CARVER

MAGNETIC

FIELD

POWER

AMPLIFIER

MODEL M-400a
Why you need every bit of the M-400's power.
The remarkable Carver M-400 may very well put out more power than you ever considered necessary for accurate music reproduction at normal listening levels. The surprising fact is, you need every watt of the power provided by this remarkable little ten-pound cube. Here's why:

Musical signal levels and lightning transients, combinant byproducts of demand created by multiple music waveforms and the explosive levels that some well-recorded instruments can instantly attain. We hear all this in live music; indeed, this is what makes music live. But we don't hear the incredibly intense bursts of sound as being loud — they are too short in duration — just live.

Nonetheless these quick, high-intensity peaks MUST be reproduced to make recorded music feel live.

And that's up to the power amplifier. If the amplifier cannot provide the instantaneous power to surmount these rigorous musical peaks when they are presented at its inputs, it makes a sound of its own devising, literally an electronic squeal of anguish. It may be an inoffensive "click" at low levels, as a second or two you come to accept as part of the music — or it may be an annoying "snap" which we call hard clipping, a sure sign the amplifier's reserves are being drained with each waveform. The result is audible degradation of your system's sound. Instantaneous clipping that even one hundred and fifty watts per channel cannot alleviate. Compare the M-400 and any lower-powered amplifier with the same signal chain and speakers to prove to yourself that all along you've been putting up with regular clipping distortion.

Having accepted the audible reasons for at least 280 watts per channel you must also deal with several Power Myths:

**MYTH 1. Power means loudness.** Certainly to play music at high sound levels, speakers require more power. But we're talking high fidelity not sound reinforcement. The point of more power is not to play music at high sound levels, a sound you've come to accept as part of your music. The M-400 has an elaborate logic-controlled protection system to prevent over-driving your valuable speakers, and to prevent clipping when power demands outrun even the M-400. The system simply shuts down output for several seconds before resumption, testing output demand before continuing. Should the problem be a short or other massive malfunction, no damage can occur. Instead of controlling input stages, which can cause delays and distortion, the M-400's computer acts as a FINAL gate, just before the speaker terminals, for instant overload protection.

Physically the M-400 is simplicity itself. Only a matched set of power LED's accent its front. Volume is controlled by the input signal eliminating the need for gain controls. The M-400's back utilities are spare and to-the-point: speaker terminals and input sockets.

Justice done to any input. While a superb pre-amplifier such as the Carver C-400 or C-1 makes a good match to the M-400, even a good receiver or integrated amplifier can be paired to take advantage of tuning, phono and switching sections you're satisfied with already. Simply exit the unit at the sockets marked "pre-out" and directly into the M-400's inputs. If your unit doesn't have "pre-main" sockets, we have developed a special coupler which lets you connect speaker outputs directly to the M-400. Called the Z-1, this inexpensive device lets you enjoy 400 watts of power from any receiver or integrated amplifier.

The most important test. Hardware, buzzwords and specmanship aside, your final decision should be made by the sound of an amplifier. Compare the Carver M-400 to any 200-250 watt/channel conventional power amplifier around. Class A, B, H, G, Z, Q or otherwise. The class that stands out will be the superb colorless sound of the cool, unruffled, lightweight M-400.

Next compare price tags and discover what designing away all that scrap metal does to the watts-per-dollar price of a Carver Magnetic Field Amplifier.

You'll be amazed at how a component can be at once affordable, powerful and above all absolutely accurate and musical.

**SPECIFICATIONS**

Power, 201 watts/channel into 8 ohms, 20Hz-20KHz with no more than .05% THD; Power at Clipping: 250 watts/channel into 8 ohms at 1K Hz, 300 watts into 4 ohms at 1K Hz, 500 watts RMS into 8 ohms single channel. Noise, 100dB down. IF/A weighted. Harmonically related commutation noise is equal to or less than non linear distortion components. IF/A weighted, IM Distortion, 0.05% SMPTE, TIM Distortion, Unmeasurable, Frequency Bandwidth, +0-3dB, 1Hz-100K Hz at 1 watt; Slew Factor, 200, Display Tracking, ±1dB; Display Ballistics. Peak responding 5 millisecond attack, 1 second decay, Input Impedance, 30K ohms. Size: 6"x6"x9".