## **Black magic**

Passive Near Field Monitors JBL 4312M II

Price - £ 30,000. (Per pair)

In the catalogs of some prominent brands are iconic models, which are the subject of lust audiophiles for the last 30-40 years and is still sought after on the occasion of the auction house. However, sometimes the past comes back, though not at full size and volume



As a result of restructuring of Harman Group in the mid of last year has been closed unit Harman Consumer Group, which includes, and JBL. After a series of reshuffles and the translation of developers from one unit to another, earlier this year it was announced that the end of June in Northridge production stops completely, and moved to Japan. The news that touches and JBL Professional, some were inclined to interpret in a negative way because of the loss of the status of «Made in USA». In America itself there were even rumors that the brand will remain only a shadow of its former glory. Be that as it may, the reason for all this experience is mainly among American music lovers, grieving over the loss of national wealth and heritage of James Lansing. For us the interesting fact that Japan has raised the banner of the fallen. And in honor of this event, in addition to modern production lines, production, organized the famous old studio monitors, the originals of which are still in high demand among collectors and connoisseurs. So, we have for the first time in Russia, the first signs of a "new old" Professional Series - Compact Mini-Monitors JBL 4312M II. And, starting to listen, we fervently hope that the first guest must be followed by a sequel.





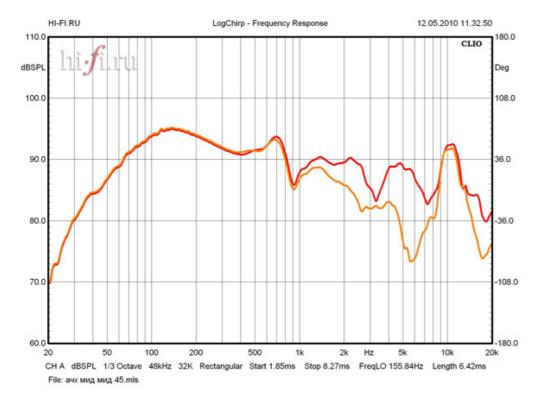
Compact speakers with a number 4312M II is nothing like a miniature replica of the studio monitor in 4312, but exactly twice smaller in size (and, of course, slowed down considerably in weight). Thumbnail complete copy of the original design model. 133-mm woofer is made exactly according to the technology that was used in 4312 - he has aluminum frame and a recognizable brand paper cone of white. The same applies to the midrange - in form and design, it is the same as the original driver, only smaller. The difference from the 1982 model was the use of titanium domes for high-frequency reproduction, made with the involvement of new material processing technologies in order to increase the strength of the membrane. All speakers magnetically. To match the bands involved simple first-order filters. But in fact this is the second attempt to miniaturize the cult studio monitor, as indicated by the index of II in the title. The latest version is different from the first model 4312M modernized slightly increased sensitivity and the value of the modulus of impedance, or cross-linked bands of the speakers, with other frequencies of the section and the port FI slightly larger diameter to enhance and increase the bass. Acoustics has built-in step tone control for middle and high frequencies, providing an increase or decrease the sensitivity of the bands by an average of 2.5 dB. The body is finished with natural veneer quality black with a satin texture.

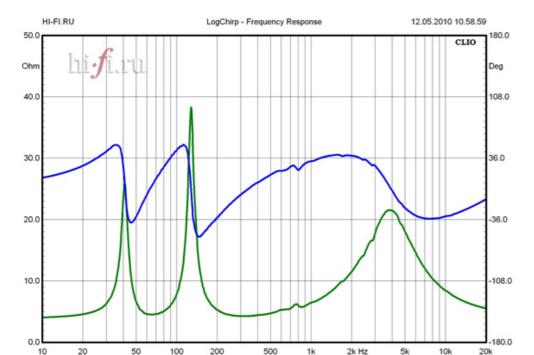


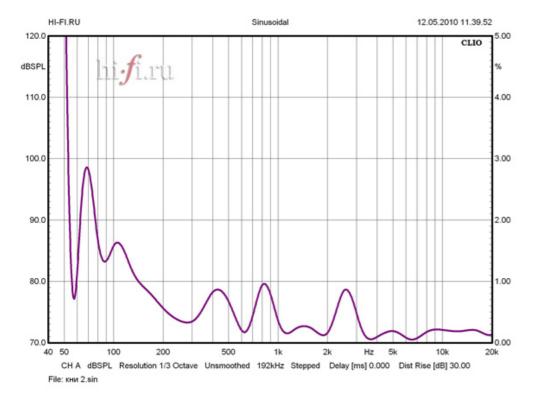
How does this sound a little larger than the size of two packets of milk speakers with firm white JBL logo on the sides? They play, I must say, amazing. So much so that you would think that it intervened in some magic. But how else they when their puppet dimensions can play an absolutely natural sound volume? One important detail - need to listen to them with a much shorter distance than usual acoustics, because it is near-field monitors. The fact that the overload capacity of the AU is not prohibitive, and permitted the passport indicates the power amplifier - only 75 watts. If you try to bring the volume to an adequate level and to evaluate the sound of, say, 3 meters it is in large-scale musical fragments will be flat and labored, and all at once spoil the non-linear distortion. However, it is closer to the speakers at a distance of about 1-1.2 m, playing hits like magic to the soul - the true magic of live sound emanating from the small black cases.

