

Review by Pavel Víšek 6/2016

Wideband Evolution

Many new brands from all around the world and also home country were introduced at this year Prague exhibition Audio Video Show. The most interesting in its category were large loudspeakers with wideband speakers Evolution, manufactured by RDacoustic in Roznov pod Radhostem.

Most argues in paragraphs on the need for a multiband structure claiming that while radiating of high and low tones the broadband transducer does not cope with the opposing demands. It is true that the bass reproduction requires a large area membrane with an appropriate submissiveness of the vibrating system, which weight might impede the radiation of high tones with necessary efficiency and directional characteristics.



Such converters do exist on the market, even if not very cheap, and the compromises its enclosures can affect the sound quality noticeably. Childhood diseases accompanied system Evolution in more than two dozens prototypes of various sizes (the biggest one of 2.2m), until it came to the final model, which became the subject of our interest in our test and wasn't missing at the last month's key exhibition European High End in Munich. RDacoustic offers primarily design in burgundy paint with beige leather, but it is up to the customer, which colors of the body and tone of leather as well as the texture he picks from countless combinations.

Acoustic Labyrinth

Hornsystems are modifications of type "Back Loaded Horn" with segmentedhorn, which evokes an acoustic labyrinth. Even if outwardly cabinets predominate flat areas, the problem with standing waving, which are horn constructions susceptible, is solved by mutual inclination of the two sides, and the front and rear panels at the angle of 2.5°. A similar orientation maintain septum front acoustic chamber, which increase the stiffness of the whole construction. The basic material constitute of hardened MDF 25mm board, molded under high pressure, which RDacoustic has custom made. The precise work of cutter helps the horn to achieve precisely defined exponential and has only two perfectly round curves, which emphasizes the bass response by up t 3 dB. The cabinets alone are acoustically more or less inert, custom made wood fiber boards have significantly suppressed resonant



frequency and between cabinets and leather upholstery is another layer of cushioning material of 5mm. Systems (each of 73 kg) are not intended for installation on the tips, as an option the company offers a marble pedestal.



Concept of construction set

System Evolution are normally fitted with modified speakers Fostex FE206en (sensitivity 96 db / W / m), but because each osmipalcový broadband transducer (diameter 200 mm) has a unique sonic character, horns are adapted for possible reinstallation to another type, which can be picked when ordering the systems from catalogs Fostex, Voxativ and Lowther: the ones hard to please will reach for Voxativ AC-Xp Gold (with a sensitivity of 108 db / W / m), which rise the price to 980 000 CZK. An nteresting addition is the upper Oris500 of acoustically favorable dried oak (for a couple of CZK 25 000), which increase sensitivity in the frequency range between 500 Hz and "steer" more sound to the listener, to partly compensate for inferior acoustics listening room; its installation is simple, because it is mounted on the four pins on a wooden ring, which cover speaker's flanges with mounting screws. A pair of massive screw terminals isatypically led on the inner sidewalls near the loudspeakers, because even good quality connection cables are always the shortest, not to mention that this way it does not interfere with the inside of cabinets. Eight ohms systems have above average sensitivity and a bonus of the wideband speakers is their balanced impedance characteristics, which makes them a great partie not only for vaccum tube amplifiers with low power reserve.

Parameters:

Type: full range back horn Frequency: 39Hz to 20Khz

Impedance: 8 Ohm

Sensitivity: 98 dB / 1W / 1mSize: $45 \times 50 \times 180 \text{ cm}$

Weight: 73 Kg

Web: www.rdacoustic.cz

Evaluation

+Spaciousness and localization of instruments, robust horn

- nothing significant

Sound: ******* 10/10 Finish: ******* 10/10

Verdict: **Excelent**

What was tested

The test took place in Roznov pod Radhostem in the listening room of RDacoustic company where the system was completed by components Denon, Integrated Amplifier PMA-1500AE CD player PMA-1450AR. XINDAK cables: Signal AC-02 Acoustic SC-01. For the test I chose CD Beethoven: Piano Concertos No. 3 & 4 (Vivarte/Sony Music, 1997), Dr. John: In A Sentimental Mood (Warner Bros., 1989), Garbage: beautifulgarbage (Mushroom Records, 2001), Medeski, Scofield, Martin & Wood: Juice (Indirecto Records, 2014) a Rob Wasserman: Trios (GRP, 1994).

Bat Ear

At the first listening Evolution system amazes detailed midrange and clean highs, balanced sound and excellence and precision in localization musical instruments, which is hard to find even in High End. Why?

The simplicity is the power and because the construction is close to one point signal source, it doesn't care about any movement phase of signal, either from deviated out of the true axis or crossover. The bass is stable, but they don't reach to the deepest sub kontra octave. The quantity of information about records surprise but the expression stays musical. It is important to have the system placed correctly in relations to listening point, in other cases one can help by installation Oris500. However, in higher volume the sound comes out the best and the most convincing without Oris or any other additions. They stay on top of the things even when the quality is crucial, not the genre of the recordings. Enhancing of the sound is not happening.