythm and Timing. For example, Porcupine Tree's well-produced *In Absentia* has an opener that could easily make the top 50 all-time best guitar intros. The CA-M400s ever so slightly slowed the rhythm and pace, taking the edge and tension off this killer rock riff. This is only noticeable when compared to some valve and class-D designs



that can excel at speed. Our reference system uses very revealing speakers with extraordinarily dynamic and fast analogue switching amplifiers, and only when compared within this context was that issue evident. However, I experimented a little further. For those "cables don't make a difference" doubters, a change to a short run of reasonably-priced silver cable almost totally redressed the PRaT situation. This highlights the CA-M400s' revealing and accurate sound when mated to appropriate speakers and ancillaries. These changes are, of course, the result of the amps *in my system*.

Classical music was reproduced superbly via the Classé amps, recording permitting, as with Decca Legend's recording of Solti conducting

Beethoven's Third, which sounded powerful and dynamic, placed within a vivid semblance of the venue in which it was recorded. The orchestra's instrumental groups were clearly resolved by the amplifiers, greatly enhancing the impression of being at a live performance. Similarly with chamber ensembles, as illustrated on the Wilson Audio label recording of Debussy and Bartok sonatas, the Classé amps were captivating in the way they separated and resolved the piano, violins and cello, all with realistic detail and presence.

### CONCLUSION

The Classé CA-M400 monobloc amplifiers are superbly built and — as far as amplification

devices go — comprehensively featured. They have the hallmarks of expertly-engineered electronics that are bound to last a lifetime. What's more they have an engaging sound that is dynamic, smooth throughout the frequency range, accurate in detail and spatially massive. Classy indeed. *Edgar Kramer* †

### VERDICT

#### Classé Audio CA-M400 monobloc amplifiers

Price: \$10,900 each



- Power output
- Information retrieval
- Build quality



- Physical size
- Cable-sensitive

SPECIFIED POWER: 400W (continuous at 8Ω, 1kHz)  
 SIGNAL-TO-NOISE RATIO: 112dB  
 VOLTAGE GAIN: 29.1dB  
 SENSITIVITY: 2.0Vrms for rated output at 8Ω  
 INPUT IMPEDANCE: 100kΩ

DIMENSIONS (hwd): 222 x 445 x 470mm  
 WEIGHT: 37kg  
 WARRANTY: Two years

CONTACT: Convoy International  
 TEL: 1800 251 995  
 WEB: [www.e-hifi.com.au](http://www.e-hifi.com.au)

