

Jamo 507 Floor standing speakers

The Danish-made Jamo 507 is next to the top of the company's new "07" line of loudspeaker systems. That it is not just another me-too design is immediately apparent: Standing 36 inches high and weighing a solid 42 pounds, the speaker has front and back panels only 5 inches wide. Curved sides, finished in mahogany, give the cabinet a maximum width of 8-3/4 inches, and a 1/4-inch-thick glass plate covers the top. The speaker is supplied with spikes whose use is optional but recommended by Jamo. Rubber feet are also furnished for installation on hard floors such as wood or stone.

The front is covered by a two-section black cloth grille. The lower part, which is purely decorative, is not removable. The upper grille, retained by small built-in magnets at its sides, lifts off easily to reveal two 4-inch cone drivers flanking a 1-inch soft-dome tweeter. These drivers handle frequencies above 150 Hz, with a 3-kHz crossover between them.

The range below 150 Hz is handled by a pair of specially developed 6-1/2-inch cone woofers mounted between two chambers within the enclosure. One chamber is closed, while the other radiates into the room through a ducted port on the rear of the cabinet. The two woofers are mounted in a push-pull arrangement, which Jamo says enables them to work as though they were in a much larger enclosure.

Also on the back of the cabinet is a recessed connection panel containing two pairs of gold-plated binding posts suitable for use with single or double banana plugs, lugs, or wire ends. They are normally strapped together with removable jumpers for conventional connection to the amplifier. With the jumper straps removed, the bass and upper-frequency drivers can be fed via separate cables from a single stereo amplifier (biwiring) or from two separate amplifiers (biampification).

Jamo rates the Model 507 for operation at power levels up to 150 watts (200 watts for short-term peaks). Its nominal impedance is 4 ohms, its frequency range 40 Hz to 20 kHz.

We measured the room response of the two Jamo 507's with the speakers installed about 7 feet apart, 1 foot from the wall behind them and 4 feet from the side walls. Jamo recommends placing their backs close to a wall for best bass performance and points out that their narrow front panels minimize high-frequency diffraction that could cause response irregularities.

The averaged room response of the two speakers was very smooth and uniform over most of the audio range. The woofer response spanned just over one octave, from approximately 40 to 115 Hz, falling at 24 dB per octave below 50 Hz and at about 30 dB per octave above 100 Hz. The output of the two midrange drivers joined the woofer output at 110 Hz, and their combined response was ± 4 dB from 40 Hz to 3 kHz.

The system's composite response, based on close-miked measurements of the low-frequency and midrange drivers and the total room response of all of the drivers, was flat within $\pm 2.5^\circ$ dB from 700 Hz to 20 kHz and ± 1.8 dB from 700 to 46 Hz. There was a double-humped peak of 3 or 4 dB in the 12- to 16-kHz range that we later confirmed with quasi-anechoic MLS response measurements. The tweeter had the good high-frequency dispersion typical of 1-inch dome radiators: At 45 degrees off-axis, it was down 6 dB at 10 kHz and 10 dB at 20 kHz.

The system impedance fell to a rather low 2.6 ohms at 120 Hz but averaged close to 4 ohms between 100 Hz and 1 kHz. It climbed at high frequencies to about 12.5 ohms at 20 kHz. As with most other multicavity bass radiators we have tested, the phase component of the impedance measurement was ragged below about 250 Hz (probably not of any audible significance).

Sensitivity was, as rated, 90 dB sound-pressure level (SPL) at 1 meter with an input of 2.83 volts of pink noise. At that level, the woofer distortion was between 0.9 and 1.5 percent from 110 Hz to 42 Hz, rising to 9 percent at 30 Hz-impressive performance from a speaker with the Jamo 507's driver complement. The small drivers were also able to absorb large short-duration power peaks without damage or excessive distortion. The tweeter and midrange drivers were not harmed by single-cycle tone bursts of 650 watts at 10 kHz and 1,050 watts at 1 kHz. A 100-Hz burst of 645 watts drove the woofer cones to their limits, adding a "hard" quality to the sound, but caused no damage.

As is our usual practice, we listened to the Jamo 507's for some time before performing any measurements. Their smoothness and wide range were obvious from the first moment. After several days of listening, the measurements were not too surprising, merely confirming this unconventional speaker's

excellence. It was interesting to feel the sides of the cabinet while it was reproducing low frequencies. When we played a 31,5-Hz test tone at a room-filling level, there was hardly a trace of vibration to be felt on the exterior of the cabinet, yet the output was obviously mostly the fundamental, not harmonics of it-something not usually experienced from a pair of 6-inch cones.

Jamo says the cabinet's sides are a sandwich of grooved chipboard and conventional medium-density fiber-board (MDF). When the two boards are glued together, they form an arcshaped, extremely rigid structure with thoroughly damped resonances. As our listening confirmed, that results in a "dead" cabinet with a minimum of sound coloration.

Over the years, I have seen and heard, and sometimes tested, quite a few unconventional, innovatively designed and constructed speakers. Unfortunately, their sound quality has rarely correlated with their special features, or with their often high prices. The Jamo 507 is a happy exception-a tastefully styled, ingeniously designed, and thoroughly listenable speaker. All things considered, it is not unreasonably priced, and we were very impressed with its performance. Hear it if you can.



Jamo E680 Floor standing speakers review



Jamo C605 Floor standing speakers review



Jamo 707i Floor standing speakers review



Jamo S606 Floor standing speakers review



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