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SUBWOOFER REVIEWS

JL Audio Fathom f112 Subwoofer

By Daniel Kumin



WIDELY RESPECTED IN HIGH-END MOBILE SOUND, JL AUDIO has only recently navigated into home theater waters. Domestic notoriety may come quickly, however. The new JL Audio Fathom f112 subwoofer has a high-tech 12-inch driver rated at more than 3 inches peak-to-peak linear excursion, mated with a digital amp said to produce “unclipped output voltages equivalent to 1,500 watts.” Weighing in at a measly 115 pounds (less than half the mass of JL’s largest sub), the f112 certainly has a big-bass recipe.

The F112’s electronics include flexible low-pass filtering (though most will bypass this for the receiver’s crossover) and an Extreme Low Frequency trim control supplying +3/-12 dB equalization over the bottommost octave. There’s also Automatic Room Optimization: Plug in the supplied test mike, and the JL adjusts its single parametric filter to “tame the primary room mode.” In many cases, this will yield at least somewhat smoother and subjectively deeper-sounding bass. In my room, with the sub in my proven spot left of

my front-left speaker, it resulted in subtly tighter music bass.

Movie Performance

Here’s the executive summary: The JL f112 outperformed my everyday sub, a somewhat more compact sealed 12-incher of similarly lofty price, by an audible margin in both depth and power - the first visiting woofer to do so in some time. I tried lots of film and music tracks, and while passages rating only “very demanding” yielded no audible differences, my “most demanding” list told the tale.

On the helicopter rotor-beats from Chapter 4 of *Black Hawk Down*, at cinema-reference levels, the f112 produced a clearly more thoracic overall effect. When playing the full speaker system, this was discernible only to a practiced ear, but it was perfectly obvious with the full-range speakers muted. Plus, the JL excited rattles in my room that my regular woofer could not. More important, it delivered tangibly more near-infrasonic gut-thumping from stuff like that old standby, the ‘zilla footfalls from *Godzilla*.

Music Performance

Music playback was just as impressive. Even with a fairly high crossover (80 Hz) dialed in from the processor, the JL produced a smooth, continuous blend with smaller sats, including exposed material such as solo string bass. I heard no hint of sub artifacts that called attention to its location, nor any of the “boom,” “bloom,” or “bloat” that afflict many

subs. The f112 was invariably tight and detailed. And it was highly musical - along with powerful and low.

Bottom Line

This is a hell of a good subwoofer. If you’ve got the scratch to buy it and the abs to unpack and install it, you won’t be sorry.

The Short Form

Prices: \$2,400 (GLOSS-BLACK); \$2,200 (MATTE-BLACK, shown) / home.jlaudio.com / 954-443-1100

Snapshot

A fine, very high-performance, comparatively compact subwoofer.

Plus

- Powerful, controlled deep bass
- Reasonably compact size
- Flexible crossover; auto-EQ controls

Minus

- Heavy
- Expensive. (Did I mention heavy?)

Key Features

- 12-in woofer
- 1,500-watt RMS amp
- 19.5 x 16.5 x 19.8 in
- 115 lb
- Finish: Gloss or matte black

Test Bench

JL Audio Fathom f112 Subwoofer

In the lab

Frequency response (at 2 meters)
24 to 101 Hz ± 2.5 dB

Bass limits (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room)
16 Hz at 80 dB SPL 108 dB average SPL from 25 to 62 Hz 114 dB maximum SPL at 62 Hz bandwidth uniformity 94%

I measured the JL Audio Fathom f112 subwoofer's bass limits with it set to maximum bandwidth and full gain and placed in the optimal corner of a 7,500-cubic-foot room. In a smaller

room, users can expect 2 to 3 Hz deeper extension and as much as 3 dB greater sound-pressure level (SPL).

The f112 has fairly high output (109 dB or greater at every frequency from 32 Hz upward) and good uniformity of output across its operating range. The subwoofer comfortably handled 16- to 20-Hz signals without exceeding our 10% maximum distortion limit, with its low-end limit measuring 16 Hz, where it produced 80 dB SPL. Maximum SPL (114 dB)

was achieved at 62 Hz.

Although the crossover control is marked from 30 to 130 Hz, the true acoustic operating range was 60 to 92 Hz when the LP Filter was employed. Crossover slope was 18 dB/octave when the control was set to either Off or 12 dB; the slope measured 12 dB/octave when the setting was 24 dB. The ELF (extra low frequency) trim feature added 1.9 dB of SPL below 70 Hz when set to +3 dB. When the ELF trim was set to -12 dB, level began decreasing at 100 Hz

and reached a maximum cut of 12 dB at the lowest frequencies. The ARO (Automatic Room Optimization) routine would not always fully complete when the microphone was more than 3 meters from the subwoofer and did not always make the optimal adjustments, as verified with MLSSA measurements. Users should listen with and without A.R.O. to confirm their results.—*Tom Nousaine*