

As Seen In

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TESTREPORTS



POLK / MOMO C400.4

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Last year we checked out one of the first of the new mono-block Polk Audio mobile audio amplifiers. This year, we are checking out a full-range four-channel amp from the same Carbon Series line of amps.

FEATURES

The C400.4 is rated to produce 75W into four channels at 4Ω with a supply voltage of 14.4V. You can line any of the Carbon-series amps up for that 'big amp' look. The aluminum extrusion heat sink controls thermal handling by fact of its high mass and the fins that line the back edge of the amp.

The C400.4 features an electronic crossover that is adjustable between 50Hz and 5kHz. The filter slope can be adjusted as well, offering 12- and 24 dB/Octave slopes. Each pair of channels has its own independent crossover that can operate in low- or high-pass mode. The amp also offers a subsonic filter with a 24dB/Octave slope at 15Hz. Finally, a remote bass level control (called the RC-1) is available to allow you to control the amp from the comfort of your front seat.

Input sensitivity is adjustable in two ranges, but covers everything from 200mV on up to 8V. That's enough to allow almost any head unit to be direct-

ly connected to the amplifier. The amp has two sets of RCA inputs, one pair for each set of channels. There is also a set of RCA outputs. I'd like to see a switch to connect the front and rear inputs, negating the need for the use of Y-cables when front and rear pre-outs aren't available.

The C400.4 has a Pre-EQ button that activates a built-in equalization circuit. The effect of the equalization is different on the front and rear channels, and depends on the filter selection switch position. The major function of this feature is as a pre-set active crossover for a pair of Polk / MOMO component systems such as the MMC6500 when bi-amping the speakers.

Connections to the amp will allow 4awg power cable and 12awg cables will fit into the speaker connections. The amp is protected by a pair of 30A ATO fuses. Removing the cover of the amp reveals the two-sided fibreglass epoxy circuit board. The power input of the amp is stiffened with four 2,200μF, 25V, 105°C capacitors and the rails are kept going strong with four 2,200μF, 50V, 85°C and two 3,300μF, 25V, 105°C capacitors. More small-value capacitors wired in parallel result in less equivalent resistance and faster response to current



demands. The bipolar transistor output devices function in a Class AB configuration for excellent sound quality. The output devices are Sanken C4468 and A1695 100W units in T03P cases.

Components in the amp are primarily surface-mount devices. Metal film resistors are used in the signal path to help ensure the best possible sonic performance in terms of slew rate and overall bandwidth.

PERFORMANCE

In terms of power production, the amp was able to produce 109.3W at 4Ω and 167.8W at 2Ω with a supply voltage of 14.1V. This is with all channels driven. The same test repeated at 13.3V resulted in 97.1W and 149.3W respectively. With the amp bridged into two 4Ω loads, it produced 260W at 13.75V and 227W at 13V.

I connected two channels of the C400.4 to my set of Polk Audio LSi9 reference speakers for a quick listen. Compared to my reference amp, the C400.4 was a bit more forward, but not enough to be considered bright. Music remained tight and controlled and imaging was good.

CONCLUSION

The C400.4 makes great power, looks totally cool and comes in a tight package. The amp exceeds its power ratings in all categories by a significant margin, even when supplied with less voltage than in the specifications. With good features and tuner-inspired design, this amp is a hit. **PAS**