We were happy that the guitar with AC / DC, Accept, and other proposed acoustic recordings were juicy and full of giperadrenalinovymi, with very different timbres that could be heard perfectly. I was surprised that rock and metal drummers had their individual style, freely traced, despite the almost complete (be honest) the absence of Lower and Middle Bass. Where did this come from for such a wonderful texture? Again, a mystery, the magic once again, not otherwise. Lisa Gerrard of Dead Can Dance's voice was not beautiful, is not unusual and not some more, characterized by the usual words. He was a shaman, addictive and even frightening. Do not go into a trance for ever under the soft bells of the track «Ariadne». Air ligature of the Baroque with delicate lines and crisp bass accompaniment, wonderful harpsichord timbre and exemplary illustrative baroque violins have led to think seriously about the futility of being an audiophile, and the desire to acquire a huge speaker when there are minimonitors. The deficit of the lower bass to the forefront of a sudden came out and became prominent violin, which always remained in the shadow of the other instruments, but it was done so well that the claims did not arise at all. Speakers clearly partial to brass instruments such as copper and wood. How often, even in high-end speakers do not get these sounds, just as they are manifested very hypnotic, it is clear and natural. But in the strongest shock plunged the symphonic classics - the overture to "Tannhauser," Wagner's "Requiem" by Verdi. In general, these classical tests for slaughter testing of dynamic peaks with respect to acceptable is usually fairly small number of speakers, and much of the ridiculous size of the speakers did not expect any miracles a priori, was just curious to see with what degree of sensitivity, they are not played. However, the reality was startling - and very different. They played everything, and with such an exciting drama, maintaining separate plans and instrumental lines, and almost without smoothing the peaks that any full-size speakers should immediately turn red with shame. Soprano, tenor and bass voices Lux Aeternae fought on the walls of indestructible life, tormented soul, afraid of the future very rare to hear a performance of "Requiem." Equally surprising adult-emotional and dramatic sound clearly can not be attributed to nothing more than the use of magic and sorcery in the development of the AU. It is also interesting that the sound, with all its detail and transparency, not "monitor" in a bad sense, that is, it was not an ounce of restraint or coldness. Quite neryadovaya acoustics, made with love for music and with understanding and respect for the glorious traditions of JBL.

## The results of measurements







Frequency response is very high, averaging about 9 dB, and the reason for this is a very interesting division of the speakers at the operating frequency (Fig. 1). Low-frequency driver is bounded above by a filter consisting of a single coil, so that is almost up to 6 kHz (-10 dB). In the region of 900 Hz it comes to the rescue with its resonant peak of midrange, but its contribution to the reproduction of the middle of a much less significant. In the region of 2 kHz to the glorious company connects the tweeter. Collaboration midrange and HF drivers causes the peak at 10 kHz, but the rest of the tweeter behaves neutrally and reproduces frequencies up to 45 kHz. The measured sensitivity is 88 dB, while the lower cutoff frequency of 48 Hz at -3 dB. The module of resistance does not fall below the nominal value of 4 ohms and is very stable at medium frequencies (Fig. 2). Total harmonic distortion (Fig. 3) for 1 watt is quite small and does not exceed 0.3%.

### Passport details:

Type - Bookshelf Speakers | Title - JBL 4312M II | Frequency Response, Hz - 55-50 000 (upper limit of -6 dB) | Number of pages - 3 (Bass - 13.3 cm paper cone, CCH - 5 cm, paper cone HF - 1.9 cm, titanium dome, frequency section 7000 and 12 000 Hz) | Acoustic design - phase inverter | Resistance, Ohm - 6 | Sensitivity, dB - 90 | Size one column, cm - 30 x 18 1 x 18 | Weight of one column, kg - 4

# **Ratings:**

Design - 85% Workmanship - 90% The sound - 95% Ergonomics - 90%

The final score - 95%

Pros: natural live sound of musical instruments and voices, drive and energy in the vigorous genres Cons: A very non-standard in the alignment (in comparison with the "home" acoustics), can be heard only at close range, LF severely limited

#### **Conclusion:**

Outstanding mini-monitors, characterized by a clear, dynamic and very natural sounding. The disadvantage of the lower and mid bass is compensated by its clarity and excellent texture, and filled the middle of a live musical ecstasy guarantee

Mary Savina















Tweet